25 Years of CHI 1982–2007

conference on human factors in computing systems

San Jose, California, USA
April 28–May 3, 2007

SIGCHI

Association for Computing Machinery

Advancing Computing as a Science & Profession

Conference Program

CHI 2007 REACH BEYOND

2007 Conference at a Glance

SUN

Course 1 Intro to HCI – 18:00–21:30 San Jose Ballroom IV	Course 2 Intro to CSCW – 18:00–21:30 San Jose Ballroom III
Course 3 HCI History – 18:00–19:30 Room A3	Course 4 Drawing Ideas – 18:00–21:30 Room A4 & A5

MONDAY

	CIVIC AUDITORIUM	A1	A2	A3	A4 & A5	A8	B1–B4	C2
8:30-10:30	**Opening Plenary:** Bill Moggridge – Reaching for the Intuitive **CHI MADNESS**							
11:30-13:00	**Interactive Session** Usability from the CIO's Perspective	SIG Beyond Usability: Social, Situational, Cultural, & Contextual Factors	Papers Faces & Bodies in Interaction	Papers Attention & Interruption	Papers Capturing Life Experiences	Experience Reports On the Move	Papers: Large Displays	Interactivity Shake, Rattle, and Roll: New Forms of Input and Output
14:30-16:00	**Interactive Session** Who Killed Design?	Papers Ubicomp Tools	Papers Mobile Interaction	Papers Politics & Activism	Papers Navigation & Interaction	Papers Medical	SIG Challenges in International Usability	Papers Task & Attention
16:30-18:00	**Interactive Session** Taking CHI for a Drive	Papers Expert/Novice	Papers Mobile Applications	Papers Navigation	Papers Photo Sharing	Experience Reports Qualitative Research Methods	Papers Empirical Studies of Web Interaction	ALT.CHI Evaluating Evaluation

TUESDAY

9:00-10:30	**Social Impact Award:** Gary Marsden – Doing HCI Differently – Stories from the Developing World **CHI MADNESS**							
11:30-13:00	**Interactive Session** "Get Real!" What's Wrong with HCI Prototyping & How Can We Fix It?	SIG Sustainability & Interaction	Papers Gaze & Eye Tracking	Papers Online Representation of Self	Papers Innovative Interactions	Experience Reports Usability	Papers Programming by Professionals	Interactivity Play & Exercise
14:30-16:00	**Interactive Session** Moving UX Into a Position of Corporate Influence	Experience Reports Education & Culture	Papers Tangibility	Papers Design Theory	Papers Web Usability	Papers Empirical Models	Papers Mobile Interaction Techniques I	ALT.CHI Re-Thinking Humans, Computers, Interaction, and Design
16:30-18:00	**Interactive Session** Along the Path of Pervasive Computing	Papers Tasks	Papers Emergency Action	Papers Design Methods	Papers Mobile Interaction Techniques II	Papers Home Spirituality	Papers Games	SIG Capturing Longitudinal Usability

WEDNESDAY

9:00-10:30	**Lifetime Achievement Award:** Jim Foley – Past, Present, and Future of HCC Education: What We Teach, How We Teach **CHI MADNESS**							
11:30-13:00	**Interactive Session** Web 2.0 & the Enterprise	Papers Video	Papers Security	Papers Emotion & Empathy	Papers Collaboration at Work	Competition Student Design Competition	Papers Tags, Tagging, & Notetaking	Interactivity Adaptation & Augmentation
14:30-16:00	**Interactive Session** Industrial Design	Papers Multimodal Interactions	Papers Distributed Interaction	Papers Learning & Education	Papers Designing for Specific Cultures	Experience Reports Development Process	Papers Mobile Kits & Stuff	ALT.CHI Life on Mars: HCI in Space, Cyberspace, and Beyond
16:30-18:00	**Interactive Session** Semantic Web HCI	Papers Novel Navigation	Papers People, Looking at People	Papers Input Techniques	Papers Location Aware Systems	Experience Reports Ethnography	Papers Social Network Sharing	Competition Student Research Competition

THURSDAY

8:30-9:00	**CHI MADNESS**							
9:00-10:30	**Interactive Session** Recommendations on Recommendations	Papers Augmentation, Automation, & Agents	Papers Distributed Coordination	Papers Usability	Papers Kids & Family	Experience Reports Management	Papers Alternative Interaction	SIG Current Issues in Assessing & Improving Information Usability
11:30-13:00	**Social Impact Award** Gregory D. Abowd Using Computing Technologies to Face Autism	Papers Usability Evaluation	Papers Programming By & With End-Users	Papers Trust & Engagement	Papers Models of Mobile Interaction	Experience Reports Research-ish	Interactive Session The I in CHI	Interactive Session User Interface Description Languages: XUL & XAML
14:30-16:00		Papers Color/Blind	Papers Social Influence	Papers Learning	SIG UXD Business Models	SIG Technologies for Autism	Interactive Session Toward a Less WIMPy Web	ALT.CHI Ideas Lab: Inspirations, Innovations, and Insights
16:30-18:00	**Closing Plenary:** Niti Bhan – The Mobile as a Post-Industrial Platform for Socio-Economic Development							

2007 Conference at a Glance

SUN

SPECIAL EVENT:
Networking Gathering
17:30-20:00 Concourse

MONDAY

	C4	A6	A7	C3	ALMADEN BALLROOM I	ALMADEN BALLROOM II	COMMONS	SPECIAL EVENTS
8:30-10:30							Conference Reception & Exhibits Grand Opening 18:30–22:00	Newcomers' Orientation 10:30–11:30 Civic Auditorium Spotlight on Doctoral Consortium, Workshop, & Competition Posters (#1-60) 10:30–11:30 Concourse
11:30-13:00	SIG Online Health Communities	Course 12 Usability Process Improvement–ISO Standards	Course 9 How to Collect Field Data & Produce a Tested Design in 1-8 Weeks	Course 7 Collaborative Behavior and Supporting Technologies	Course 5 Personal Information Management in Theory and Practice	Course 6 Usability and Product Development		
14:30-16:00	SIG Usability and Free/Libre/Open Source Software	Course 13 An Introduction to Human-Robot Interaction Design and Evaluation	Course 10 Top Field Interview Mistakes: Recognizing and Preventing Them					
16:30-18:00	SIG Let's Get Emotional: Emotion Research in HCI		Course 11 After the Interviews: Making Sense of Fieldwork Data	Course 8 Where Usability Meets Desirability: Visual Design with Personas & Goals				

TUESDAY

	C4	A6	A7	C3	ALMADEN BALLROOM I	ALMADEN BALLROOM II	COMMONS	SPECIAL EVENTS
9:00-10:30		Course 21 Web Usability for Assistive Technology	Course 19 Information Foraging Theory	Course 16 Design of Spatial Applications	Course 14 Card Sorting & Cluster Analysis for Information Architecture Design	Course 15 Understanding Users in Context: An In-Depth Introduction to Fieldwork	Exhibits, Interactivity, & Info Booth 10:30–18:00	Spotlight on Work-in-Progress Posters (#61-104) 10:30–11:30 Concourse Job Fair 18:00–20:00 Commons
11:30-13:00	SIG Beyond Usability for Safety Critical Systems							
14:30-16:00	SIG Trust 2.1 Advancing the Trust Debate	Course 22 Rapid Prototyping & Evaluation with Web Mashups	Course 17 An Introduction to Designing for the Scent of Information	Course 20 Building Affinity Diagrams to Reveal User Needs & Engage Developers				
16:30-18:00	SIG End User Software Engineering		Course 18 Designing for the Scent of Information: Advanced Concepts					

WEDNESDAY

	C4	A6	A7	C3	ALMADEN BALLROOM I	ALMADEN BALLROOM II	COMMONS	SPECIAL EVENTS
9:00-10:30		Course 28 Ajax - Design & Usability	Course 26 Faceted Metadata for Information Architecture & Search	Course 31 Expert Reviews - For Experts	Course 23 Analyzing Qualitative Data From Field Studies	Course 24 Understanding Mobile Interaction Design	Exhibits, Interactivity, & Info Booth 10:30–18:00	Spotlight on Work-in-Progress Posters (#105-156) 10:30–11:30 Concourse SIGCHI Member Meeting 18:10–19:30 B1-B4 Hospitality Events 18:30–20:30 Marriott Hotel, Fairmont Hotel 20:30–22:30 Tech Museum
11:30-13:00	SIG Engineering Community							
14:30-16:00	SIG Research Community	Course 32 Avoiding "We Can't Change THAT!"	Course 27 Empirical Research Methods for Human Computer Interaction	Course 29 How to Build Rich Personas from Field Data		Course 25 Doing Mobile Interaction Design		
16:30-18:00	SIG Design Community	Course 33 Avoiding "We Can't Do THAT Either!"		Course 30 Usability Testing: Creating Good Test Tasks				

THURSDAY

	C4	A6	A7	C3	ALMADEN BALLROOM I	ALMADEN BALLROOM II	COMMONS	SPECIAL EVENTS
8:30-9:00							Exhibits, Interactivity, & Info Booth 10:30–14:30	Spotlight on Work-in-Progress Posters (People's Choice) 10:30–11:30 Concourse Anniversary Party 18:00–19:00 Concourse
9:00-10:30	SIG Evaluating Experience-Focused HCI	Course 39 Advanced Data Collection & Analysis Tools for HCI Research & Usability	Course 41 Keeping the Web in Web 2.0: An HCI Approach to Designing Web Applications (1/2)	Course 37 The Top 5 Universal Design Problems & Ways to Solve Them	Course 34 The Persona Lifecycle	Course 35 Principles of Interaction Design		
11:30-13:00	SIG Education Community SIG		Course 42 Keeping the Web in Web 2.0: An HCI Approach to Designing Web Applications (2/2)					
14:30-16:00	SIG Usability Community SIG	Course 40 Ensuring the Usability of Systems that Adapt to Their Users	Course 38 Usability Testing: Usable Communication Techniques			Course 36 Interaction Design Studio		
16:30-18:00								

Welcome from the Chairs

Welcome to CHI 2007!

CHI is the premier international conference on human-computer interaction (HCI). This year we gather to celebrate our 25th anniversary: reflecting on all that we have accomplished in the past quarter century, while reaching beyond to the challenges and opportunities of the next.

CHI 2007 builds on many of the innovations introduced at CHI 2006 in Montréal. The main conference program again takes place over four days; courses are scheduled in parallel with other program sessions; the conference reception is situated in the exhibit hall; and each day includes a CHI Madness preview. In keeping with the "Reach Beyond" theme you'll find considerable variety in program content. We focused particularly on expanding the coverage of course offerings to meet the many interests of our communities: design, education, engineering, management, research, and usability. Committee members have also organized a number of invited interactive sessions to appeal to different communities.

You will see a few changes as well. We have closely integrated the interactivity program with the exhibits and will feature these hands-on demos along with the exhibits during the reception on Monday night. We'll also highlight some of the most interesting content from interactivity exhibits during the "I in CHI" session later on in the week. Work-in-Progress will be on display in the Concourse, as an informal complement to the technical sessions held in meeting rooms. Be sure to cast your vote for the poster(s) you find most interesting, so that we can recognize these "People's Choice" projects on Thursday. For the first time, we are hosting an ACM Student Research Competition, an event that complements the CHI Student Design Competition, with a focus on individual student research projects. Also for the first time we have arranged for presentations by three SIGCHI 2007 award winners.

Because 2007 is CHI's 25th anniversary, you will encounter many activities that are aimed at evoking and sharing our community's memories and accomplishments from over the years. Look for ribbons, stickers, and other indications of attendees' involvement in past CHIs. Admire the photo essay designed by Ken Korman, drawing from the large set of photos that Ben Shneiderman has taken over the years. Contribute to the participatory CHI timeline project with your own memories, artifacts, or comments. Come to the 25th anniversary party after the closing plenary!

San Jose as the location for CHI's 25th anniversary is especially fitting, given the substantial contributions that HCI researchers and practitioners from the Silicon Valley have made over the years. Get outside to explore the area using the maps and other information we've included here, or that you can obtain from student volunteers or local attendees. Schedule lunches and dinners with old and new friends at area restaurants. Visit the Tech Museum and other local attractions. And for those of you who will be here an extra day (and have signed up in advance), check out the lab tours that area companies are offering on Friday. As always at CHI, there is much to do, much to see, much to learn.

Enjoy!

Mary Beth Rosson
Conference Chair

David Gilmore
Technical Program Chair

Table of Contents

2 **Welcome from the Chairs**
3 **Table of Contents**
4 **Conference Committee**
5 **Sponsors**

15 **GENERAL INFORMATION**

15 **ACM SIGCHI**
15 Membership Information

15 **CHI 2007 Overview**
15 Pre-Conference | Saturday & Sunday
15 Doctoral Consortium
15 Workshops
16 Technical Program | Monday – Thursday
16 Choosing Sessions
16 Leaving Sessions
16 Session Types
17 Special Events
17 Network Gathering
17 Newcomers' Orientation
17 Conference Reception & Exhibits Grand Opening
18 Job Fair
18 ACM SICGHI Member Meeting
18 Hospitality Events
18 Anniversary Party

19 **Venue Information**
19 Internet Access
19 CHI Buzz (chibuzz.ist.psu.edu)
19 Registration
19 The Commons
19 Coffee Breaks
19 The CHI Merchandise Desk
20 The CHI Information Booth
20 Student Volunteers
20 International Relations
20 Lunch with a Local
20 Recruiting Boards
20 Speaker Ready Room
20 Press Office

21 **CHI 2007 Policies**
21 Cell Phone Courtesy
21 Name Badges
21 Blogging and Photosharing
21 Recording Prohibited
21 Smoking Policy
21 Alcoholic Beverages
21 Accompanying Persons
21 Electrical Power

22 **Miscellaneous Services**
22 ATMs
22 Business Services
22 First Aid / Emergencies
22 Lost And Found
22 San Jose Visitors' Bureau
22 Special Needs
22 Starbucks

22 **San Jose, California**
22 City Transportation
22 VTA Light Rail
22 Airport Flyer
22 Taxis

23 **SIGCHI 2007 AWARDS**

23 **Lifetime Achievement Award**
23 **CHI Academy**
24 **Lifetime Service Award**
24 **Social Impact Award**
25 **Past Honorees**
26 **Best of CHI Awards**

30 **SUNDAY COURSES**

31 **MONDAY**

31 **Day at a Glance**
32 **Opening Plenary**
33 **Mid-Morning**
37 **Afternoon**
40 **Late Afternoon**
44 **Courses**

47 **TUESDAY**

47 **Day at a Glance**
48 **Morning**
49 **Mid-Morning**
53 **Afternoon**
57 **Late Afternoon**
60 **Courses**

65 **WEDNESDAY**

65 **Day at a Glance**
66 **Morning**
67 **Mid-Morning**
70 **Afternoon**
74 **Late Afternoon**
77 **Courses**

81 **THURSDAY**

81 **Day at a Glance**
82 **Morning**
86 **Mid-Morning**
89 **Afternoon**
92 **Closing Plenary**
93 **Courses**

97 **POSTERS / EXHIBITS**

97 **Doctoral Consortium**
97 **Student Design Competition**
98 **Student Research Competition**
99 **Workshops**
100 **Work-in-Progress**

105 **EXHIBITS**

111 **INDEX**

MAPS

Commons Posters / Exhibits Tab
Convention Center Inside Back Cover
San Jose Outside Back Cover

Conference Committee

MANAGEMENT

Conference Chair
Mary Beth Rosson, *The Pennsylvania State University,* USA

Technical Program Chair
David Gilmore, *Intel,* USA

Conference Chair's Administrator
Helena M. Mentis, *The Pennsylvania State University,* USA

Communications Chair
Marta Rey-Babarro, *University of Michigan,* USA

ACM SIGCHI Program Coordinator
Brooke Hardy, *ACM,* USA

ACM SIGCHI Vice Chair for Conferences
Dennis Wixon, *Microsoft,* USA

TECHNICAL PROGRAM

Papers Co-Chairs
James 'Bo' Begole, *PARC,* USA
Stephen Payne, *University of Manchester,* UK

Notes Co-Chairs
Elizabeth F. Churchill, *Yahoo!,* USA
Rob St. Amant, *North Carolina State University,* USA

Workshops Co-Chairs
Margaret Burnett, *Oregon State University,* USA
J. J. Cadiz, *Microsoft,* USA

Courses Co-Chairs
Jean Scholtz, *Pacific Northwest National Laboratory,* USA
Susan Palmiter, *Design Technologies, Inc.,* USA

Interactivity Co-Chairs
Lars Erik Holmquist, *Swedish Institute of Computer Science,* Sweden
Tom Igoe, *ITP, NYU,* USA

Work-in-Progress Co-Chairs
Catalina Danis, *IBM,* USA
Scott McCrickard, *Virginia Polytechnic Institute and State University,* USA

Doctoral Consortium Co-Chairs
Deborah Tatar, *Virginia Polytechnic Institute and State University,* USA
Tom Rodden, *University of Nottingham*, UK

Student Design Competition
Steven A. Wall, *University of Glasgow,* UK
Ilona Posner, *Usability Consultant,* Canada

Student Research Competition
Kori M. Inkpen, *Dalhousie University,* Canada
Robert C. Miller, *MIT,* USA

ALT.CHI Co-Chairs
Lars Erik Holmquist, *Swedish Institute of Computer Science,* Sweden
Barry Brown, *University of Glasgow,* UK

Best of CHI Awards Chair
Wendy A. Kellogg, *IBM,* USA

COMMUNITY CHAIRS

Design Co-Chairs
Jon Kolko, *Savannah College of Art and Design,* USA
Bill Lucas, *MAYA Design,* USA

Education Co-Chairs
Scott Berkun, *Scott Berkun Consulting,* USA
Charles van der Mast, *Delft University of Technology,* the Netherlands

Engineering Co-Chairs
Alan Blackwell, *Cambridge University,* UK
John 'Scooter' Morris, *University of California, San Francisco,* USA

Management Co-Chairs
Scott Berkun, *Scott Berkun Consulting,* USA
Jeremy Ashley, *Oracle,* USA

Research Chair
David Gilmore, *Intel,* USA

Usability Co-Chairs
Carol Righi, *Perficient,* USA
Janice James, *Perficient,* USA

PARTICIPATION AND VOLUNTEERING CHAIRS

Mentoring Co-Chairs
Michael J. Muller, *IBM,* USA
Kumiyo Nakakoji, *University of Tokyo & SRA-KTL Inc.,* Japan

Student Volunteer Co-Chairs
Cliff Lampe, *Michigan State University,* USA
Kirstie Hawkey, *Dalhousie University,* Canada

CHI Madness Co-Chairs
Patrick Baudisch, *Microsoft,* USA
Gonzalo Ramos, *University of Toronto,* Canada

OPERATIONS

Sponsors & Exhibits Coordinator
Carol Klyver, *Foundations of Excellence,* USA

Logistics
Janeé Pelletier, *Conference & Logistics Consultants,* USA

Technology Liaison
John 'Scooter' Morris, *University of California, San Francisco,* USA

Reviewing Software
James Stewart, *Precision Conference Solutions,* Canada

Registration
Deb Bartlett, *Executive Events,* USA
Yvonne Lopez, *Executive Events,* USA

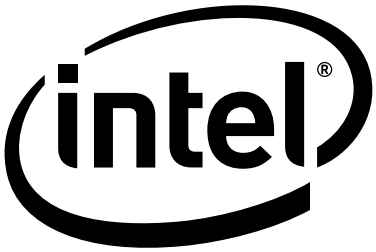
e-Publications Coordinator
Joshua B. Gross, *The Pennsylvania State University,* USA

Online Community Designer
Dejin Zhao, *The Pennsylvania State University,* USA

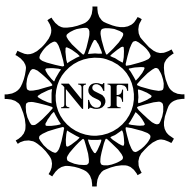
Print Publications Co-Chairs
Lana Krolikowski, *Ford Motor Company,* USA
Kathy Seyama, *Qualcomm Inc.,* USA

Local Arrangements Chair
Jennifer Gove, *Google,* USA

CHI Hero



CHI Champions



CHI Contributors

Friends of CHI FX Palo Alto Laboratory, Inc. VMware, Inc.

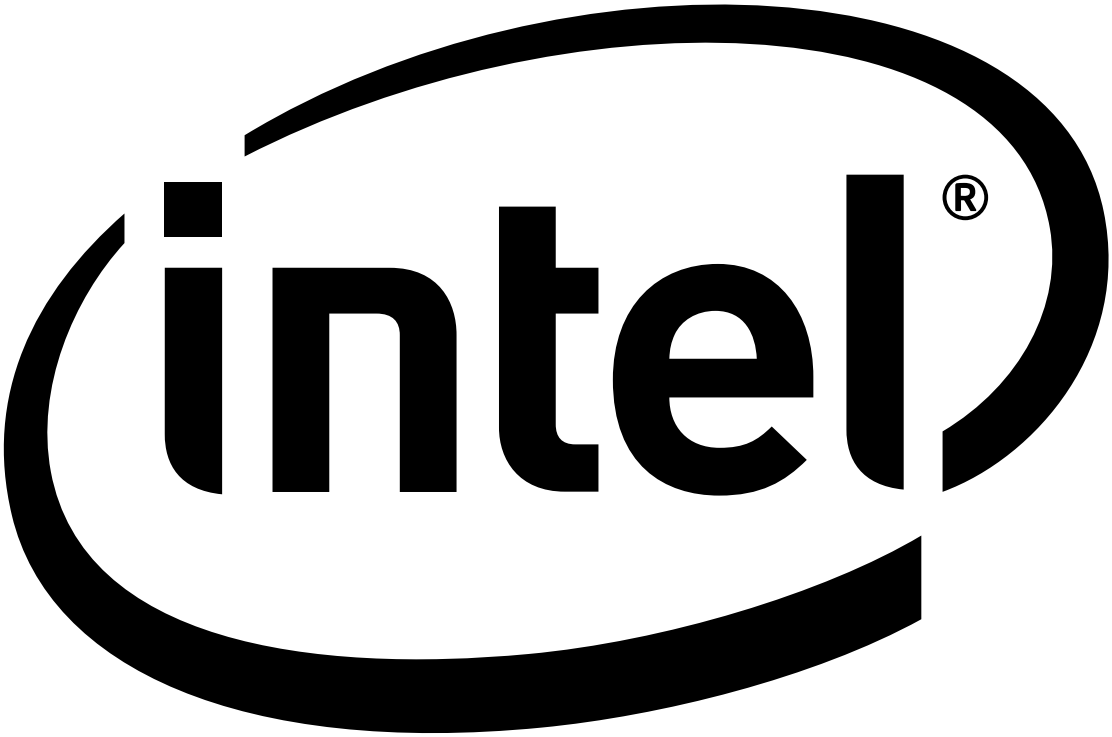
Now seeking candidates for a full-time faculty position in industrial design with an emphasis on interaction design. Qualified candidates should have the terminal degree or its equivalent in industrial design, interaction design or a related field. Candidates should have practical interaction design experience as well as a strong understanding of perceptual and cognitive human factors, visual interface design, ethnography, and rapid digital prototyping. Experience in enterprise software development, consumer-based interactive product design or information architecture of large-scale systems encouraged. For more information, contact scadfaculty@scad.edu.

Savannah College of Art and Design®

ATLANTA · LACOSTE · SAVANNAH · E-LEARNING

www.scad.edu

Intel congratulates the CHI conference on its 25th Anniversary!



Please stop by booth C to see Intel's "Kitchen Window" demo -
a vision for the central hub of family communications.

[it's just easier]

Fast: Automatic analysis

Easy: Built-in satisfaction survey

Appealing: Customizable, professional graphs

Functional: Editable task and marker log

Simple: Real-time task segmentation

Find all of this and more at TechSmith's booth 14!
Or visit www.morae.com

TechSmith®
MORAE 2 USABILITY RE-IMAGINED

Google is looking for engineers with great aspirations.

If you've ever imagined being able to use your talent, education and skills to benefit millions of people around the world, Google might be the place for you. We're looking for the brightest minds in engineering at all levels of experience.

One of our goals is to create the most inspiring work environment on the planet – a place where you can dream big and make things happen. If you'd like to be a part of that, we'd love to hear from you.

Stop by booth #R21, and check out our current openings at **www.google.com/jobs/chi**

Be sure to swing by the Google party on May 2, 2007, at the Tech Museum from 7:00 – 11:00pm for some fabulous food and drinks and fun Google swag!

©2007 Google Inc .All rights reserved.
Google and the Google logo are registered trademarks of Google Inc.

Google™

Need something?[SM]

Great Careers

at

YELLOWPAGES.COM™

We wrote the book on local search.[SM]

Contact us at careerspas@yellowpages.com

Interaction design is not guesswork.

From the people who brought you personas and GOAL-DIRECTED® design comes

About Face 3

The Essentials of Interaction Design

Alan Cooper

Robert Reimann and David Cronin

Meet the authors at our book party on Wednesday night (6:30 to 8:30) in the Willow Glen suite at the Marriott.

cooper

www.cooper.com | booth G

This completely updated volume presents the effective and practical tools you need to design great desktop applications, Web 2.0 sites and mobile devices. This book will teach you the principles of good product behavior and introduce you to Cooper's Goal-Directed® Design method, from conducting user research to defining your product's interaction using personas and scenarios. In short, *About Face 3* will show you how to design the best possible digital products and services.

Available May, 2007
Published by Wiley
ISBN: 978-0-470-08411-3

New books from The MIT Press

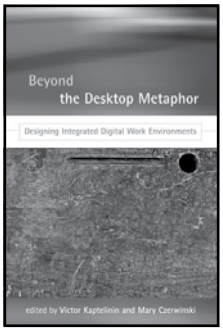
Acting with Technology

Activity Theory and Interaction Design

Victor Kaptelinin and Bonnie A. Nardi

"With elegance and clarity, *Acting with Technology* outlines a theoretical perspective that helps interaction design meet its future. . . .essential reading in an age when computers and software have long since escaped the confines of individual users and workstations." — Sampsa Hyysalo, University of Helsinki

Acting with Technology series
344 pp., 17 illus. $35 cloth



Beyond the Desktop Metaphor

Designing Integrated Digital Work Environments

edited by Victor Kaptelinin and Mary Czerwinski

Leading developers and researchers report on what the next generation of digital work environments may look like, analyzing the theory and practice of designing "out of the box" to facilitate multitasking, collaboration, and multiple technologies.

400 pp., 65 illus. $35 cloth

Designing with Blends

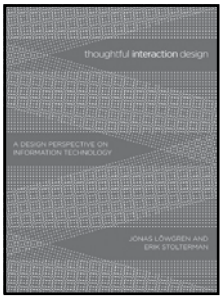
Conceptual Foundations of Human-Computer Interaction and Software Engineering

Manuel Imaz and David Benyon

"An excellent and detailed demonstration of the ways in which cognitive science provides new tools for software design." — Mark Turner, Case Western Reserve University

224 pp., 70 illus. $35 cloth

now in paperback



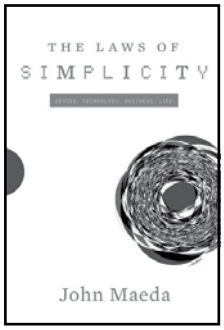
Thoughtful Interaction Design

A Design Perspective on Information Technology

Jonas Löwgren and Erik Stolterman

"A fine introduction to thinking about and within a design process, and would no doubt relieve the minds of many designers who worry they might be doing it wrong." — *Networker*

240 pp., 17 illus. $20 paper

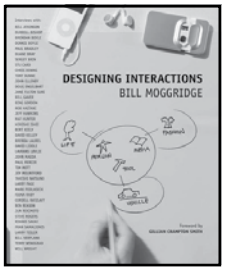


The Laws of Simplicity

John Maeda

"A clear and incisive guide for making simplicity the paramount feature of our products; it's also a road map for constructing a more meaningful world." — Andrea Ragnetti, Board of Management, Royal Philips Electronics

176 pp., 30 illus. $20 cloth



Designing Interactions

Bill Moggridge

"This will be *the* book—the book that summarizes how the technology of interaction came into being and prescribes how it will advance in the future. Essential, exciting, and a delight for both eyes and mind." — Don Norman, Nielsen Norman Group and Northwestern University, author of *Emotional Design*

816 pp., 700 illus., color thourghout
$39.95 cloth and DVD

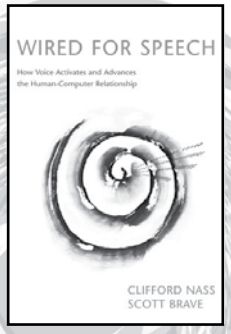
Web Campaigning

Kirsten A. Foot and Steven M. Schneider
foreword by Michael Cornfield

"Foot and Schenider's meticulous interrogation of Web artifacts provides valuable insights into the character of electoral campaigns on the Internet. It will be of interest to scholars and practitioners alike." — Pablo J. Boczkowski, Northwestern University and author of *Digitizing the News*

Acting with Techonlogy series
272 pp. $27.50 paper

now in paperback



Wired for Speech

How Voice Activates and Advances the Human-Computer Relationship

Clifford Nass and Scott Brave

"I found *Wired for Speech* absolutely fascinating, full of amazing insights." — Robert MacNeil, former cohost, MacNeil-Lehrer NewsHour, coauthor, *Do You Speak American?*

296 pp., 1 illus. $17.95 paper

http://mitpress.mit.edu
Available in fine bookstores everywhere, or call **800-405-1619**.

Visit our booth for a 20% discount

Notes

ACKNOWLEDGEMENTS

CHI conferences only exist due to the hard work of thousands of people, especially those who review the numerous submissions we receive. On these tabs, we'd like to acknowledge the contributions of the CHI 2007 submissions reviewers; various committees that worked with venue chairs to coordinate their respective portions of the program; and those who served as mentors for new submitters. CHI 2007 appreciates your contribution to the conference and to the field of HCI.

PAPERS ASSOCIATE CHAIRS

Anne Anderson, *University of Dundee*, UK
Paul Aoki, *Intel*, USA
Brian Bailey, *University of Illinois*, USA
Jakob Bardram, *University of Aarhus*, Denmark
Patrick Baudisch, *Microsoft*, USA
Rachel Bellamy, *IBM*, USA
Ann Blandford, *University College London*, UK
Stephen Brewster, *University of Glasgow*, UK
Pamela Briggs, *Northumbria University*, UK
John Canny, *Univeristy of California, Berkeley*, USA
Stuart Card, *PARC*, USA
John Carroll, *The Pennsylvania State University*, USA
Maria Francesca Costabile, *Univerisity Bari*, Italy
Edward Cutrell, *Microsoft*, USA
Mary Czerwinski, *Microsoft*, USA
Anind Dey, *Carnegie Mellon University*, USA
Keith Edwards, *Georgia Institute of Technology*, USA
Steven Feiner, *Columbia University*, USA
Jodi Forlizzi, *Carnegie Mellon University*, USA
Susan Fussell, *Carnegie Mellon University*, USA
Carl Gutwin, *University of Saskatchewan*, Canada
Beverly Harrison, *Intel*, USA
Steven Harrison, *Virginia Polytechnic Institute and State University*, USA
Anthony Hornof, *University of Oregon*, USA
Andrew Howes, *University of Manchester*, UK
Scott Hudson, *Carnegie Mellon University*, USA
Kori Inkpen, *Dalhousie University*, Canada
Robert Jacob, *Tufts University*, USA
Wendy Kellogg, *IBM,* USA
Sara Kiesler, *Carnegie Mellon University*, USA
Scott Klemmer, *Stanford University*, USA
Boriana Koleva, *University of Nottingham*, UK
David McDonald, *University of Washington*, USA
Joanna McGrenere, *University of Brisith Columbia*, Canada
Bonnie Nardi, *University of California, Irvine*, USA
Kenton O'Hara, *Hewlett-Packard*, UK
Claire O'Malley, *University of Nottingham*, UK
Yvonne Rogers, *Open University*, UK
mc schraefel, *University of Southampton*, UK
Abigail Sellen, *Microsoft*, UK
Chia Shen, *Mitsubishi Electric Research Labs*, USA
Ian Smith, *Intel*, USA
John Stasko, *Georgia Institute of Technology*, USA
Alistair Sutcliffe, *University of Manchester*, UK
John Tang, *IBM*, USA
Deborah Tatar, *Virginia Polytechnic Institute and State University*, USA
John Thomas, *IBM* , USA
Michael Twidale, *University of Illinois*, USA
Gina Venolia, *Microsoft*, USA
Leon Watts, *University of Bath*, UK
Terry Winograd, *Stanford University*, USA
Allison Woodruff, *Intel*, USA
Shumin Zhai, *IBM*, USA
John Zimmerman, *Carnegie Mellon University*, USA

PAPERS REVIEWERS

Gregory Abowd, *Georgia Tech,* USA
Mark Ackerman, *University of Michigan,* USA
Piotr Adamczyk, *University of Illinois, Urbana-Champaign,* USA
Maneesh Agrawala, *Microsoft,* USA
David Ahlstroem, *University of Klagenfurt,* Austria
Ryan Aipperspach, *Intel,* USA
David Akers, *Stanford University,* USA
Fahim Akhter, *Zayed University,* United Arab Emirates
Jennifer Allanson, *Independent,* UK
Meghan Allen, *University of British Columbia,* Canada
Nancy Alvarado, *California State Polytechnic University, Pomona,* USA
Brian Amento, *AT&T,* USA
Morgan Ames, *Stanford University,* USA
Einat Amitay, *IBM,* Israel
Tue Andersen, *University of Copenhagen,* Denmark
Richard J Anderson, *University of Washington,* USA
Anne Anderson, *University of Dundee,* UK
Alissa Antle, *Simon Fraser University,* Canada
Pedro Antunes, *University of Lisboa,* Portugal
Paul Aoki, *Intel,* USA
Ernesto Arroyo, *MIT,* USA
Brent Auernheimer, *California State University, Fresno,* USA
Anne Aula, *Tampere University of Techonlogy,* Finland
Daniel Avrahami, *Carnegie Mellon University,* USA
Jeff Axup, *University of Queensland,* Australia
Tamara Babaian, *Bentley College,* USA
Paula Bach, *The Pennsylvania State University,* USA
Maribeth Back, USA
Ronald Baecker, *University of Toronto,* Canada
Jeremy Bailenson, *Stanford University,* USA
Brian Bailey, *University of Illinois,* USA
Lynne Baillie, *Forschungszentrum Telekommunikation Wien,* Austria
Ryan Baker, *University of Nottingham,* UK
Ravin Balakrishnan, *University of Toronto,* Canada
Sandrine Balbo, *The University of Melbourne,* Australia
Jakob Bardram, *University of Aarhus,* Denmark
Jeffrey Bardzell, *Indiana University,* USA
Shaowen Bardzell, *Indiana University,* USA
Louise Barkhuus, *University of Glasgow,* UK
Bill Barnert, *Tufts Uiniversity,* USA
Armando Barreto, *Florida International University,* USA
Christoph Bartneck, *Eindhoven University of Technology,* the Netherlands
John Barton, *IBM,* USA
Lyn Bartram, *Simon Fraser University,* Canada
Sumit Basu, *Microsoft,* USA
Steven Bathiche, *Microsoft,* USA
Katja Battarbee, *University of Art and Design, Helsinki,* Finland
Thomas Baudel, *ILOG,* France
Patrick Baudisch, *Microsoft,* USA
Konrad Baumann, *FH Joanneum School of Information Design,* Austria
Russell Beale, *University of Birmingham,* UK
Michel Beaudouin-Lafon, *Université Paris-Sud,* France
Kent Beck, *Three Rivers Institute,* USA
Andrew Begel, *Microsoft,* USA
James "Bo" Begole, *PARC,* USA
Wolfgang Beinhauer, *Fraunhofer Institute for Industrial Engineering,* Germany
Marek Bell, *University of Glasgow,* UK
Blaine Bell, *Schrodinger,* USA
Rachel Bellamy, *IBM,* USA
Peter Benda, *The University of Melbourne,* Australia
Steve Benford, *University of Nottingham,* UK
Hrvoje Benko, *Columbia University,* USA
David Benyon, *Napier University,* UK
Regina Bernhaupt, *Salzburg University,* Austria
Nadia Berthouze, *University College London,* UK
Katie Bessiere, *Carnegie Mellon University,* USA
Nigel Bevan, *Profesional Usability Services,* UK
Anastasia Bezerianos, *University of Toronto,* Canada
Suresh Bhavnani, *University of Michigan,* USA
Timothy Bickmore, *Northeastern University,* USA
Jacob Biehl, *University of Illinois, Urbana-Champaign,* USA
Tora Bikson, *RAND,* USA
Matt Billings, *Univeristy of Bath,* UK
Jeremy Birnholtz, *University of Toronto,* Canada
Staffan Björk, *Interactive Institute,* Sweden
Marilyn Blackmon, *University of Colorado,* USA
Alan Blackwell, *University of Cambridge,* UK
Ann Blandford, *University College London,* UK
Eli Blevis, *Indiana University,* USA
Jeanette Blomberg, *IBM,* USA
Sara Bly, *Sara Bly Consulting,* USA
Susanne Bodker, *University of Aarhus,* Denmark
Shawn Bohner, *Virginia Polytechnic Institute and State University,* USA
Agnieszka Bojko, *User Centric, Inc.,* USA
Kellogg Booth, *University of British Columbia,* Canada
Jan Borchers, *RWTH Aachen University,* Germany
Katy Borner, *Indiana University,* USA
Gaetano Borriello, *University of Washington,* USA
Claus Bossen, *University of Aarhus,* Denmark
Dominic Bouwhuis, *Eindhoven University of Technology,* the Netherlands
Doug Bowman, *Virginia Polytechnic Institute and State University,* USA
Danah Boyd, *University of California, Berkeley,* USA
Erin Bradner, *University of California, Irvine,* USA
Susan Brennan, *Stoney Brook, SUNY,* USA
Stephen Brewster, *University of Glasgow,* UK
Pamela Briggs, *Northumbria University,* UK
Derek Brock, *Naval Research Laboratory,* USA
Christina Brodersen, *University of Aarhus,* Denmark
Lorna Brown, *Microsoft,* UK
Barry Brown, *University of Glasgow,* UK
Georgina Browne, *Microsoft,* UK
Amy Bruckman, *Georgia Institute of Technology,* USA
Duncan Brumby, *Drexel University,* USA
A.J. Brush, *Microsoft,* USA
Nick Bryan-Kinns, *Queen Mary College, University of London,* UK
Mike Brzozowski, *Hewlett-Packard,* USA
Raluca Budiu, *PARC,* USA
Stephanie Buisine, *LCPI-ENSAM,* France
Andrea Bunt, *University of British Columbia,* Canada
Jamika Burge, *Virginia Polytechnic Institute and State University,* USA
Moira Burke, *Carnegie Mellon University,* USA
Gary Burnett, *University of Nottingham,* UK
Daniela Busse, *SAP,* USA
Kirsten Butcher, *University of Pittsburgh,* USA
William Buxton, *Buxton Design,* Canada
JJ Cadiz, *Microsoft,* USA
Paul Cairns, *University College London,* UK
Licia Calvi, *Katholieke Universiteit Leuven,* Belgium
John Canny, *University of California, Berkeley,* USA
Xiang Cao, *University of Toronto,* Canada
Stuart Card, *PARC,* USA
Andy Carle, *University of California, Berkeley,* USA
Alex Carmichael, *University of Dundee,* UK
Stefan Carmien, *University of Colorado, Boulder,* USA
Sheelagh Carpendale, *University of Calgary,* Canada
Luis Carriço, *University of Lisbon,* Portugal
John Carroll, *The Pennsylvania State University,* USA
Justine Cassell, *Northwestern University,* USA
Anxo Cereijo Roibas, *University of Brighton,* UK
Ann-Marie Chadwick-Dias, *Fidelity Investments,* USA
Matthew Chalmers, *University of Glasgow,* UK
Michele Chang, *Intel,* USA
Angela Chang, *MIT,* USA
Olivier Chapuis, *Laboratoire de Recherche en Informatique,* France
Mousumi Chatterjee, *Mobius Management Systems,* USA
Dr Jarinee Chattratichart, *Kingston University,* UK
Mike Chen, *Intel,* USA
Lynn Cherny, *Adobe,* USA
Keith Cheverst, *Lancaster University,* UK
Ed Chi, *PARC,* USA
Mark Chignell, *University of Toronto,* Canada

CONTINUES ON BACK

PAPERS REVIEWERS – CONTINUED

Luca Chittaro, *University of Udine,* Italy
Jan Chong, *Stanford University,* USA
Konstantinos Chorianopoulos, *Bauhaus University of Weimar,* Germany
Georgios Christou, *Cyprus College,* Cyprus
Yu Shan Chuang, *Yahoo!,* USA
Elizabeth Churchill, *PARC,* USA
Luigina Ciolfi, *University of Limerick,* Ireland
Siobhan Clarke, *Trinity College Dublin,* Ireland
Andy Cockburn, *University of Canterbury,* New Zealand
Gilbert Cockton, *University of Sunderland,* UK
Mike Cohen, *Google,* USA
Katherine Connelly, *Indiana University,* USA
Frederick Conrad, *University of Michigan,* USA
Sunny Consolvo, *Intel,* USA
Gregorio Convertino, *The Pennsylvania State University,* USA
Dan Cosley, *University of Minnesota,* USA
Maria Francesca Costabile, *University of Bari,* Italy
Tim Coughlan, *University of Bath,* UK
Scott Counts, *Microsoft,* USA
Lynne Coventry, *NCR,* UK
Andy Crabtree, *University of Nottingham,* UK
Lorrie Cranor, *Carnegie Mellon University,* USA
Andrew Crossan, *University of Glasgow,* UK
Abe Crystal, *University of North Carolina, Chapel Hill,* USA
James Cunningham, *AT&T,* USA
Douglas Cunningham, *University of Tübingen,* Germany
William Curtis-Davidson, *IBM,* USA
Paul Curzon, *Queen Mary College, University of London,* UK
Edward Cutrell, *Microsoft,* USA
Allen Cypher, *IBM,* USA
Sara Czaja, *University of Miami,* USA
Mary Czerwinski, *Microsoft,* USA
Laura Dabbish, *Carnegie Mellon University,* USA
Owen Daly-Jones, *Serco Usability Services,* UK
Ben Daniel, *University of Saskatchewan,* Canada
Catalina Danis, *IBM,* USA
Francoise Darses, *CNAM, Paris,* France
Scott Davidoff, *Carnegie Mellon University,* USA
Richard Davis, *University of California, Berkeley,* USA
Antonella De Angeli, *University of Manchester Institute of Science and Technology,* UK
Oscar de Bruijn, *University of Manchester,* UK
Nadja De Carolis, *University of Bari,* Italy
Wim De Pauw, *IBM,* USA
Cleidson de Souza, *Universidade Federal do Pará,* Brazil
David Dearman, *University of Toronto,* Canada
Uri Dekel, *Carnegie Mellon University,* USA
Leonidas Deligiannidis, *University of Georgia,* USA
Rob DeLine, *Microsoft,* USA
Pieter Desmet, *Delft University of Technology,* the Netherlands
Anind Dey, *Carnegie Mellon University,* USA
Rachna Dhamija, *University of California, Berkeley,* USA
Nicholas Diakopoulos, *Georgia Institute of Technology,* USA
Stephan Diehl, *University of Trier,* Germany
Paul Dietz, *Mitsubishi Electric Research Laboratories,* USA
Joan DiMicco, *MIT,* USA
Carl DiSalvo, *Carnegie Mellon University,* USA
Alan Dix, *Lancaster University,* UK
Ellen Yi-Luen Do, *Georgia Institute of Technology,* USA
Judith Donath, *MIT,* USA
Mira Dontcheva, *University of Washington,* USA
John Dowell, *University College London,* UK
Silke Dr. Lang, *ETH Zurich,* Switzerland
Pierre Dragicevic, *University of Toronto,* France
Steven Drucker, *Microsoft,* USA
Benedict du Boulay, *University of Sussex,* UK
Carlos Duarte, *Faculdade de Ciencias da Universidade de Lisboa,* Portugal
Nicolas Ducheneaut, *PARC,* USA
Andrew Duchowski, *Clemson University,* USA
Geoffrey Duggan, *University of Manchester,* UK
Henry Been-Lirn Duh, *Nanyang Technological University,* Singapore
Lynne Dunckley, *Thames Valley University,* UK
Anthony Dunne, *Royal College of Art,* UK
Keith Edwards, *Georgia Institute of Technology,* USA
Kate Ehrlich, *IBM,* USA
Rana El Kaliouby, *University of Cambridge,* UK
Ame Elliott, *PARC,* USA
Dan Ellis, *Columbia Univesity,* USA
Jason Ellis, *IBM,* USA
Niklas Elmqvist, *INRIA Futurs,* France
David England, *Liverpool John Moores University,* UK
Deniz Erdogmus, *Oregon Health and Science University,* USA
Thomas Erickson, *IBM,* USA
Mattias Esbjörnsson, *Mobility, The Interactive Institute,* Sweden
Shelley Evenson, *Carnegie Mellon University,* USA
Katherine Everitt, *University of Washington,* USA
Rod Farmer, *The University of Melbourne,* Australia
Shelly Farnham, *Microsoft,* USA
Umer Farooq, *The Pennsylvania State University,* USA
Robert Farrell, *IBM,* USA
J. Shawn Farris, *Atlantic Human Factors,* USA
Steven Feiner, *Columbia University,* USA
Jean-Daniel Fekete, *INRIA,* France
Sue Fenley, *Reading University,* UK
Bob Fields, *Middlesex University,* UK
Leah Findlater, *University of British Columbia,* Canada
Thomas Finholt, *University of Michigan,* USA
Glenn Fink, *Pacific Northwest National Laboratory,* USA
Janet Finlay, *Leeds Metropolitan University,* UK
Andrew Fiore, *University of California, Berkeley,* USA
Brian Fisher, *University of British Columbia,* Canada
Danyel Fisher, *Microsoft,* USA
George Fitzmaurice, *Autodesk,* Canada
Geraldine Fitzpatrick, *University of Sussex,* UK
Morten Fjeld, *Chalmers University of Technology,* Sweden
James Fogarty, *University of Washington,* USA
Andrew Fogg, UK
Eelke Folmer, *University of Nevada, Reno,* USA
Clifton Forlines, *Mitsubishi Electric Research Laboratories,* USA
Jodi Forlizzi, *Carnegie Mellon University,* USA
Andrea Forte, *Georgia Institute of Technology,* USA
Brooke Foucault, *Northwestern University,* USA
Katie Fraser, *University of Nottingham,* UK
Mike Fraser, *University of Bristol,* UK
Adrian Friday, *Lancaster University,* UK
Batya Friedman, *University of Washington,* USA
Bernd Froehlich, *Bauhaus-Universität Weimar,* Germany
Jon Froehlich, *University of Washington,* USA
Peter Fröhlich, *Telecommunications Research Center Vienna,* Austria
Erik Frøkjær, *Københavns Universitet,* Denmark
Robert Fuller, *University of Tennessee,* USA
George Furnas, *University of Michigan,* USA
Susan Fussell, *Carnegie Mellon University,* USA
Krzysztof Gajos, *University of Washington,* USA
Craig Ganoe, *The Pennsylvania State University,* USA
Michael Gardner, *University of Essex,* UK
Simson Garfinkel, *MIT,* USA
Franca Garzotto, *HOC-Politecnico di Milano,* Italy
William Gaver, *Goldsmiths College,* UK
Shirley Gaw, *Princeton University,* USA
Erik Geelhoed, *Hewlett-Packard,* UK
Jim Gemmell, *Microsoft,* USA
Darren Gergle, *Northwestern University,* USA
Werner Geyer, *IBM,* USA
Elisa Giaccardi, *University of Colorado, Boulder,* USA
Juan Gilbert, *Auburn University,* USA
Audrey Girouard, *Tufts University,* USA
Paul Gnanayutham, *University of Portsmouth,* UK
Rachel Gockley, *Carnegie Mellon University,* USA
Carsten Goerg, *Georgia Institute of Technology,* USA
Jennifer Golbeck, *University of Maryland, College Park,* USA
Scott Golder, *Hewlett-Packard,* USA
Evan Golub, *University of Maryland,* USA
Victor Gonzalez, *University of Manchester,* UK
Monica Gonzalez Veron, *Carnegie Mellon University,* USA
Lance Good, *PARC,* USA
Kim Goodwin, *Cooper,* USA
Dina Goren-Bar, *Ben-Gurion University,* Israel
Dorian Gorgan, *Technical University of Cluj-Napoca,* Romania
Peter Gorny, *University of Oldenburg,* Germany
Jeremy Gow, *University College London,* UK
Denis Gracanin, *Virginia Polytechnic Institute and State University,* USA
Peter Graf, *University of British Columbia,* Canada
Andrina Granic, *University of Split,* Croatia
Rego Granlund, *Linköping University,* Sweden
Wayne Gray, *Rensselaer Polytechnic Institute,* USA
Paul Green, *University of Michigan Transportation Research Institute,* USA
Saul Greenberg, *University of Calgary,* Canada
Dan Grigorovici, *The Pennsylvania State University,* USA
Andrea Grimes, *Georgia Institute of Technology,* USA
Georges G. Grinstein, *University of Massachusetts, Lowell,* USA
Rebecca Grinter, *Georgia Institute of Technology,* USA
Kaj Gronbak, *University of Aarhus,* Denmark
Joshua Gross, *The Pennsylvania State University,* USA
Ben Gross, *University of Illinois, Urbana-Champaign,* USA
Mark Gross, *Carnegie Mellon University,* USA
Tom Gross, *Bauhaus-University Weimar,* Germany
Tovi Grossman, *University of Toronto,* Canada
Jonathan Grudin, *Microsoft,* USA
Zhiwei Guan, *University of Washington, Seattle,* USA
Catherine Guastavino, *McGill University,* Canada
Agnes Guerraz, *INRIA,* France
Yves GUIARD, *CNRS & U2 Marseille France,* France
Francois Guimbretiere, *University of Maryland,* USA
Anuj Gujar, *DARTdevices Corporation,* USA
Carl Gutwin, *University of Saskatchewan,* Canada
Jonna Häkkilä, *Nokia,* Finland
Michael Haller, *Upper Austria University of Applied Sciences,* Austria
John Halloran, *Coventry University,* UK
Tim Halverson, *University of Oregon,* USA
Christine Halverson, *IBM,* USA
Tracy Hammond, *Texas A&M University,* USA
Kari Hamnes, *Telenor R&D,* Norway
Jeff Hancock, *Cornell University,* USA
John Paulin Hansen, *University of Copenhagen,* Denmark
Richard Harper, *Microsoft,* UK
Steve Harrison, *Virginia Polytechnic Institute and State University,* USA
Beverly Harrison, *IBM,* USA
Bjoern Hartmann, *Stanford University,* USA
Marc Hassenzahl, *University of Koblenz-Landau,* Germany
Kirstie Hawkey, *Dalhousie University,* Canada
Gillian Hayes, *Georgia Institute of Technology,* USA
Steven Haynes, *The Pennsylvania State University,* USA
James Hays, *Carnegie Mellon University,* USA
Richard Hazlett, *The Johns Hopkins University,* USA
William Hazlewood, *Indiana University, Bloomington,* USA
Jeffrey Heer, *University of California, Berkeley,* USA
Ilona Heldal, *Chalmers University of Technology,* Sweden
Austin Henderson, *Pitney Bowes,* USA
Denise Henriques, *York University,* Canada
Daryl Hepting, *University of Regina,* Canada
Morten Hertzum, *Roskilde University,* Denmark
Jonathan Hey, *University of California, Berkeley,* USA
Martin Hicks, *Microsoft,* UK
Ken Hinckley, *Microsoft,* USA
Jon Hindmarsh, *King's College London,* UK
Nicolas Hine, *University of Dundee,* UK

CONTINUES NEXT TAB

ACM SIGCHI

CHI 2007 is sponsored by ACM's Special Interest Group on Computer-Human Interaction (ACM SIGCHI). ACM, the Association for Computing Machinery, is an educational and scientific society uniting the world's computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

ACM offers its more than 80,000 global members cutting-edge technical information through world class journals and magazines, dynamic special interest groups, and globally recognized conferences. Visit www.acm.org for more information about the ACM.

SIGCHI is the premier international society for professionals, academics, and students who are interested in human technology and human-computer interaction (HCI). We provide a forum for the discussion of all aspects of HCI through our conferences, including our flagship CHI conference, publications, web sites, email discussion groups, and other services. We advance education in HCI through courses, workshops, and outreach and we promote informal access to a wide range of individuals and organizations involved in HCI. Members can be involved in HCI-related activities with others in their region through local SIGCHI chapters.

Come to our membership meeting on Wednesday at 18:10 in Room B1–B4; or visit www.sigchi.org to learn more about SIGCHI.

Membership Information

Please contact ACM's Member Services Department

Online: www.acm.org

Tel: +1-800-342-6626 (USA/Canada)

+1-212-626-0500 (International)

Fax: +1-212-944-1318

Email: acmhelp@acm.org

Write: Association for Computing Machinery, Inc.
General Post Office
P.O. Box 30777
New York, NY 10087-0777
USA

CHI 2007 OVERVIEW

The CHI 2007 technical program showcases presentations of outstanding research in human-computer interaction (HCI), demonstrations of new and innovative technology, discussion of timely and controversial issues, and presentations of the latest developments in HCI design and practice.

PRE-CONFERENCE | SATURDAY & SUNDAY

Doctoral Consortium

Location: Willow Glen I, II, III

The Doctoral Consortium provides an opportunity for a group of invited doctoral students to explore their research interests in an interdisciplinary workshop with other students and a group of experienced researchers.

Posters displaying the Doctoral Consortium participants' work will be on display in the Concourse throughout the conference. Brief descriptions of each poster can also be found in the CHI 2007 Extended Abstracts.

Doctoral Consortium Faculty:

Deborah Tatar, *Virginia Polytechnic Institute and State University,* USA (Co-Chair)
Tom Rodden, *University of Nottingham,* UK (Co-Chair)
Batya Friedman, *University of Washington,* USA
Wendy Mackay, *INRIA,* France
Gary M. Olson, *University of Michigan,* USA

Workshops

Workshops provide a valuable opportunity for small communities of people with diverse perspective to engage in rich one- and two-day discussions about a topic of common interest. Workshop participants are pre-selected based on submitted position papers, and results will be summarized and displayed as posters in the Concourse area.

TECHNICAL PROGRAM | MONDAY – THURSDAY

The CHI technical program includes presentations and posters. Sessions are described below and poster information can be found at the back of this program.

Choosing Sessions

With so many exciting opportunities happening at once, how do you choose? CHI 2007 has put four resources in place to help you make the most of your conference experience:

1. The CHI 2007 Conference Proceedings and Extended Abstracts contain information about each presentation. Additional copies of the proceedings, in both print and digital format, are available for sale at the CHI Merchandise Desk near Registration.
2. To help you decide how to spend your time during the day, each morning we present CHI Madness, a fast-paced overview of many of the presentations of the day.
3. Immediately following Monday's Opening Plenary, attend the Newcomers' Orientation (Monday, 10:30, Civic Auditorium), where we offer suggestions on planning your conference experience.
4. Conference volunteers are also available to answer any questions you may have.

Leaving Sessions

If you plan to leave during the middle of a session, please be considerate of the speakers and others around you by taking a seat near an exit.

Session Types

ALT.CHI (12–30 min / presentation)

These invited sessions allow the controversial, hard to publish, and/or alternative perspectives on HCI to express themselves in a format that encourages lively audience participation.

CHI Madness (30 sec / presentation)

At the beginning of each day, we will give a fast-paced overview of many elements of that day's program.

CHI Notes (15 min / presentation)

Introduced in 2006, CHI Notes is a participation category modeled on the successful UIST TechNotes and CSCW Notes categories. CHI Notes are briefer and more focused than CHI Papers, but follow the same strenuous review process. The goal of CHI Notes is to increase diversity of the fully-reviewed technical program by encouraging submissions that might not fit well within the traditional CHI Papers program. Notes authors are asked to complete their presentations in ten minutes with five minutes for Q&A after each presentation.

CHI Papers (30 min / presentation)

CHI Papers present significant contributions to research, development, and practice in all areas of the field of human-computer interaction. All accepted papers were rigorously reviewed. Papers in the CHI Proceedings are read and cited worldwide and have a wide impact on the development of HCI principles, theories, techniques, and practical application. Paper authors are asked to complete their presentations in 20 minutes with ten minutes for Q&A after each presentation.

Courses (90 min / unit)

CHI 2007 offers courses as part of the technical program. The goal of these courses is to provide professional development opportunities for people in the HCI community or those wishing to join. Courses are strictly limited and pre-registration is required; the course notes you receive at registration will serve as your entry ticket. You may register for courses that have not yet been filled at the registration desk in the Concourse.

Experience Reports (15–30 min / presentation)

Experience Reports are discussions of the practice of HCI based on real world experience, described and generalized in a way to be of interest to and instructive to other members of the community.

Interactive Sessions (90 min / session)

Formerly known as Panels, Interactive Sessions allow audience members to understand and interact with different perspectives on an emerging or controversial topic. These sessions stimulate thought and discussion about contemporary trends of interest to the human-computer interaction community. Interactive Sessions are varied in their structure and mechanisms for interaction but all organizers are expected to provide considerable time and attention for collecting and responding to audience concerns.

Interactivity (15 min / presentation)

Experience human-computer interaction for yourself at the Interactivity displays in the Exhibit Hall. These presentations are hands-on demonstrations that push the boundaries of tangible, multimodal, collaborative, and multimedia interfaces. They will be available during the Exhibits Grand Opening at the conference reception on Monday night, and will be available for interaction throughout the week. Interactivity participants will also describe their research in scheduled conference sessions, with ten minutes for each presentation followed by five minutes Q&A. Interactivity projects were selected after peer review, based on their scientific as well as artistic merit.

SIGCHI Award Talks (60–90 min / presentation)

CHI 2007 will feature invited talks by three individuals receiving major SIGCHI awards – Jim Foley (Lifetime Achievement Award, Wednesday at 9:00 am), Gary Marsden (Social Impact Award, Tuesday at 9:00 am), and Gregory D. Abowd (Social Impact Award, Thursday at 11:30 am). These individuals are being honored for their cumulative contributions to our community and we encourage you to attend their talks to learn about their work and perspectives.

Special Interest Groups (SIGs) (90 min / presentation)

Special Interest Groups (SIGs) enable conference attendees who share similar interest to meet for 90 minutes of facilitated discussion.

Student Design Competition (20 min / presentation)

Professionals in the field of human-computer interaction are unique in their ability to impact the quality of people's lives. Tackling real-world programs, HCI researchers and designers in both academia and industry face many fascinating challenges in designing usable and enjoyable services, applications, interfaces, and environments. This year's Student Design Competition problem was to design a service to promote or encourage the use of public transit.

All CHI 2007 Student Design Competition entries will be displayed on posters in the Concourse area. Be sure to review them and attend the finalist teams' presentations on Wednesday at 11:30 in room A8. See if you can guess the winners, who will be announced at the end of the Closing Plenary on Thursday!

Student Research Competition (15 min / presentation)

The Student Research Competition, new at CHI 2007, provides a forum for undergraduates and graduate students to share their research results, exchange ideas, and improve their communication skills, while competing for prizes. Sponsored by Microsoft Research, the CHI competition is a branch of the ACM Student Research Competition, which hosts similar competitions at other ACM conferences in other areas of computer science. As for the Design Competition, the Student Research Competition entries will be displayed as posters in the Concourse area during the week and there will be presentations by finalists on Wednesday at 16:30 in room C2. The winners will be announced at the Closing Plenary on Thursday.

SPECIAL EVENTS

Network Gathering

Location: Concourse
Time: Sunday, 17:30–20:00

Kick off CHI 2007 the right way! All CHI participants are invited to join friends and colleagues at the Networking Gathering to mix and mingle, catch up with old friends, and make newcomers feel welcome. Complimentary light snacks will be served and a cash bar will be available.

Newcomers' Orientation

Location: Civic Auditorium
***This venue is across the street from McEnery Convention Center on San Carlos Street**
Time: Monday, 10:30–11:30

Join ACM SIGCHI President Julie Jacko, Conference Chair Mary Beth Rosson, and Technical Program Chair David Gilmore after the Opening Plenary to find out how to get the most from CHI 2007. This session offers first-time attendees information on navigating the conference and making session choices in an environment with many options. The Newcomers' Orientation will also provide a brief history of SIGCHI and an overview of its current structure and activities.

Conference Reception & Exhibits Grand Opening

Location: The Commons (Exhibit Hall 1)
Time: Monday, 18:30–22:00

To celebrate the CHI 2007 theme of "Reach Beyond" and the tremendous growth we have seen in the last 25 years, we cordially invite you to join us for a fantastic around-the-world reception in the Exhibit Hall. Experience international flavors and enjoy multi-sensory performances featuring entertainment from the four corners of the earth: witness a colorful Chinese dragon parade, syncopated Japanese Taiko drummers, a sultry Tango, and Middle Eastern bellydancers! One complimentary beer, wine, or soda is included with your admission ticket, and a cash bar will also be available.

During the reception you will also have a chance to visit our exhibitors and Interactivity authors, as well as to view the Student Design and Research Competition posters, Doctoral Consortium posters, and posters reporting the workshops held over the preceding weekend. Admission to the opening reception is included with Conference registration; additional tickets may be purchased for $50 each at Registration. Tickets will not be available at the door.

Job Fair

Location: The Commons (Exhibit Hall 1)
Time: Tuesday, 18:00–20:00

To enhance recruiting this year, CHI 2007 is featuring a Job Fair on Tuesday evening. Recruiters and job candidates are invited to take advantage of this key event. Visit the Recruiting Boards and designated exhibit booths throughout the conference to find out more about available positions. Light refreshments will be served.

CHI Hero Recruiter:

Intel Corporation (exhibiting)

CHI Champion Recruiters:

Cisco Systems, Inc. (see recruiting board)
Cooper (exhibiting)
Google, Inc. (exhibiting)
Intuit (exhibiting)
Microsoft Corporation (exhibiting)
SAP (exhibiting)
Sun Microsystems (exhibiting)
Yahoo! Inc. (exhibiting)

CHI Contributor Recruiters:

Adobe Systems, Inc. (exhibiting)
Autodesk, Inc. (exhibiting)
eBay, Inc. (exhibiting)
Pitney Bowes (see recruiting board)

Other Recruiters:

Alucid Solution, Inc. / Usability Systems (exhibiting)
Enterprise Rent-A-Car (see recruiting board)
FILTER/TALENT (exhibiting)
Human Factors International, Inc. (exhibiting)
Landmark (see recruiting board)
Oracle USA (exhibiting)
salesforce.com (exhibiting)
Savannah College of Art and Design (exhibiting)
TechSmith Corporation (exhibiting)
Tobii Technology (exhibiting)
VMware, Inc. (exhibiting)
UXalliance (exhibiting)
YELLOWPAGES.COM (exhibiting)

ACM SICGHI Member Meeting

Location: B1–B4
Time: Wednesday, 18:10–19:30

SIGCHI officers will present ongoing programs and activities, followed by an audience Q&A session. Participants interested in shaping SIGCHI's future are encouraged to attend.

Hospitality Events

Time: Wednesday, 18:30–20:30

CHI Champions:

Cooper
Willow Glen I, II, III – Marriott Hotel

Intuit
Regency Ballroom – Fairmont Hotel

Microsoft Corporation
San Jose Ballroom I, II, III – Marriott Hotel

Google, Inc. (20:30–22:30)
San Jose Tech Museum

Anniversary Party

Location: Concourse
Time: Thursday, 18:00–19:00

Say goodbye to your friends and colleagues from CHI 2007 with a celebration of our 25th anniversary. A low-key networking event, the Anniversary Party will feature displays of CHI history and a chance to mingle with CHI alumni from many different years. Join us for cake and an ice cream sundae bar, share your own CHI memories, and make plans for meeting up with new colleagues and friends in Florence, Italy next year!

VENUE INFORMATION

INTERNET ACCESS

Wireless high-speed internet access for your laptop is being provided in meeting rooms at the San Jose McEnery Convention Center, Hilton and Marriott hotels, and Civic Auditorium by CHI 2007. You may wish to visit the Internet Café near Registration to go online while you chat informally with colleagues in a relaxed environment.

Up to 500 ports will be available at any one time, so please be considerate of your colleagues and limit your time spent online. Hardwired connections and computers are not provided. If your laptop does not have wireless capability, you will need to access the internet through your hotel guest room.

CHI BUZZ (CHIBUZZ.IST.PSU.EDU)

CHI Buzz is the online community established to support the CHI Conference community. In honor of CHI's 25th anniversary, please share your stories, memories, and thoughts about this exciting conference in "CHI Stories and Memories" and share your pictures from past CHIs in CHI Photos! Then engage with others at CHI 2007 by joining discussions in the CHI 2007 Forum, vote in our polls at CHI 2007 Polls, and announce impromptu meet-ups and luncheons at CHI Meetups.

REGISTRATION

Location: Concourse

The CHI 2007 Registration area is located on the main level of the McEnery Convention Center. Pre-registered participants must pick up their badges and conference materials in this area. On-site registration for the conference and courses (subject to space availability) is located here as well.

Registration Hours:

Friday	17:00–19:00
Saturday	8:00–12:00
Sunday	8:00–18:00
Monday	8:00– 21:30
Tuesday	8:00– 17:30
Wednesday	8:00– 17:30
Thursday	8:00– 16:30

THE COMMONS

Location: Exhibit Hall 1

The Commons is a large central area that is the site for all main conference breaks, exhibits, interactivity, and other informal activities. Seating areas make The Commons the perfect place to meet with old or new friends, enjoy a refreshing beverage during a coffee break, or just relax between sessions.

Commons Hours:

Monday	18:30– 21:30
Tuesday	10:30–18:00
Wednesday	10:30–18:00
Thursday	10:30–14:30

COFFEE BREAKS

Regularly scheduled morning and afternoon coffee breaks are complimentary for all registered CHI 2007 participants.

Coffee Break Schedule:

Monday
10:30 – 11:30: Concourse
16:00 – 16:30: Concourse

Tuesday
10:30 – 11:30: The Commons
16:00 – 16:30: The Commons

Wednesday
10:30 – 11:30: The Commons
16:00 – 16:30: The Commons

Thursday
10:30 – 11:30: The Commons
16:00 – 16:30: Concourse

THE CHI MERCHANDISE DESK

Location: Concourse

Conference t-shirts, mugs, publications, videos, and DVDs will be sold at the CHI Merchandise Desk located near Registration. The CHI Merchandise Desk opens at 12:00 on Sunday and will be open during registration hours.

THE CHI INFORMATION BOOTH

Location: Concourse & The Commons

The info booth is staffed by CHI Local Members and Student Volunteers who can answer your CHI 2007 questions and assist with recruiting and special needs. There is also a CHI Information Booth in the Commons, which will be staffed during regular Commons hours.

Information Booth Hours:

Monday	8:00–17:30
Tuesday	8:00–17:30
Wednesday	8:00–17:30
Thursday	8:00–16:30

The Convention Center also staffs a Concierge Desk where you can obtain assistance in locating and booking reservations for local restaurants or other attractions.

STUDENT VOLUNTEERS

Student Volunteers are a great source of information about the conference. They help give the conference a friendly, helpful face and work hard to assist during the whole conference. Many are working on their Masters or Ph.D.s and some are looking for job or internship opportunities. Please be courteous to them and feel free to ask them questions. You can identify Student Volunteers by their red T-shirts.

INTERNATIONAL RELATIONS

CHI 2007 welcomes participants from around the world. Please visit the CHI Information Booth in the Concourse if you have any questions about the conference.

LUNCH WITH A LOCAL

Back by popular demand, CHI local members will offer the successful "Lunch with a Local" program that has been uniquely designed to learn more about San Jose and what it has to offer. Advance registration (free) is required, so visit the CHI Information Booth at the start of the conference to take advantage of these unique opportunities. Please note that "Lunch with a Local" participants are responsible for the cost of their own lunch.

RECRUITING BOARDS

Location: The Commons (Exhibit Hall 1)

Please check the recruiting boards in the Commons for information about career opportunities with exhibiting companies. For a list of this years recruiters, refer to page 18.

SPEAKER READY ROOM

Location: Meeting Room N

The Speaker Ready Room serves as a central check-in point for speakers and session chairs. Conference speakers may reserve a designated LCD projector in these rooms to help them prepare materials and rehearse for their presentations. Appointments will be taken on a first-come, first-served basis, and should be made with the staff person in Meeting Room N. Please sign up early—only one LCD will be available for speaker preparation. Presenters planning to include interactive media (e.g., video, sound) are particularly advised to test their materials in advance.

Ready Room Hours:

Sunday	13:00–18:00
Monday	7:30–18:00
Tuesday	7:30–18:00
Wednesday	7:30–18:00
Thursday	7:30–14:30

PRESS OFFICE

Location: San Carlos Room (Marriott)

CHI 2007 welcomes members of the media. Please stop by the Press Office to get information on scheduled Media Events this week and to learn more about CHI 2007, SIGCHI, and future CHI conferences. CHI 2007 media coordinators will be happy to schedule interviews with select authors at the conference.

CHI 2007 POLICIES

CELL PHONE COURTESY

Please be considerate in your cell phone use. CHI 2007 requests that all cellular phones, pagers, and other equipment with audible alarms be turned off in all sessions as a courtesy to the presenters and to the other attendees.

NAME BADGES

Your CHI 2007 name badge serves as your admission pass to conference sessions and events. Please wear your name badge at all times while inside the McEnery Convention Center or the Civic Auditorium. Conference management reserves the right to deny admission to any persons not wearing a CHI 2007 name badge.

BLOGGING AND PHOTOSHARING

CHI encourages conference participants to blog CHI while at the event. You can use the CHI 2007 Blog on CHI Buzz (chibuzz.ist.psu.edu) or add the category/keyword "CHI 2007" to your blog entries.

We also encourage photo-sharing through services such as flickr. You can use CHI Photos on Chi Buzz (chibuzz.ist.psu.edu) or add the tag "CHI 2007" to your photos.

RECORDING PROHIBITED

The use of any type of audio or video recording device is not permitted during any part of the conference. The use of still cameras is permissible, however, reprinting photographs in print or electronic publications is prohibited without the written permission of the people photographed.

SMOKING POLICY

CHI conferences are smoke-free and the McEnery Convention Center is a non-smoking facility. Smoking is only permitted outside of the facility in the designated areas.

ALCOHOLIC BEVERAGES

Legal drinking age in San Jose is 21 years old. Bartenders will request photo identification from all patrons who appear to be less than 30 years old.

ACCOMPANYING PERSONS

CHI 2007 welcomes accompanying persons, age 18 or older, at the conference. Please note that children under 18 are not permitted to attend any portion of the conference or ancillary events for safety reasons. Accompanying persons must register on-site for a pass that will permit entry to the opening plenary and the conference reception.

Additional tickets for the conference reception may be purchased at the CHI Registration Desk for $50. Reception tickets will not be sold on the evening of the event. Each reception ticket includes admission to the reception, dinner, and one complimentary beer, wine, or soda.

ELECTRICAL POWER

It is ACM SIGCHI policy to use the local power source. Electrical outlets in the United States are 110 volts (60 cycles). If you are traveling from Europe or elsewhere, you will need an adapter to use your small appliances, if they are designed for a different standard. CHI 2007 does not provide power converters, extension cords, power strips, or other electric accessories.

MISCELLANEOUS SERVICES

ATMs

The San Jose McEnery Convention Center has two ATMs within the facility: one located on the lower level by Starbucks (Hilton side) and the other located on the upper level of the Convention Center before the Marriott pass-through. There is a $2.00 fee per transaction.

BUSINESS SERVICES

Business centers are located in all CHI 2007 hotels. Please see hotel staff for hours, rates, and additional information.

FIRST AID / EMERGENCIES

Your safety is our primary concern. First Aid staff may be contacted by picking up any house phone and dialing "0" or by contacting any Center personnel. You may also dial the main Center switchboard at 408-277-3500 from any phone in case of emergency.

LOST AND FOUND

Please turn all lost and found items in to the Registration desk. CHI 2007 management will then turn lost and found items over to building security at the conclusion of the conference. All lost and found articles are catalogued and stored at the McEnery Center for 30 days. After that period, all articles are disposed of at the sole discretion of the McEnery Convention Center.

SAN JOSE VISITORS' BUREAU

Please visit the San Jose Convention & Visitors Bureau desk, located on the lower level of the San Jose McEnery Convention Center directly across from the Marriott Hotel, for information on events and activities happening in San Jose this week.

SPECIAL NEEDS

Any special requirements you may need should be relayed to the CHI Information Booth in the Concourse at the earliest time possible. The San Jose McEnery Convention Center is in current compliance with all ADA requirements, and has elevators, restrooms, concessions, and telephones designed to accommodate the needs of those with physical and non-physical impairments. The Ballrooms, Meeting Rooms, and Exhibit Halls may be equipped with services for the hearing impaired upon request, dependant upon the Center's inventory.

STARBUCKS

(Open 7:00–14:00 daily)

Starbucks is located on the lower level of the convention center, near the entrance to the Hilton San Jose.

SAN JOSE, CALIFORNIA

San Jose is just a 45-minute car or train ride to San Francisco. Blessed with a perfect California climate, San Jose boasts over 300 days of sunshine each year, with April high temperatures in the high 60s/low 70s. Also the "Safest Big City in America" for five consecutive years, San Jose offers a compact and pedestrian-friendly downtown filled with unique dining and cultural attractions.

CITY TRANSPORTATION

The San Jose McEnery Convention Center and surrounding area is easily accessible by taxi, light rail, airport shuttle, and bus service. For more information about any of these transportation options, please visit www.vta.org or stop by the San Jose Visitors Center on the lower level of the Convention Center.

VTA LIGHT RAIL

Directly across the street from the McEnery Center visitors can access the VTA Light Rail, which services the entire Santa Clara Valley with 62 stations. The light rail operates 365 days per year, and adult fares are $1.75. Day and week passes are also available. Light rail service connects with VTA buses at all stations. Light rail also connects with Caltrain at the Tamien and Downtown Mountain View Stations, as well as to the Altamont Commuter Express (ACE) and Capitol Corridor Intercity Rail Service at Lick Mill Station.

AIRPORT FLYER

The free VTA/SJC Airport Flyer takes off for Norman Y. Mineta San Jose International Airport daily from 5:00 until Midnight every 15 minutes on weekdays and weekends. Catch the Airport Flyer at VTA's Metro/Airport Light Rail stop and at the Santa Clara Caltrain station. Regular VTA Light Rail fares apply.

TAXIS

Taxi service in San Jose is easily accessible and very affordable. Approximate taxi rates in downtown San Jose are as follows: $2.00 first 1/10th mile, $0.25 each 1/10th mile thereafter. Add $1.50 airport tax fee for all taxis to and from the airport. CHI attendees can catch a taxi at the main entrance to the Marriott or Hilton hotels, or by calling Yellow Check Cab 408-777-7777.

LIFETIME ACHIEVEMENT AWARD

James D. Foley

James D. Foley is Professor in the School of Interactive Computing in the College of Computing and in the School of Electrical and Computer Engineering at the Georgia Institute of Technology. He was the founding director of the Graphics, Visualization & Usability Center at Georgia Tech. Other past positions include CEO of Yamacraw, Georgia's economic development initiative in broadband devices and chips, and the director of the Mitsubishi Electric Research Laboratory (MERL) in Cambridge, Massachusetts and chairman and CEO of Mitsubishi Electric ITA, directing four labs in North America. He is a Fellow of AAAS, ACM, and IEEE, and a recipient of the ACM/SIGGRAPH Stephen Coons Award for Outstanding Creative Contributions to Computer Graphics.

Foley was one of the computer graphics pioneers who came over to help establish HCI as a discipline. He is the first author of the leading text in computer graphics, part of which deals with core technical HCI issues such as input devices, interaction techniques, and dialogue design. From this base of credibility, he established the Graphics, Visualization & Usability Center at Georgia Tech. This institution became a major center for HCI research, the training of students and future faculty, and the codification of courses and content in the field. It is difficult to think of anyone who had a larger role in the institutionalization of HCI as a discipline. Foley's technical work has been characterized by its breadth across HCI. He has contributed over 80 publications spanning computer graphics, input devices, visualization, user interface evaluation, perceptual issues, and user interfaces.

CHI ACADEMY

Joëlle Coutaz

Joëlle Coutaz is Professor "Exceptional Class" at University of Grenoble, France, and is the head of the HCI group of the CLIPS-IMAG laboratory that she founded in 1990. She was a pioneer in HCI in France, shaping HCI research via national institutions such as the CNRS national network. She has been a key participant in many European research projects, has been involved in organizing all the major HCI conferences, and served for several years on the editorial board of ACM ToCHI. Coutaz's pioneering work connected HCI to software engineering and her research has shown great versatility, ranging from CSCW to Augmented Reality and Ubiquitous Computing. She is the author of the PAC architectural model for interactive systems and has developed a framework for understanding the plasticity of interactive systems. She is also the author of *Human-Computer Interaction: Design and Development* (Dunod, in French, 1990) and the co-author with Len Bass of *Developing Software for the User Interface* (Addison-Wesley, 1991).

Karen Holtzblatt

Karen Holtzblatt is CEO and co-founder of InContext, a company at the leading edge in training clients to use customer-centered design to develop innovative designs and design processes. With a strong record of achievement in numerous companies and for numerous product areas, Holtzblatt stands as an example of a practitioner par-excellence, teaching clients methods of systematic data collection, field observation, and analysis. The results for clients are deeper understanding of customer behavior, richer, successful products and services, and quite often, a restructuring of their practices and procedures.

Gerhard Fischer

Gerhard Fischer has had a long and distinguished career in the application of computational technology to important social issues, starting even before the existence of CHI. He is a Professor of Computer Science at the University of Colorado, Boulder, as well as a fellow of the Institute for Cognitive Science and the Director and founder of the Center for Lifelong Learning and Design.

Fischer has introduced visionary, long lasting research themes to HCI. He is a prolific researcher, who creatively combines European and American research traditions. He has played a crucial role as an integrator of and mediator between HCI and a spectrum of related fields: AI, Software Engineering, Participatory Design, Computer Supported Collaborative Learning, and CSCW. His work has extended the boundaries of our field, trained numerous students, and serves as a role model for active professional contributions to the development of a scientific discipline that bridges society and technology.

Robert J. K. Jacob

Rob Jacob is a Professor of Computer Science at Tufts University. Rob was an early leader in creating and applying formalisms that are appropriate to the kinds of concurrent real-world interactions that are becoming prevalent in today's post-WIMP interfaces. His work is notable for bringing system design, theoretical analysis, and quantitative measurement to bear on the problem. His early work on eye-tracking at the Naval Research Laboratory combined design and empirical studies to lay out basic issues. More recently, collaborations at the Media Lab have brought his theoretical perspective to bear on a wide range of tangible user interfaces. He was Vice Chair for Conference Planning 1990-1993, Papers Co-Chair of the CHI 2001 conference, and SIGCHI VP for Finance from 2001 to 2006.

Jun Rekimoto

Jun Rekimoto is the founding Director of the Interaction Laboratory within the Sony Computer Science Laboratories. His pioneering work has been at the forefront of efforts to apply new technology to interaction for many years. His research has explored a range of highly innovative techniques for combining the digital and physical worlds. Rekimoto's clever devices and interaction techniques have extended the reach of interactive technologies into the everyday world and represents some of the best work in computer augmented environments, tangible interaction, and mobile computing.

Chris Schmandt

Chris Schmandt has been a Principal Research Scientist in the Media Lab at MIT since 1985. He is currently the Director of the Speech Interface Group. Formerly, he worked in MIT's Architecture Machine Group from 1977 to 1985. During his career, he has authored over 60 research papers. He is an early pioneer in the uses of speech and non-speech audio in user interfaces. In fact, his first published work on interactive audio was in 1981, almost a decade before such technology was generally available. Some of his early work involved studies of how people might use voice to interact with email and other messaging systems. Other studies concerned how much speech could be sped up before it becomes unusable. He has done seminal work on architectures for integrating speech into interactive software. In 1997, he was the UIST program chair and has served on numerous conference program committees.

LIFETIME SERVICE AWARD

Richard I. Anderson

Richard I. Anderson is a user experience practice, management, and organizational development consultant with more than 20 years of experience. He was on the founding committee and served as program chair (1990–2002) and chair (first elected chair) of BayCHI, the largest chapter of SIGCHI, but has also traveled around the world growing and facilitating SIGCHI chapters internationally. Richard was the SIGCHI Local Chapters Chair for five years, from 1996-2001. He authored numerous SIGCHI Bulletin articles, wherein he offered case studies, advice, and support for local SIG leadership. He organized and led popular annual workshops for chapter leaders at the CHI conference. Richard also served as a member of four CHI conference committees (including the upcoming CHI 2008) and served as the CHI 2005 Development Consortium Chair, in addition to serving on the committee for 3 DUX conferences. Finally, Richard has authored multiple articles for interactions magazine. Through his leadership, he has facilitated and spread the word about human-computer interaction around the world.

SOCIAL IMPACT AWARD

Gregory D. Abowd

Gregory Abowd is an Associate Professor in the College of Computing and GVU Center at Georgia Institute of Technology and co-Director of the Aware Home Research Initiative. His research explores applications of ubiquitous computing technologies, combining both human-centered and technology-driven research themes. Since 1995, Dr. Abowd has lead the development and evaluation of several influential ubiquitous computing projects: Cyberguide; eClass (nee Classroom 2000); the Aware Home; and most recently a suite of tools to support caregivers for children with autism and other developmental disabilities. Dr. Abowd is the co-author of a major textbook on Human-Computer Interaction and has published over 150 peer-reviewed scientific articles in the areas of Ubiquitous Computing, HCI, and Software Engineering. He is a 1986 graduate of the University of Notre Dame, where he studied Mathematics and Physics. He has a M.Sc. (1987) and D.Phil. (1991) in Computation from the University of Oxford, where he studied as a Rhodes Scholar. Prior to joining the faculty at Georgia Tech in 1994, he was a postdoctoral researcher at the University of York in the UK and at Carnegie Mellon University.

One of 12 children growing up in suburban Detroit, Dr. Abowd himself is the father of three children, two of whom have diagnoses on the autism spectrum. For the past four years, Dr. Abowd has been a strong advocate for technology research related to autism and serves on the Scientific Advisory Committee for the Cure Autism Now Foundation (now part of the Autism Speaks Foundation). In this role, he has been a strong advocate to encourage Computer Scientists to explore the applications of their work towards problems of relevance for the developmental disabilities community. He has also been an advocate to other researchers in the area of autism to consider the use of technology to improve their own work. With seed funding from CAN and SBIR funding from NICHD, he has started a company, Caring Technologies, to provide video recording services for schools and families wishing to communicate behavioral evidence to behavioral and medical professionals. Dr. Abowd is also a member of the Board of Directors for the Autism Society of America Greater Georgia Chapter and serves as the chair for adult services. In this role, he has helped to establish a mentoring program for adults on the autism spectrum, providing shelter, counseling, and careers for these extremely talented but unfortunate souls in the Atlanta area. Dr. Abowd also serves as moderator for the Emory Autism Center's Dad's support group.

Gary Marsden

Gary Marsden is an Associate Professor in the Department of Computer Science, University of Cape Town, South Africa. He completed his Ph.D. work at Stirling University in 1998. He now teaches computer science and HCI. Besides his academic interests in designing interaction for mobile computers including cell phones, a large part of his time is spent in examining how mobile computers can be used for betterment of the developing world. Gary edits the column "Under Development" in ‹interactions› magazine, which is aimed at raising the profile of the developing world both in SIGCHI and in the worldwide HCI community. He has worked to help build a local community of HCI researchers and practitioners, serving the South African Institute of Computer Scientists and Information Technologists (SAICSIT), CHI-SA (the South African chapter of SIGCHI), and Afri-Graph (the South African chapter of SIGGRAPH) as well as bringing well-known HCI researchers for keynote presentations in South Africa. His book co-authored with Matt Jones, *Mobile Interaction Design,* includes chapters on how mobile technology can be used to make an impact in the developing world. Gary's work and that which he inspires has significantly raised the profile of developing world issues in the wider HCI community and, similarly, has brought HCI to developing world's computer science community.

PAST HONOREES

SIGCHI Lifetime Achievement Award

2006 Gary M. Olson & Judith S. Olson
2005 Tom Landauer
2004 Thomas P. Moran
2003 John M. Carroll
2002 Donald A. Norman
2001 Ben Shneiderman
2000 Stuart K. Card
1998 Douglas Engelbart

SIGCHI Lifetime Service Award

2006 Susan M. Dray
2005 Sara Bly, John 'Scooter' Morris, Don Patterson, Gary Perlman, Marilyn Mantei Tremaine
2004 Robin Jeffries, Gene Lynch
2003 Lorraine Borman
2002 Dan R. Olsen Jr.
2001 Austin Henderson

CHI Academy Members

Class of 2006 Scott Hudson, Hiroshi Ishii, Michel Beaudouin-Lafon, Jakob Nielsen, Peter Pirolli, George Robertson

Class of 2005 Ron Baecker, Susan Dumais, John Gould, Saul Greenberg, Bonnie E. John, Andrew Monk

Class of 2004 George Furnas, Jonathan Grudin, William Newman, Brad Meyers, Dan R. Olsen Jr., Brian Shackel, Terry Winograd

Class of 2003 Thomas Green, James D. Hollan, Robert E. Kraut, Gary M. Olson, Peter G. Polson

Class of 2002 William A. S. Buxton, John M. Carroll, Douglas C. Engelbart, Sara Kiesler, Thomas K. Landauer, Lucy A. Suchman

Class of 2001 Stuart K. Card, James D. Foley, Morten Kyng, Thomas P. Moran, Judith S. Olson, Ben Shneiderman

BEST OF CHI AWARDS

The SIGCHI "Best of CHI" Program is designed to recognize outstanding work in the field of human-computer interaction by selecting and honoring exceptional submissions to SIGCHI-sponsored conferences. This year, the Papers and Notes committees took part in this program, nominating up to 5% of their submissions as Award Nominees. A separate awards committee then chose a select group of these submissions – no more than 1% of the total submissions – to receive a "Best" designation. We are proud to congratulate the award winners and nominees for their outstanding contributions to CHI 2007 and to our field.

SIGCHI BEST OF CHI 2007 COMMITTEE:

Wendy A. Kellogg, *IBM,* USA (Chair)
James 'Bo' Begole, *PARC,* USA
Elizabeth F. Churchill, *Yahoo!,* USA
Rebecca E. Grinter, *Georgia Institute of Technology,* USA
Robert J. K. Jacob, *Tufts University,* USA
Stephen Payne, *University of Manchester,* UK
Robert St. Amant, *North Carolina State University,* USA
Stephanie Teasley, *University of Michigan,* USA
Terry Winograd, *Stanford University,* USA

CHI 2007 BEST PAPERS, AWARDED BY SIGCHI

Authoring Sensor-Based Interactions by Demonstration with Direct Manipulation and Pattern Recognition (page 37)
Bjoern Hartmann, Leith Abdulla, *Stanford University,* USA
Manas Mittal, *MIT,* USA
Scott R. Klemmer, *Stanford University,* USA

Consuming Video on Mobile Devices (page 67)
Kenton O'Hara, *Hewlett-Packard,* UK
April Slayden Mitchell, Alex Vorbau, *Hewlett-Packard,* USA

MultiView: Improving Trust in Group Video Conferencing Through Spatial Faithfulness (page 87)
David Nguyen, John Canny, *University of California, Berkeley,* USA

Shift: A Technique for Operating Pen-Based Interfaces Using Touch (page 55)
Daniel Vogel, *University of Toronto,* Canada
Patrick Baudisch, *Microsoft,* USA

Software or Wetware? Discovering When and Why People Use Digital Prosthetic Memory (page 34)
Vaiva Kalnikaite, Steve Whittaker, *The University of Sheffield,* UK

Sustainable Interaction Design: Invention & Disposal, Renewal, & Reuse (page 54)
Eli Blevis, *Indiana University, Bloomington,* USA

CHI 2007 HONORABLE MENTION PAPERS, AWARDED BY SIGCHI

A Cognitive Constraint Model of Dual-Task Trade-Offs in a Highly Dynamic Driving Task (page 39)
Duncan P. Brumby, *Drexel University,* USA
Andrew Howes, *University of Manchester,* UK
Dario D. Salvucci, *Drexel University,* USA

A Game Design Methodology to Incorporate Activist Themes (page 38)
Mary Flanagan, *Hunter College, CUNY,* USA
Helen Nissenbaum, *New York University,* USA

A Meta-Analysis of the Impact of the Inclusion and Realism of Human-Like Faces on User Experiences in Interfaces (page 33)
Nicholas Yee, Jeremy N. Bailenson, Kathryn Rickertsen, *Stanford University,* USA

An Exploration of Web-Based Monitoring: Implications for Design (page 42)
Melanie Kellar, Carolyn Watters, Kori M. Inkpen, *Dalhousie University,* Canada

Augmenting the Mouse with Pressure Sensitive Input (page 84)
Jared Cechanowicz, *University of Saskatchewan,* Canada
Pourang Irani, *University of Manitoba,* Canada
Sriram Subramanian, *University of Saskatchewan,* Canada

Back Stage on the Front Lines: Perspectives and Performance in the Combat Information Center (page 57)
Paul M. Aoki, *Intel,* USA

Do Life-Logging Technologies Support Memory for the Past? An Experimental Study Using SenseCam (page 34)
Abigail Sellen, Andrew Fogg, *Microsoft,* UK
Mike Aitken, *University of Cambridge,* UK
Steve Hodges, Carsten Rother, Ken Wood, *Microsoft,* UK

How HCI Interprets the Probes (page 71)
Kirsten Boehner, Janet Vertesi, Phoebe Sengers, *Cornell University,* USA
Paul Dourish, *University of California, Irvine,* USA

Improving Recognition and Characterization in Groupware with Rich Embodiments (page 33)
Tadeusz Stach, Carl Gutwin, David Pinelle, *University of Saskatchewan,* Canada
Pourang Irani, *University of Manitoba,* Canada

Meta-Analysis of Correlations Among Usability Measures (page 55)
Kasper Hornbæk, University of Copenhagen, Denmark
Effie Lai-Chong Law, *Eidgenössische Technische Hochschule, Zürich,* Switzerland

Modeling and Understanding Students' Off-Task Behavior in Intelligent Tutoring Systems (page 71)
Ryan S.J.D. Baker, *University of Nottingham,* UK

Modeling the Impact of Shared Visual Information on Collaborative Reference (page 89)
Darren Gergle, *Northwestern University,* USA
Carolyn P. Rosé, Robert E. Kraut, *Carnegie Mellon University,* USA

Move to Improve: Promoting Physical Navigation to Increase User Performance with Large Displays (page 38)
Robert Ball, Chris North, Doug A. Bowman, *Virginia Polytechnic Institute and State University,* USA

Sabbath Day Home Automation: "It's Like Mixing Technology and Religion" (page 58)
Allison Woodruff, *Intel,* USA
Sally Augustin, *PlaceCoach, Inc.,* USA
Brooke Foucault, *Intel,* USA

Selection-Based Note-Taking Applications (page 69)
Aaron Bauer, Kenneth R. Koedinger, *Carnegie Mellon University,* USA

Shallow-Depth 3D Interaction: Design and Evaluation of One-, Two-, and Three-Touch Techniques (page 74)
Mark Hancock, Sheelagh Carpendale, *University of Calgary,* Canada
Andy Cockburn, *University of Canterbury,* New Zealand

Social Responses to Virtual Humans: Implications for Future Interface Design (page 89)
Catherine Zanbaka, Amy Ulinski, Paula Goolkasian, Larry Hodges, *University of North Carolina, Charlotte,* USA

Task and Social Visualization in Software Development: Evaluation of a Prototype (page 51)
Jason B. Ellis, *IBM,* USA
Shahtab Wahid, *Virginia Polytechnic Institute and State University,* USA
Catalina Danis, Wendy A. Kellogg, *IBM,* USA

The Life and Death of Online Gaming Communities: A Look at Guilds in World of Warcraft (page 59)
Nicolas Ducheneaut, *PARC,* USA
Nicholas Yee, *Stanford University,* USA
Eric Nickell, Robert J. Moore, *PARC,* USA

Usability Testing: What Have We Overlooked? (page 86)
Gitte G. Lindgaard, *Carleton University,* Canada
Jarinee J. Chattratichart, *Kingston University London,* UK

Web Page Revisitation Revisited: Implications of a Long-Term, Click-Stream Study of Browser Usage (page 54)
Hartmut Obendorf, Harald Weinreich, *University of Hamburg,* Germany
Eelco Herder, *University of Hannover,* Germany
Matthias Mayer, *University of Hamburg,* Germany

What Are You Looking For? An Eye-Tracking Study of Information Usage in Web Search (page 49)
Edward Cutrell, *Microsoft,* USA
Zhiwei Guan, *Microsoft & University of Washington,* USA

CHI 2007 BEST NOTE, AWARDED BY SIGCHI

Designing a Mobile User Interface for Automated Species Identification (page 41)
Sean White, Dominic Marino, Steven Feiner, *Columbia University,* USA

CHI 2007 HONORABLE MENTION NOTES, AWARDED BY SIGCHI

Tracking the Interaction of Users with AJAX Applications for Usability Testing (page 83)
Richard Atterer, *Ludwig Maximilian University Munich,* Germany
Albrecht Schmidt, *Fraunhofer IAIS & University of Bonn,* Germany

The Truth about Lying in Online Dating Profiles (page 50)
Jeffrey T. Hancock, Catalina Toma, *Cornell University,* USA
Nicole Ellison, *Michigan State University,* USA

Getting Our Head in the Clouds: Toward Evaluation Studies of Tagclouds (page 69)
A.W. Rivadeneira, *University of Maryland,* USA
Daniel M. Gruen, Michael J. Muller, David R. Millen, *IBM,* USA

Notes

COURSE 1 | SAN JOSE BALLROOM IV

Human-Computer Interaction: Introduction and Overview

18:00-21:30

INSTRUCTORS:
Keith A. Butler, *Microsoft,* USA
Robert J. K. Jacob, *Tufts University,* USA
David Kieras, *University of Michigan,* USA

Benefits: This course is intended to give newcomers enough background in the field of HCI to make their conference experience much more meaningful. It provides a framework to understand how the various topics are related to research and practice. It is a tried-and-true introduction and has become a CHI conference tradition.

Intended Audience: Mainly first-time CHI attendees, typically professionals from computing-related fields who are new to the field of human-computer interaction. No background in HCI is assumed.

COURSE 2 | SAN JOSE BALLROOM III

An Introduction to Computer Supported Cooperative Work (CSCW)

18:00-21:30

INSTRUCTORS:
Gary M. Olson, *University of Michigan,* USA
Jim Herbsleb, *Carnegie Mellon University,* USA

Benefits: Participants will become familiar with the themes and issues in the field of CSCW. These matters will be illustrated with representative CSCW systems, including studies of their deployment and outcome.

Intended Audience: People new to the field of CSCW.

COURSE 3 | ROOM A3

HCI History: Trajectories into the Future

18:00-19:30

INSTRUCTOR:
Jonathan Grudin, *Microsoft,* USA

Benefits: Learn about the history of human-computer interaction as it has been addressed by psychologists, computer scientists, human factors engineers, information systems researchers, designers, and others. By understanding the dynamics that have brought us here, we will be in a better position to understand how to position our efforts effectively going forward.

Intended Audience: The course is intended for anyone who thinks that the best preparation for where we are headed is to understand the road we have traveled to get where we are today.

COURSE 4 | ROOM A1 & A2

Drawing Ideas: Visualization and Design Sketching

18:00-21:30

INSTRUCTORS:
Mark Baskinger, *Carnegie Mellon University,* USA
William Bardel, *Information Designer,* USA

Benefits: This course is about the collaborative processes and engaging tools you can use to be a better visual communicator during creative brainstorming and problem solving activities.

During this course we will investigate the development of sketches, doodles, and handwritten notes that are the first expressions of great ideas and the road maps of how to get there. We will help you visualize their potential as we discuss a few of the ways to capture, organize and share them with others. At the end you will have a broader understanding of how to use visual communication in ways that will enable you to more effectively share your ideas with others.

Intended Audience: Participants need no prerequisite knowledge of the subject. This course is for both novice and seasoned professionals, introducing both basic themes and new approaches to sketching and notation. We recommend this course for:

- Individuals who present information to others as part of their working process
- Managers involved in problem solving or creative processes
- Designers and creative types
- Organizers, directors, collaborators, developers, and thinkers

PAPERS REVIEWERS – CONTINUED

Laurian Hobby, *Virginia Polytechnic Institute and State University,* USA
Harry Hochheiser, *Towson University,* USA
Steve Hodges, *Microsoft,* UK
Blaine Hoffman, *The Pennsylvania State University,* USA
James Hollan, *University of California, San Diego,* USA
Lars Erik Holmquist, *Viktoria Institute,* Sweden
Kate Hone, *Brunel University,* UK
Jason Hong, *Carnegie Mellon University,* USA
Kristina Hook, *Stockholm University,* Sweden
Michael Horn, *Tufts University,* USA
Dan Horn, *U. S. Army Research Institute,* USA
Kasper Hornbæk, *University of Copenhagen,* Denmark
Eva Hornecker, *Technical University Vienna,* Austria
Anthony Hornof, *University of Oregon,* USA
Eric Horvitz, *Microsoft,* USA
Juan Pablo Hourcade, *University of Iowa,* USA
Andrew Howes, *University of Manchester,* UK
Gary Hsieh, *Carnegie Mellon University,* USA
Hao-Wei Hsieh, *Texas A&M University,* USA
Elaine Huang, *Georgia Institute of Technology,* USA
Jim Hudson, *PayPal,* USA
Scott Hudson, *Carnegie Mellon University,* USA
Christopher Hundhausen, *Washington State University,* USA
Anne Hunt, *Microsoft,* USA
Amy Hurst, *Carnegie Mellon,* USA
Dugald Hutchings, *Bowling Green State University,* USA
Hilary Hutchinson, *Google,* USA
Ebba Thora Hvannberg, *University of Iceland,* Iceland
Faustina Hwang, *The University of Reading,* UK
Giovanni Iachello, *Georgia Institute of Technology,* USA
Takeo Igarashi, *The University of Tokyo,* Japan
Tommi Ilmonen, *Helsinki Institute for Information Technology,* Finland
Ohad Inbar, *Ben Gurion University,* Israel
Kori Inkpen, *Dalhousie University,* Canada
Stephen Intille, *MIT,* USA
Shamsi Iqbal, *University of Illinois, Urbana-Champaign,* USA
Pourang Irani, *University of Manitoba,* Canada
Charles Isbell, *Georgia Institute of Technology,* USA
Katherine Isbister, USA
Edward Ishak, *Columbia University,* USA
Hiroshi Ishii, *MIT,* USA
Suguru Ishizaki, *QUALCOMM Incorporated,* USA
Poika Isokoski, *University of Tampere,* Finland
Shahram Izadi, *Microsoft,* UK
Robert Jacob, *Tufts University,* USA
Giulio Jacucci, *Helsinki Institute for Information Technology,* Finland
Jhilmil Jain, *Hewlett-Packard,* USA
Frankie James, *SAP,* USA
Anthony Jameson, *German Research Institute for Artificial Intelligence,* Germany
Robin Jeffries, *Google,* USA
Qiang Ji, *Rensselaer Polytechnic Institute,* USA
Hao Jiang, *The Pennsylvania State University,* USA
Orvalho João, *Scytl Secure Electronic Voting,* Spain
Bonnie John, *Carnegie Mellon University,* USA
Christopher Johnson, *University of Glasgow,* UK
Jeff Johnson, *UI Wizards, Inc.,* USA
Adam Joinson, *The Open University,* UK
Steve Jones, *University of Waikato,* New Zealand
M. Cameron Jones, *University of Illinois, Urbana-Champaign,* USA
Matt Jones, *University of Waikato,* New Zealand
Anker Jorgensen, *University of Copenhagen,* Denmark
Wendy Ju, *Stanford University,* USA
Oskar Juhlin, *Interactive Institute,* Sweden
Susanne Jul, USA
Hyunjoon Jung, *Republic of Korea Telecom,* Republic of Republic of Korea
Younbo Jung, *University of Southern California,* USA
Edward Kaiser, *Adapx,* USA
Matthew Kam, *University of California, Berkeley,* USA
Eser Kandogan, *IBM,* USA
Hyunmo Kang, *Human Computer Interaction Lab,* USA
Anu Kankainen, *Idean Research,* Finland
Victor Kaptelinin, *Umeå University,* Sweden
Maria Karam, *University of Southampton,* UK
Clare-Marie Karat, *IBM,* USA
John Karat, *IBM,* USA
Demetrios Karis, *Verizon,* USA
Kristiina Karvonen, *Helsinki University of Technology,* Finland
Hannes Kaufmann, *Institute of Software Technology and Interactive Systems,* Austria
Laura Kauhanen, *Helsinki University of Technology,* Finland
Judy Kay, *University of Sydney,* Australia
Joseph Kaye, *Cornell University,* USA
Simeon Keates, *IBM,* USA
Daniel Keefe, *Brown University,* USA
Melanie Kellar, *Dalhousie University,* Canada
Wendy Kellogg, *IBM,* USA
Jon Kelly, *Vanderbilt University,* USA
Andruid Kerne, *Texas A&M University,* USA
Pekka Ketola, *Nokia,* Finland
Sanshzar Kettebekov, *Keane Inc,* USA
Pedram Keyani, *Carnegie Mellon University,* USA
Azam Khan, *Autodesk,* Canada
Julie Kientz, *Georgia Institute of Technology,* USA
David Kieras, *University of Michigan,* USA
Sara Kiesler, *Carnegie Mellon University,* USA
Jeong Kim, *Carnegie Mellon University,* USA
Hans Kim, *Santa Clara University,* USA
Tim Kindberg, *Hewlett-Packard,* UK
Esin Kiris, *AT&T,* USA
David Kirk, *University of Nottingham,* UK
Arthur Kirkpatrick, *Simon Fraser University,* Canada
Rick Kjeldsen, *IBM,* USA
Gary Klatsky, *Oswego, SUNY,* USA
Scott Klemmer, *Stanford University,* USA
Alexander Klippel, *The Pennsylvania State University,* USA
Andrew Ko, *Carnegie Mellon University,* USA
Michael Koch, *Technische Universitaet Muenchen,* Germany
Boriana Koleva, *University of Nottingham,* UK
Jon Kolko, *Savannah College of Art & Design,* USA
Joseph Konstan, *University of Minnesota,* USA
Hannu Korhonen, *Nokia,* Finland
Robert Kosara, *University of North Carolina, Charlotte,* USA
Ilpo Koskinen, *University of Art and Design Helsinki,* Finland
Vassilis Kostakos, *University of Bath,* UK
Paula Kotze, *University of South Africa,* South Africa
Robert Kraut, *Carnegie Mellon University,* USA
Christian Kray, *Newcastle University,* UK
Per Ola Kristensson, *Linkoping University,* Sweden
Peter Krogh, *Arhus School of Architecture,* Denmark
Ernst Kruijff, *Graz University of Technology,* Austria
Manu Kumar, *Stanford University,* USA
Sri Kurniawan, *University of Manchester,* UK
Gordon Kurtenbach, *Autodesk,* Canada
Jennifer Lai, *IBM,* USA
Shyong Lam, *University of Minnesota,* USA
Anthony LaMarca, *Intel,* USA
James Landay, *University of Washington,* USA
Jonas Landgren, *Viktoria Institute,* Sweden
David Lane, *Rice University,* USA
Marc Langheinrich, *ETH Zurich,* Switzerland
Rosa Lanzilotti, *University of Bari,* Italy
Kevin Larson, *Microsoft,* USA
Kent Larson, *MIT,* USA
Celine Latulipe, *University of Waterloo,* Canada
Tessa Lau, *IBM,* USA
Effie Law, *Swiss Federal Institute of Technology,* Switzerland
Shaun Lawson, *University of Lincoln,* UK
Joonhwan Lee, *Carnegie Mellon University,* USA
John Lee, *University of Iowa,* USA
Bongshin Lee, *Microsoft,* USA
Stelios Lelis, *University of Manchester,* UK
Catherine Letondal, *Institut Pasteur,* France
Rock Leung, *University of British Columbia,* Canada
Vincent Levesque, *McGill University,* Canada
Lan Li, *Carnegie Mellon University,* USA
Yang Li, *University of Washington,* USA
Henry Lieberman, *MIT,* USA
Ann Light, *Queen Mary College, University of London,* UK
Youn-kyung Lim, *Indiana University,* USA
James Lin, *IBM,* USA
James Jeng-Weei Lin, *Siemens,* USA
Gitte Lindgaard, *Carleton University,* Canada
Sian Lindley, *University College London,* England
Matthew Lipson, *Bristol University,* UK
Linda Little, *Northumbria University,* UK
Feng Liu, *Mercer University,* USA
Mark Livingston, *Naval Research Laboratory,* USA
Sara Ljungblad, *Viktoria Institute,* Sweden
Rosemary Luckin, *University of Sussex,* UK
Paul Luff, *King's College London,* UK
Jay Lundell, *Intel,* USA
Saturnino Luz, *Trinity College Dublin,* Ireland
Michael Lyons, *ATR Media Information Science Research Labs,* Japan
Kent Lyons, *Georgia Institute of Technology,* USA
Catriona Macaulay, *University of Dundee,* UK
Liliane Machado, *Federal University of Paraiba,* Brazil
Wendy Mackay, *INRIA,* France
Christine MacKenzie, *Simon Fraser University,* Canada
Karon MacLean, *University of British Columbia,* Canada
Allan MacLean, *Image Semantics Ltd,* UK
Ed Maclin, *University of Illinois, Urbana-Champaign,* USA
Scott Mainwaring, *Intel,* USA
Heidy Maldonado, *Stanford University,* USA
Peter Mambrey, *Fraunhofer FIT,* Germany
Thomas Mandl, *Universität Hildesheim,* Germany
Regan Mandryk, *Dalhousie University,* Canada
Jennifer Mankoff, *Carnegie Mellon University,* USA
Wendy March, *Intel,* USA
Georgios Marentakis, *McGill University,* Canada
Gloria Mark, *University of California, Irvine,* USA
Gary Marsden, *University of Cape Town,* South Africa
Masood Masoodian, *The University of Waikato,* New Zealand
Dominic Massaro, *University of California, Santa Cruz,* USA
Anijo Mathew, *Mississippi State University,* USA
Nicholas Matsakis, *MIT,* USA
Tara Matthews, *University of California, Berkeley,* USA
Dan Maynes-Aminzade, *Stanford University,* USA
Ali Mazalek, *Georgia Institute of Technology,* USA
Scott McCrickard, *Virginia Polytechnic Institute and State University,* USA
Malcolm Mccullough, *University of Michigan,* USA
Sharon McDonald, *University of Sunderland,* UK
David McDonald, *University of Washington,* USA
Daniel McFarlane, *Lockheed Martin Advanced Technology Laboratories,* USA
David McGee, *Natural Interaction Systems,* USA
Marilyn McGee-Lennon, *University of Glasgow,* UK
Jane McGonigal, *University of California, Berkeley,* USA
David McGookin, *University of Glasgow,* UK
Joanna McGrenere, *University of Brisith Columbia,* Canada
Michael McGuffin, *University of Toronto,* Canada
Sean McNee, *Attenex Corporation,* USA
Timothy McNerney, *Tuva Design,* USA
Guy Melancon, *LIRMM,* France
Cecelia Merkel, *The Pennsylvania State University,* USA
Crysta Metcalf, *Motorola,* USA
Nadyne Mielke, *Microsoft,* USA
Gareth Miles, *University of Glamorgan,* UK
Russell Milham, *Microsoft,* USA
David Millard, *University of Southampton,* UK
Craig Miller, *DePaul University,* USA
Rob Miller, *MIT,* USA
Karyn Moffatt, *University of British Columbia,* Canada
Tom Moher, *University of Illinois, Chicago,* USA

CONTINUES ON BACK

PAPERS REVIEWERS – CONTINUED

Andrew Monk, *University of York,* UK
Bob Moore, *PARC,* USA
Tom Moran, *IBM,* USA
Rob Mori, *Sun Microsystems,* USA
Margaret Morris, *Intel,* USA
Meredith Morris, *Microsoft,* USA
Michael Morrissey, *Microsoft,* USA
Emile Morse, *NIST,* USA
Ingrid Mulder, *Telematica Instituut,* the Netherlands
Michael Muller, *IBM,* USA
Bjørn Erik Munkvold, *Agder University College,* Norway
Guadalupe Muñoz, *University Rey Juan Carlos,* Spain
Cosmin Munteanu, *University of Toronto,* Canada
Tamara Munzner, *University of British Columbia,* Canada
Gail Murphy, *University of British Columbia,* Canada
Roderick Murray-Smith, *Glasgow University & Hamilton Institute,* UK
Bilge Mutlu, *Carnegie Mellon University,* USA
Brad Myers, *Carnegie Mellon University,* USA
Elizabeth Mynatt, *Georgia Institute of Technology,* USA
Mor Naaman, *Yahoo!,* USA
Miguel Nacenta, *University of Saskatchewan,* Canada
Kristine Nagel, *Clayton State University,* USA
Bonnie Nardi, *Agilent Technologies,* USA
Clifford Nass, *Stanford University,* USA
Raquel Navarro-Prieto, *Barcelona Media-Innovation Center,* Spain
Lisa Neal, *eLearn Magazine,* USA
Les Nelson, *PARC,* USA
Carman Neustaedter, *University of Calgary,* Canada
Christine Neuwirth, *Carnegie Mellon University,* USA
Alan Newell, *Dundee University,* UK
David Nguyen, *University of California, Irvine,* USA
Tao Ni, *Virginia Polytechnic Institute and State University,* USA
David Nichols, *University of Waikato,* New Zealand
Jeffrey Nichols, *Carnegie Mellon University,* USA
Helen Nissenbaum, *New York University,* USA
Sylvie Noël, *Communications Research Centre,* Canada
Chris North, *Virginia Polytechnic Institute and State University,* USA
Kenton O'Hara, *Hewlett-Packard,* UK
Masao Ohira, *Nara Institute of Science and Technology,* Japan
Dan Olsen, *Brigham Young University,* USA
Gary Olson, *University of Michigan,* USA
Judith Olson, *University of Michigan,* USA
Claire O'Malley, *University of Nottingham,* UK
Hernando Ombao, *University of Illinois,* USA
Eamonn O'Neill, *University of Bath,* UK
Brittney Oppermann, *Rensselaer Polytechnic Institute,* USA
Carljohan Orre, *Umeå University,* Sweden
Chiara Orsingher, *University of Bologna,* Italy
Antti Oulasvirta, *Helsinki Institute for Information Technology,* Finland
Kees Overbeeke, *TU Eindhoven,* the Netherlands
Sharon Oviatt, *Natural Interaction Systems,* USA
Sharon Oviatt, *Oregon Health & Science University,* USA
Volker Paelke, *University of Hannover,* Germany
Andreas Paepcke, *Stanford University,* USA
Leysia Palen, *University of Colorado, Boulder,* USA
Shimei Pan, *IBM,* USA
Bing Pan, *Cornell University,* USA
Tapan Parikh, *University of Washington,* USA
Cecile Paris, *CSIRO,* Australia
Eunkwang Park, *Nanyang Technological University,* Singapore
Caroline Parker, *Glasgow Caledonian University,* UK
J. Karen Parker, *University of British Columbia,* Canada
Timo Partala, *University of Oulu,* Finland
Kurt Partridge, *PARC,* USA
Fabio Paternò, *ISTI-CNR,* Italy
Sameer Patil, *University of California, Irvine,* USA
Andrew Patrick, *National Research Council of Canada,* Canada
Donald Patterson, *University of California, Irvine,* USA
Celeste Paul, *User-Centered Design, Inc.,* USA
Eric Paulos, *Intel,* USA
Andriy Pavlovych, *York University,* Canada
Celia Pearce, *University of California, Irvine,* USA
Thomas Pederson, *Umeå University & Bari University,* Sweden & Italy
Samuli Pekkola, *University of Jyvaskyla,* Finland
Catherine Pelachaud, *University of Paris,* France
Gerald Penn, *University of Toronto,* Canada
Manuel Perez-Quinones, *Virginia Polytechnic Institute and State University,* USA
Mark Perry, *Brunel University,* UK
Christian Peter, *Fraunhofer Institute for Computer Graphics Rostock,* Germany
Daniela Petrelli, *University of Sheffield,* UK
Mårten Pettersson, *Malmö University,* Sweden
Doantam Phan, *Stanford University,* USA
Wayne Piekarski, *University of South Australia,* Australia
Jeffrey Pierce, *IBM,* USA
David Pinelle, *University of Saskatchewan,* Canada
Claudio Pinhanez, *IBM,* USA
Niels Pinkwart, *TU Clausthal,* Germany
Volkmar Pipek, *University of Siegen,* Germany
Christopher Plaue, *Georgia Institute of Technology,* USA
Beryl Plimmer, *University of Auckland,* New Zealand
Barry Po, *Cogneto Development Inc.,* Canada
Michael Poor, *Tufts University,* USA
Florin Popescu, *Fraunhofer FIRST,* Germany
Vesna Popovic, *Queensland University of Technology,* Australia
Zachary Pousman, *Georgia Institute of Technology,* USA
Christopher Power, *University of York,* Canada
Jenny Preece, *University of Maryland,* USA
Tony Pridmore, *University of Nottingham,* UK
Simon Prince, *University College London,* UK
Wolfgang Prinz, *Fraunhofer FIT,* Germany
John Pruitt, *Microsoft,* USA
Pardha Pyla, *Virginia Polytechnic Institute and State University,* India
Yan Qu, *University of Maryland, College Park,* USA
Aaron Quigley, *University College Dublin,* Ireland
Pernilla Qvarfordt, *FX Palo Alto Laboratory,* USA
Kari-Jouko Räihä, *University of Tampere,* Finland
Roope Raisamo, *University of Tampere,* Finland
Gonzalo Ramos, *University of Toronto,* Canada
Rebecca Randell, *City University,* UK
Tye Rattenbury, *University of California, Berkeley,* USA
Janet Read, *University of Central Lancashire,* England
Madhu Reddy, *The Pennsylvania State University,* USA
David Redmiles, *University of California, Irvine,* USA
Stuart Reeves, *University of Nottingham,* England
Tim Regan, *Microsoft,* UK
Holger Regenbrecht, *University of Otago,* New Zealand
Susan Regli, *Lockheed Martin,* USA
Derek Reilly, *Dalhousie University,* Canada
Ehud Reiter, *University of Aberdeen,* UK
Jun Rekimoto, *Sony,* Japan
Yuqing Ren, *Carnegie Mellon University,* USA
Karen Renaud, *University of Glasgow,* UK
Michael Richardson, *Colby College,* USA
Heather Richter, *University of North Carolina, Charlotte,* USA
Jens Riegelsberger, *University College London,* UK
Christine Riley, *Intel,* USA
Daniel Robbins, *Microsoft,* USA
Dave Roberts, *IBM,* UK
George Robertson, *Microsoft,* USA
Peter Robinson, *University of Cambridge,* England
Kerry Rodden, *Google,* USA
Tom Rodden, *University of Nottingham,* UK
Jennifer Rode, *University of California, Irvine,* USA
Con Rodi, *Virginia Polytechnic Institute and State University,* USA
Yvonne Rogers, *The Open University,* UK
Michael Rohs, *TU Berlin,* Germany
Paul Rohwer, *Indiana University,* USA
John Rooksby, *Lancaster University,* UK
Volker Roth, *FX Palo Alto Laboratory,* USA
Ling Rothrock, *The Pennsylvania State University,* USA
Nicolas Roussel, *Projet In Situ, LRI & INRIA Futurs,* France
Maria Roussou, *University College London,* UK
Joe Rubleske, *Syracuse University,* USA
Yong Rui, *Microsoft,* USA
Enrico Rukzio, *University of Munich,* Germany
Daniel Russell, *Google,* USA
Zsofia Ruttkay, *University of Twente,* the Netherlands
Kathy Ryall, *MERL,* USA
Eva-Lotta Sallnäs, *Royal Institute of Technology, IPLab,* Sweden
Dario Salvucci, *Drexel University,* USA
Jaime Sánchez, *University of Chile,* Chile
Bob Sandusky, *University of Tennessee, Knoxville,* USA
Aleksandra Sarcevic, *Rutgers University,* USA
Martina Angela Sasse, *University College London,* UK
Christine Satchell, *University of Melbourne,* Australia
Walt Scacchi, *Institute for Software Research,* USA
Wendy Schafer, *The Pennsylvania State University,* USA
Chris Schmandt, *MIT,* USA
Holger Schnädelbach, *Mixed Reality Lab,* UK
m.c. Schraefel, *University of Southampton,* UK
Will Schroeder, *The MathWorks,* USA
Till Schümmer, *FernUniversität in Hagen,* Germany
Stan Sclaroff, *Boston University,* USA
Donia Scott, *The Open University,* UK
Stacey Scott, *MIT,* USA
Peter Scupelli, *Carnegie Mellon University,* USA
Andrew Sears, *University of Maryland, Baltimore County,* USA
Stuart Selber, *The Pennsylvania State University,* USA
Abigail Sellen, *Microsoft,* UK
John Senders, *University of Toronto,* Canada
Phoebe Sengers, *Cornell University,* USA
Orit Shaer, *Tufts University,* USA
N. Sadat Shami, *Cornell University,* USA
Helen Sharp, *The Open University,* UK
Chia Shen, *Mitsubishi Electric Research Labs,* USA
Irina Shklovski, *Carnegie Mellon University,* USA
John Sibert, *The George Washington University,* USA
Linda Sibert, USA
Rosanne Siino, *Stanford University,* USA
Carla Simone, *Universita' di Milano-Bicocca,* Italy
Mike Sinclair, *Microsoft,* USA
Vikash Singh, *Mississippi State University,* USA
Vineet Sinha, *MIT,* USA
Roger Slack, *University of Edinburgh,* UK
Malcolm Slaney, *IBM,* USA
Mel Slater, *University College London,* UK
Diana Smetters, *PARC,* USA
Hilary Smith, *University of Sussex,* UK
Daniel Smith, *University of Southampton,* UK
Brian Smith, *The Pennsylvania State University,* USA
Marc Smith, *Microsoft,* USA
Shamus Smith, *Durham University,* UK
Ian Smith, *Intel,* USA
Mirjana Spasojevic, *Yahoo!,* USA
Clay Spinuzzi, *University of Texas, Austin,* USA
Mark Springett, *Middlesex University,* UK
Thad Starner, *Georgia Institute of Technology,* USA
John Stasko, *Georgia Institute of Technology,* USA
Michelle Steves, *NIST,* USA
Erik Stolterman, *Indiana University, Bloomington,* USA
Susan Straus, *RAND,* USA
Wolfgang Stuerzlinger, *York University,* Canada
Simone Stumpf, *Oregon State University,* USA
Sriram Subramanian, *University of Saskatchewan,* Canada
Bongwon Suh, *PARC,* USA
Bernhard Suhm, *Enterprise Integration Group,* USA
James Sullivan, *Center for Lifelong Learning and Design,* USA
Jay Summet, *Georgia Institute of Technology,* USA
Pen-Fan Sun, *SAP,* USA

CONTINUES NEXT TAB

	8:30–10:00	10:00–10:30	11:30–13:00	14:30–16:00	16:30–18:00
CIVIC AUDITORIUM	**Opening Plenary** Bill Moggridge Reaching for the Intuitive Page 32	**CHI MADNESS** Page 32	**Interactive Session** Usability from the CIO's Perspective Page 33	**Interactive Session** Who Killed Design?: Addressing Design Through an Interdisciplinary Investigation Page 37	**Interactive Session** Taking CHI for a Drive: Interaction in the Car Page 40
Room A1			SIG Beyond Usability: Social, Situational, Cultural, & Contextual Factors Page 33	Papers Ubicomp Tools Page 37	Papers Expert/Novice Page 40
Room A2			Papers Faces & Bodies in Interaction Page 33	Papers Mobile Interaction Page 37	Papers Mobile Applications Page 40
Room A3			Papers Attention & Interruption Page 33	Papers Politics & Activism Page 38	Papers Navigation Page 41
Room A4 & A5			Papers Capturing Life Experiences Page 34	Papers Navigation & Interaction Page 38	Papers Photo Sharing Page 41
Room A8			Experience Reports On the Move Page 34	Papers Medical Page 38	Experience Reports Qualitative Research Methods Page 42
Room B1 - B4			Papers Large Displays Page 34	SIG Challenges in International Usability Page 39	Papers Empirical Studies of Web Interaction Page 42
Room C2			Interactivity Shake, Rattle, and Roll: New Forms of Input and Output Page 35	Papers Task & Attention Page 39	ALT.CHI Evaluating Evaluation Page 43
Room C4			SIG Online Health Communities Page 36	SIG Usability and Free/Libre/Open Source Software Page 39	SIG Let's Get Emotional: Emotion Research in Human Computer Interaction Page 43
Room A6			Course 12 Usability Process Improvement – ISO Standards Page 44	Course 13 An Introduction to Human-Robot Interaction Design and Evaluation Page 44	
Room A7			Course 9 How to Collect Field Data and Produce a Tested Design in 1–8 Weeks Page 44	Course 10 Top Field Interview Mistakes: Recognizing and Preventing Them Page 44	Course 11 After the Interviews: Making Sense of Fieldwork Data Page 44
Room C3			Course 7 Collaborative Behavior and Supporting Technologies Page 45		Course 8 Where Usability Meets Desirability: Visual Design with Personas and Goals Page 45
Almaden Ballroom I			Course 5 Personal Information Management in Theory and Practice Page 45		
Almaden Ballroom II			Course 6 Usability and Product Development Page 45		

= 15 minutes = 30 minutes = unscheduled time

COMMONS

Conference Reception & Exhibits Grand Opening
18:30–22:00

SPECIAL EVENTS

Newcomers' Orientation
10:30–11:30
Civic Auditorium

Spotlight on Doctoral Consortium, Workshop, & Competition Posters (#1–60)
10:30–11:30
Concourse

OPENING PLENARY | CIVIC AUDITORIUM

REACHING FOR THE INTUITIVE

BILL MOGGRIDGE, *IDEO,* USA

Abstract: Perhaps the mind is like an iceberg, with just a small proportion of the overall amount protruding above the water into consciousness, but the vast bulk of the subconscious submerged and out of sight. If we operate above the water line, we only have a small volume to use, but if we allow ourselves to use the whole submerged mass, we have a lot more to work with.

Bill will attempt to show how design thinking can harness intuitive mental processes, leveraging tacit knowledge as well as the explicit knowledge of logically expressed thoughts. He will give examples of how designers and design teams learn by doing, allowing the subconscious mind to inform intuitions that guide actions. Some of the examples will come from his experience as Cofounder of IDEO, and others will be taken from his recent book *Designing Interactions* (www.designinginteractions.com), in which he interviews 40 influential designers who have shaped our interaction with digital technology.

Biography: Cofounder of IDEO, a firm that helps companies innovate through the design of products, services, environments and digital experiences. Bill founded his design firm in London in 1969, adding a second office in 1979 in Palo Alto, at the heart of California's Silicon Valley. He designed the first laptop computer, the GRiD Compass, and pioneered Interaction Design as a discipline. In 1991 he merged his company with David Kelley and Mike Nuttall to form IDEO, which now has offices in Palo Alto, San Francisco, Chicago, Boston, London, Munich, and Shanghai. Bill has been active in design education throughout his career, notably as Visiting Professor in Interaction design at the Royal College of Art in London, and Associate Professor in the Design program at Stanford University. He is most interested in what people want, who they are, and how they interact with other people, things, and places. His book *Designing Interactions* is available from The MIT Press.

CHI MADNESS | CIVIC AUDITORIUM

SESSION CHAIRS:
Patrick Baudisch, *Microsoft,* USA
Gonzalo Ramos, *University of Toronto,* Canada

Confused about what to do next? Too many options for you to choose from? We end this session with CHI Madness. The presenters in many of today's sessions will have 30 seconds to tell you what's exciting about their presentation. It's fast-paced; it's fun; sometimes it's even funny.

CHI's 30 second Madness, which premiered in Montréal, returns to give everyone a lighting speed overview of the day's program.

■ INTERACTIVE SESSION | CIVIC AUDITORIUM

USABILITY FROM THE CIO'S PERSPECTIVE

MODERATORS:
James Euchner, Austin Henderson, *Pitney Bowes, Inc.,* USA

PANELISTS:
Jan Roberts, *Cisco,* USA
Patty Seybold, *The Seybold Group,* USA
Patañjali S. Venkatacharya, *Oracle,* USA

There is significant frustration among business leaders and CIOs concerning the success of their systems in the field. There is an equal frustration among HCI professionals at the marginalized role that usability often plays in systems development efforts. These frustrations are, to a large extent, two sides of the same coin. This panel will consider how successful CIOs manage the apparently competing challenges of faster/better/cheaper systems and the time and money required for developing highly usable systems. They will discuss the strategies and techniques that they use to integrate usability into systems design and development.

■ SPECIAL INTEREST GROUP | ROOM: A1

BEYOND USABILITY: TAKING SOCIAL, SITUATIONAL, CULTURAL, AND OTHER CONTEXTUAL FACTORS INTO ACCOUNT

MODERATORS:
Jina Huh, Mark Ackerman, *University of Michigan,* USA
Thomas Erickson, *IBM,* USA
Steve Harrison, *Virginia Polytechnic Institute and State University,* USA
Phoebe Sengers, *Cornell University,* USA

This SIG will provide a forum for people to discuss current and future design approaches that move beyond usability. It will address both the relation of underlying paradigms and the relation of design and research.

■ PAPERS | ROOM: A2

FACES & BODIES IN INTERACTION

SESSION CHAIR: Anne Anderson, *University of Dundee,* UK

PAPER | A Meta-Analysis of the Impact of the Inclusion and Realism of Human-Like Faces on User Experiences in Interfaces

Nicholas Yee, Jeremy N. Bailenson, Kathryn Rickertsen, *Stanford University,* USA

The meta-analysis of previous studies in the area of interface agent research helps to synthesize the accumulated findings in this area, and highlights noticeable effects and differences.

PAPER | Improving Recognition and Characterization in Groupware with Rich Embodiments

Tadeusz Stach, Carl Gutwin, David Pinelle, *University of Saskatchewan,* Canada
Pourang Irani, *University of Manitoba,* Canada

Presents evidence that rich embodiments (which represents much more information about people than traditional embodiments) improve recognition and characterization in groupware, and can enhance richness and subtlety of interaction.

PAPER | Coordinating Joint Activity in Avatar-Mediated Interaction

Robert J. Moore, *PARC,* USA
E. Cabell Gathman, *University of Wisconsin, Madison,* USA
Nicholas Ducheneaut, Eric Nickell, *PARC,* USA

A deeper understanding of user-to-user coordination in the avatar-mediated social interaction of online game worlds based on qualitative video analysis.

■ PAPERS | ROOM: A3

ATTENTION & INTERRUPTION

SESSION CHAIR: Brian Bailey, *University of Illinois,* USA

PAPER | How it Works: A Field Study of Non-Technical Users Interacting with an Intelligent System

Joe Tullio, *Motorola Labs,* USA
Anind K. Dey, Jason Chalecki, *Carnegie Mellon University,* USA
James Fogarty, *University of Washington,* USA

We describe a novel field study of how users' mental models develop around an intelligent system. Designers can use our results to design user interfaces to correct flawed mental models.

PAPER | Matching Attentional Draw with Utility in Interruption

Jennifer Gluck, Andrea Bunt, Joanna McGrenere, *University of British Columbia,* Canada

Demonstrates that matching interruption signal salience to interruption utility decreases annoyance and increases benefit. Applying this matching strategy will help mitigate the negative perception of interruptions in many systems today.

PAPER | Biases in Human Estimation of Interruptibility: Effects and Implications for Practice

Daniel Avrahami, *Carnegie Mellon University,* USA
James Fogarty, *University of Washington,* USA
Scott E. Hudson, *Carnegie Mellon University,* USA

Describes a study examining the differences between self-reports of interruptibility, and estimates of that interruptibility, provided by others. Our findings are important for successful design of CMC and awareness systems.

■ PAPERS | ROOM: A4 & A5

CAPTURING LIFE EXPERIENCES

SESSION CHAIR: Sara Kiesler, *Carnegie Mellon University,* USA

PAPER | Understanding Videowork

David Kirk, *University of Nottingham,* UK
Abigail Sellen, Richard Harper, Ken Wood, *Microsoft,* UK

An in-depth study of how people work with home video, deriving two distinct sets of practices emerging from the interrelationship between technologies and users' goals.

PAPER | Software or Wetware? Discovering When and Why People Use Digital Prosthetic Memory

Vaiva Kalnikaite, Steve Whittaker, *The University of Sheffield,* UK

A laboratory study examining the factors influencing people's choice of when to use prosthetic memory or organic memory and why. Can assist in developing effective memory aids.

PAPER | Do Life-Logging Technologies Support Memory for the Past? An Experimental Study Using SenseCam

Abigail Sellen, Andrew Fogg, *Microsoft,* UK
Mike Aitken, *University of Cambridge,* UK
Steve Hodges, Carsten Rother, Ken Wood, *Microsoft,* UK

Experimentally evaluates the efficacy of still images in triggering the remembering of past personal events, having implications for how we conceive of and the claims we make about "life-logging" technologies.

■ EXPERIENCE REPORTS | ROOM: A8

ON THE MOVE

SESSION CHAIR: Katie Minardo, *MITRE Corporation*, USA

The LiLiPUT Prototype: A Wearable Lab Environment for User Tests of Mobile Telecommunication Applications

Peter Reichl, Peter Froehlich, Lynne Baillie, Raimund Schatz, Antitza Dantcheva, *Telecommunications Research Center Vienna,* Austria

In this paper we describe LiLiPUT (Lightweight Lab Equipment for Portable User Testing in Telecommunications), a highly flexible wearable test system which has been realized as a fully operational prototype and illustrate how we use LiLiPUT for testing mobile applications in the wild.

Implementation of Interactive Poster "SuiPo"

Fuminori Tsunoda, Takayuki Matsumoto, Takeshi Nakagawa, Mariko Utsunomiya, *East Japan Railway,* Japan

We discuss the implementation of new media "SuiPo," or Suica Poster, which uses a combination of IC card ticket Suica and Internet accessible mobile phone where customers can get e-mail information by touching their IC card ticket on the reader located near the poster. Two pilot tests and their results are discussed.

Towards the Perfect Infrastructure for Usability Testing on Mobile Devices

Rudy Schusteritsch, Carolyn Y. Wei, *Google,* USA
Mark LaRosa, *Google & University of Michigan,* USA

We describe various setups that allow usability professionals to conduct effective user studies on mobile devices and describe the factors relevant when building a solution for mobile device observation, including a set-up developed for mobile testing.

Designing for Totality of Mobile and Non-Mobile Interaction: A Case Study

Shweta Aneja, *Kosmix & Indiana University, Bloomington,* USA
Youn-Kyung Lim, *Indiana University, Bloomington,* USA

This project studied the mobile needs of users to support activities that closely relate to non-mobile contexts in the real estate industry. We identified some unique challenges that such a mixed work environment proposes, such as recording contextual data in the mobile environment and streamlining it with other related information in the non-mobile environment. We designed an integrated system of a web-based application "REMAP" (for information analysis) and a mobile device "NotePod" (for information capture).

■ PAPERS | ROOM: B1-B4

LARGE DISPLAYS

SESSION CHAIR: Mary Czerwinski, *Microsoft*, USA

PAPER | An Exploratory Study of Input Configuration and Group Process in a Negotiation Task Using a Large Display

Jeremy P. Birnholtz, Tovi Grossman, Clarissa Mak, Ravin Balakrishnan, *University of Toronto,* Canada

Explores differences in group process and competitive behavior for groups using a shared large display with shared vs. individual input devices. Results inform design of large display interfaces.

PAPER | Beyond Visual Acuity: The Perceptual Scalability of Information Visualizations for Large Displays

Beth Yost, Yonca Haciahmetoglu, Chris North, *Virginia Polytechnic Institute and State University,* USA

Presents a study on the usefulness of displays that exceed visual acuity for scaling up information visualizations. Encourages designers to take advantage of larger displays for visualization.

PAPER | White Rooms and Morphing Don't Mix: Setting and the Evaluation of Visualization Techniques

Derek Reilly, Kori M. Inkpen, *Dalhousie University,* Canada

We present a comparative evaluation examining the impact of experimental setting on the effectiveness of two visualization techniques. The results indicate that setting must be considered when evaluating visualizations.

■ INTERACTIVITY | ROOM: C2

SHAKE, RATTLE, AND ROLL: NEW FORMS OF INPUT AND OUTPUT

SESSION CHAIR: Lars Erik Holmquist, *Viktoria Institute*, Sweden

Tangible Programming in the Classroom with Tern

Michael Horn, Robert J. K. Jacob, *Tufts University,* USA

Demonstrates a tangible programming language for middle school and late elementary school students consisting of a collection of wooden blocks shaped like jigsaw puzzle pieces. Provides the ability for teachers to conduct engaging programming activities in their classrooms.

NOTE | Shoogle: Excitatory Multimodal Interaction on Mobile Devices

John Williamson, Roderick Murray-Smith, Stephen Hughes, *University of Glasgow,* UK

Describes a novel audio and vibrotactile interface based on exciting information from a physical model. Sets out a foundation for building compelling non-visual, handheld multimodal interfaces which include complex inference.

Dynamics of Tilt-Based Browsing on Mobile Devices

Sung-Jung Cho, *Samsung Advanced Institute of Technology,* Republic of Korea
Roderick Murray-Smith, *Glasgow University & Hamilton Institute, NUIM,* UK
Changkyu Choi, Younghoon Sung, Kwanghyeon Lee, Yeun-Bae Kim, *Samsung,* Republic of Korea

Demonstrates a tilt-controlled photo browsing method for small mobile devices is presented which uses continuous inputs from an accelerometer and a multimodal display. Shows how dynamics of the physical model can be shaped to make the handling qualities of the mobile device fit the browsing task and compares a tilt-based interaction method with a button-based browser and an iPod wheel.

Soap: How to Make a Mouse Work in Mid-Air

Patrick Baudisch, Mike Sinclair, Andrew Wilson, *Microsoft,* USA

In this demo, we demonstrate how to combine a mouse and a mouse pad into "soap," a device that can be operated in mid air with a single hand. We have used "soap" to control video games, interact with wall displays and Windows Media Center, and to give slide presentations.

I/O Brush: Beyond Static Collages

Kimiko Ryokai, *University of California, Berkeley,* USA
Stefan Marti, *Samsung Advanced Systems Research Lab,* USA
Hiroshi Ishii, *MIT,* USA

I/O Brush is our ongoing effort to empower people to create new expressions and meanings by painting with attributes of everyday objects and movements in their physical world. Using examples from our case studies, we discuss I/O Brush's most distinguishing features and how they enable people to invent new expressions and meaning making with objects in their physical environment.

GUIDe: Gaze-Enhanced User Interface Design

Manu Kumar, Terry Winograd, *Stanford University,* USA

Explores how gaze information can be effectively used as an augmented input in addition to keyboard and mouse. Presents three practical applications of gaze as an augmented input for pointing and selection, application switching, and scrolling.

■ SPECIAL INTEREST GROUP | ROOM: C4

ONLINE HEALTH COMMUNITIES

MODERATORS:
Lisa Neal, *Tufts University,* USA
Kate Oakley, *Carleton University,* USA
Derek Hansen, *University of Michigan,* USA
David Kaufman, *New York State Psychiatric Institute & Columbia University,* USA
Jan Marco Leimeister, *Technische Universität München,* Germany
Ted Selker, *MIT,* USA

This SIG will explore current trends in online health communities and how the design and evaluation expertise of the CHI community can benefit and improve online health community research and development.

■ INTERACTIVE SESSION | CIVIC AUDITORIUM

WHO KILLED DESIGN?: ADDRESSING DESIGN THROUGH AN INTERDISCIPLINARY INVESTIGATION

MODERATORS:
Scott Pobiner, *Parsons The New School for Design,* USA
Anijo Mathew, *Mississippi State University,* USA

PANELISTS:
Bill Moggridge, *IDEO,* USA
Bill Buxton, *Microsoft,* USA
Terry Winograd, *Stanford University,* USA
Meg Armstrong, *Parsons The New School for Design,* USA

This interactive session brings together significant voices from a variety of "design-engaged" disciplines to lead a discussion about the oft-used, but seldom agreed upon notion of "Design". The primary goal of this session is to address "Design" from a much wider variety of perspectives than could occur within any singular discipline. In doing so, the session intends to re-visit the definitions of "Design", "Designer", and "Designed".

This session is intended to be truly "interactive" and will rely on active discussion from the audience as well as panelists. In an effort to jump-start the discussion and to facilitate what is likely to be a very broad range of perspectives the organizers have set-up a Wiki, which all are encouraged to participate in editing.

■ PAPERS | ROOM: A1

UBICOMP TOOLS

SESSION CHAIR: Beverly Harrison, *Intel,* USA

PAPER | Momento: Support for Situated Ubicomp Experimentation

Scott Carter, *FX Palo Alto Laboratory,* USA
Jennifer Mankoff, *Carnegie Mellon University,* USA
Jeffrey Heer, *Univeristy of California, Berkeley,* USA

We present the iterative design of Momento, which supports situated ubicomp experimentation, and demonstrate its use in three studies. Momento supports remote testing and can gather quantitative and qualitative data.

PAPER | Toolkit Support for Developing and Deploying Sensor-Based Statistical Models of Human Situations

James Fogarty, *University of Washington,* USA
Scott E. Hudson, *Carnegie Mellon University,* USA

Presents Subtle, a toolkit that enables sensor-based statistical models of human situations. Subtle focuses research on applications and datasets, instead of the difficulties in collecting sensor data and learning models.

PAPER | Authoring Sensor-Based Interactions by Demonstration with Direct Manipulation and Pattern Recognition

Bjoern Hartmann, Leith Abdulla, *Stanford University,* USA
Manas Mittal, *MIT,* USA
Scott R. Klemmer, *Stanford University,* USA

Contributes method and tool for rapidly designing sensor-based interactions by demonstration, emphasizes control of generalization criteria through integrating direct manipulation and pattern recognition, and offers theoretical and first-use lab evaluations.

■ PAPERS | ROOM: A2

MOBILE INTERACTION

SESSION CHAIR: Kori M. Inkpen, *Dalhousie University,* Canada

NOTE | Questions Not Answers: A Novel Mobile Search Technique

Matt Jones, George Buchanan, *University of Wales, Swansea,* UK
Richard Harper, Pierre-Louis Xech, *Microsoft,* UK

Presents a novel perspective on the mobile search problem using low-cost, incidental information. Demonstrates how other people's queries can provide users with insights into the locations they encounter.

NOTE | Tactile Feedback for Mobile Interactions

Stephen Brewster, Faraz Chohan, Lorna Brown, *University of Glasgow,* UK

Presents two studies (one static, one mobile) investigating the use of tactile feedback for enhancing touch-screen buttons. Improves performance and reduces workload, even when users are mobile.

NOTE | Revisiting and Validating a Model of Two-Thumb Text Entry

Edward Clarkson, Kent Lyons, James Clawson, Thad Starner, *Georgia Institute of Technology,* USA

This work contributes a comparison of a model of two-thumb text entry with empirical data, modifies it to account for observed behavior, and validates the revised model.

NOTE | **Jump and Refine for Rapid Pointing on Mobile Phones**

Martin Hachet, *INRIA,* France
Joachim Pouderoux, *LaBRI-INRIA,* France
Florence Tyndiuk, *UTBM,* France
Pascal Guitton, *LaBRI-INRIA,* France

The technique we propose improves the user performance for pointing tasks on mobile phones when no pointing device is available. It favors the development of new mobile applications (e.g.. 3D).

■ PAPERS | ROOM: A3

POLITICS & ACTIVISM

SESSION CHAIR: Jodi Forlizzi, *Carnegie Mellon University,* USA

PAPER | **Usability of Voting Systems: Baseline Data for Paper, Punch Cards, and Lever Machines**

Michael D. Byrne, Kristen K. Greene, Sarah P. Everett, *Rice University,* USA

This paper contributes information about the usability of traditional pre-computer voting technologies, the benefit being that new systems now have a point of comparison.

PAPER | **A Game Design Methodology to Incorporate Activist Themes**

Mary Flanagan, *Hunter College, CUNY,* USA
Helen Nissenbaum, *New York University,* USA

The contribution our project makes to the next decade of game design is a rigorous, systematic means to take human values into consideration in design at many levels.

■ PAPERS | ROOM: A4 & A5

NAVIGATION & INTERACTION

SESSION CHAIR: Patrick Baudisch, *Microsoft,* USA

PAPER | **Move to Improve: Promoting Physical Navigation to Increase User Performance with Large Displays**

Robert Ball, Chris North, Doug A. Bowman, *Virginia Polytechnic Institute and State University,* USA

We contribute a greater understanding of user preference for, and performance with, physical and virtual navigation in visualizations. Readers learn how to afford increased physical navigation, leading to improved performance.

PAPER | **Copy-and-Paste Between Overlapping Windows**

Olivier Chapuis, Nicolas Roussel, *Université Paris-Sud & CNRS, INRIA,* France

Presents a study comparing four copy-and-paste techniques under four window management conditions. Introduces two new window management techniques that significantly reduce the time to copy text between partially overlapping windows.

NOTE | **Consistency, Multiple Monitors, and Multiple Windows**

Dugald Hutchings, *Bowling Green State University,* USA
John Stasko, *Georgia Institute of Technology,* USA

Lab study showing reduced navigation time for interacting with dialog boxes on multiple monitors when using the mudibo prototype. Illuminates broader problems with the concept of "consistency" for multiple-monitor interfaces.

NOTE | **How Pairs Interact Over a Multimodal Digital Table**

Edward Tse, *University of Calgary,* Canada
Chia Shen, *Mitsubishi Electric Research Labs,* USA
Saul Greenberg, *University of Calgary,* Canada
Clifton Forlines, *Mitsubishi Electric Research Labs,* USA

This paper presents the first observations of how pairs of people communicated and interacted in a multimodal digital table environment and contributes to the understanding of multi-user multimodal digital table interaction.

■ PAPERS | ROOM: A8

MEDICAL

SESSION CHAIR: David McDonald, *University of Washington,* USA

PAPER | **An Observational Study on Information Flow During Shift Change**

Charlotte Tang, Sheelagh Carpendale, *University of Calgary,* Canada

Observational study investigating information flow during shift change in medical setting. Presents multitude of information media involved in information assembly and disassembly and interplay between common and personal information space.

NOTE | **Medical Sensemaking with Entity Workspace**

Dorrit Billman, Eric A. Bier, *PARC,* USA

Presents a new sensemaking tool for knowledge workers that integrates searching, reading, and note-taking. A user study provides guidance for developers of future tools and reveals multiple strategies users adopt.

SPECIAL INTEREST GROUP | ROOM: B1-B4

DEALING WITH KEY CHALLENGES IN INTERNATIONAL USABILITY AND USER RESEARCH

MODERATORS:
David A. Siegel, Susan M. Dray, *Dray & Associates, Inc.*, USA
Rolf Molich, *DialogDesign,* Denmark

In this SIG, we will present scenarios that exemplify many of the key challenges of doing user research and usability evaluation internationally. We will use these to stimulate discussion about solutions and approaches, and then share our own recommendations.

PAPERS | ROOM: C2

TASK & ATTENTION

SESSION CHAIR: Anthony Hornof, *University of Oregon,* USA

PAPER | A Cognitive Constraint Model of Dual-Task Trade-Offs in a Highly Dynamic Driving Task

Duncan P. Brumby, *Drexel University,* USA
Andrew Howes, *University of Manchester,* UK
Dario D. Salvucci, *Drexel University,* USA

Describes a modeling study of the strategic variations in distracted driving and their effects on driver performance. Demonstrates how a constraint modeling approach can be applied to complex dynamic tasks.

PAPER | iPod Distraction: Effects of Portable Music-Player Use on Driver Performance

Dario D. Salvucci, Daniel Markley, Mark Zuber, Duncan P. Brumby, *Drexel University,* USA

Describes an empirical study of driver distraction from portable music-player (iPod) interaction. Augments our understanding of "off-the-desktop" interaction in complex, multitasking environments.

PAPER | InkSeine: In Situ Search for Active Note Taking

Ken Hinckley, *Microsoft,* USA
Shendong Zhao, *Microsoft & University of Toronto,* Canada
Raman Sarin, Patrick Baudisch, Ed Cutrell, Michael Shilman, Desney S. Tan, *Microsoft,* USA

Prototype that supports active note taking by coupling a pen-and-ink interface with an in situ search facility that flows directly from a user's ink notes.

SPECIAL INTEREST GROUP | ROOM: C4

USABILITY AND FREE/LIBRE/OPEN SOURCE SOFTWARE: HCI EXPERTISE AND DESIGN RATIONALE

MODERATORS:
Paula M. Bach, John M. Carroll, *The Pennsylvania State University,* USA
Bryan Kirschner, *Microsoft,* USA

The purpose of this SIG is to bring together HCI professionals and researchers to discuss current issues in Free/Libre/Open Source Software. Specifically, this SIG looks at usability, the role of HCI expertise, and design rationale in these projects.

INTERACTIVE SESSION | CIVIC AUDITORIUM

TAKING CHI FOR A DRIVE: INTERACTION IN THE CAR

PANELISTS:
David M. Krum, *Bosch Research and Technology Center,* USA
Dietrich Manstetten, *Robert Bosch, GmbH,* Germany
Clifford Nass, *Stanford University,* USA
K. Venkatesh Prasad, *Ford Motor Company,* USA
Roberto Sicconi, *IBM,* USA

With the increasing number of cars on the road, longer commutes, and the proliferation of complex information and entertainment features, there is a greater need for careful interaction design in the car. The automobile is a challenging environment for designing and deploying good user interfaces. Interaction designers must balance brand identity, safety, legislation, and manufacturability, among other issues. In this panel, practitioners and researchers from industry, industrial labs, and academia will discuss the challenges of interaction design in an automotive environment. While some members of the CHI community are active in the automotive field, the general CHI community may not be aware of this work, the open research issues, and opportunities for collaboration in this area. This panel will provide an introduction into HCI research in the automotive industry. Some successful examples of interaction design will be discussed, as well as a few not-so-successful examples. Questions and comments from the audience are welcomed.

PAPERS | ROOM: A1

EXPERT/NOVICE

SESSION CHAIR: Paul Aoki, *Intel*, USA

PAPER | Sharing a Single Expert Among Multiple Partners

Jeffrey Wong, Jiazhi Ou, *Carnegie Mellon University,* USA
Lui Min Oh, *DSO National Laboratories,* Singapore
Carolyn P. Rosé, Jie Yang, Susan R. Fussell, *Carnegie Mellon University,* USA

Preliminary laboratory study exploring how an expert helps two novices simultaneously on physical tasks. Provides design implications and an algorithm for predicting attention shifts in a mediated system.

PAPER | Dynamic Detection of Novice vs. Skilled Use Without a Task Model

Amy Hurst, Scott E. Hudson, Jennifer Mankoff, *Carnegie Mellon University,* USA

Describes machine learning based techniques to automatically detect expertise from low-level pointing interactions using statistical models with 91% accuracy, and explores how to dynamically adapt the interface with this knowledge.

PAPER | Approaches to Web Search and Navigation for Older Computer Novices

Anna Dickinson, *University of Dundee,* UK
Michael J. Smith, *Fujitsu,* UK
John L. Arnott, Alan F. Newell, *University of Dundee,* UK
Robin L. Hill, *University of Edinburgh,* UK

Development and evaluation of proof-of-concept web search and navigation system for older novice computer users. Supports older, inexperienced users in initial encounters with web. We offer possible approaches for interface researchers.

PAPERS | ROOM: A2

MOBILE APPLICATIONS

SESSION CHAIR: Scott McCrickard, *Virginia Polytechnic Institute and State University,* USA

NOTE | Designing a Mobile User Interface for Automated Species Identification

Sean White, Dominic Marino, Steven Feiner, *Columbia University,* USA

Our contribution focuses on design research and user interface techniques for mobile devices relevant to automated vision-based identification in the field.

NOTE | BrickRoad: A Light-Weight Tool for Spontaneous Design of Location-Enhanced Applications

Alan L. Liu, Yang Li, *University of Washington,* USA

BrickRoad supports the spontaneous design of location-enhanced applications using the wizard to simulate both location and application logic. We believe this tool will lower the threshold for prototyping location-enhanced applications.

NOTE | Psychophysical Elements of Wearability

Lucy E. Dunne, Barry Smyth, *University College Dublin,* Ireland

Explores the psychological and physiological components of wearability, the human-device interface of wearable technology. Helps designers to understand the way in which worn technologies become part of the body schema.

NOTE | **The Tilt Cursor: Enhancing Stimulus-Response Compatibility by Providing 3D Orientation Cue of Pen**

Feng Tian, Xiang Ao, Hongan Wang, *Institute of Software, Chinese Academy of Sciences,* China
Vidya Setlur, *Nokia,* USA
Guozhong Dai, *Institute of Software, Chinese Academy of Sciences,* China

Describes a new cursor for enhancing stimulus-response compatibility of touchpad, that dynamically reshapes itself to providing 3D orientation cue of pen. The cursor can significantly reduce response latencies in drawing.

PAPER | **How Younger and Older Adults Master the Usage of Hyperlinks in Small Screen Devices**

Martina Ziefle, Ulrik Schroeder, Judith Strenk, Thomas Michel, *RWTH Aachen University, Germany*

This research introduces a software tool for analyzing navigation paths. The outcomes contribute to the understanding how older adults interact with small screen devices and which difficulties they experience when using hyperlinks.

■ PAPERS | ROOM: A3

NAVIGATION

SESSION CHAIR: Robert J. K. Jacob, *Tufts University*, USA

PAPER | **Modeling Steering within Above-the-Surface Interaction Layers**

Ragu Kattinakere, *University of Saskatchewan,* Canada
Tovi Grossman, *University of Toronto,* Canada
Sriram Subramanian, *University of Saskatchewan,* Canada

Investigates human capabilities when steering through above-the-surface interaction layers. Proposed models are verified, which can be used to guide the design of future interaction techniques.

PAPER | **Quantifying Degree of Goal Directedness in Document Navigation: Application to the Evaluation of the Perspective-Drag Technique**

Yves Guiard, *Université Mediterranee & CNRS,* France
Yangzhou Du, Olivier Chapuis, *Université Paris-Sud & CNRS, INRIA,* France

Introduces degree of goal directedness (DGD), an important new quantitative dimension for taxonomizing HCI tasks, and implements the DGD concept to the evaluation of perspective-drag, a novel technique.

PAPER | **PageLinker: Integrating Contextual Bookmarks into a Browser**

Aurélien Tabard, Wendy E. Mackay, Nicolas Roussel, *Université Paris-Sud & CNRS, INRIA,* France
Catherine Letondal, *Institut Pasteur,* France

Presents the participatory design and a controlled longitudinal field study with research biologists of PageLinker, a browser extension that significantly reduces pageloads and time spent on web navigation tasks.

■ PAPERS | ROOM: A4 & A5

PHOTO SHARING

SESSION CHAIR: Jakob Bardram, *IT University of Copenhagen,* Denmark

PAPER | **Give and Take: A Study of Consumer Photo-Sharing Culture and Practice**

Andrew Miller, *Schematic,* USA
W. Keith Edwards, *Georgia Institute of Technology,* USA

Describes one of the first examinations of the community of practice around Flickr.com, especially in contrast to traditional consumer photographers. Provides design implications for meeting needs of consumer photographers.

PAPER | **Over-Exposed? Privacy Patterns and Considerations in Online and Mobile Photo Sharing**

Shane Ahern, Dean Eckles, Nathaniel S. Good, Simon King, Mor Naaman, Rahul Nair, *Yahoo!,* USA

Qualitative and quantitative study of privacy decisions in mobile and online photo sharing, using previously unavailable, context-rich data. We provide a taxonomy of privacy considerations, and implications for content-sharing systems.

PAPER | **EasyAlbum: An Interactive Photo Annotation System**

Jingyu Cui, *Tsinghua University,* China
Fang Wen, Rong Xiao, *Microsoft,* China
Yuandong Tian, *Shanghai Jiao Tong University,* China
Xiaoou Tang, *Microsoft,* China

We propose a novel interactive UI for semi-automatic photo annotation. The key contributions are: "cluster annotation", "contextual re-ranking", and "ad hoc annotation".

EXPERIENCE REPORTS | ROOM: A8

QUALITATIVE RESEARCH METHODS

SESSION CHAIR: Jeanette Blomberg, *IBM*, USA

How to Look Beyond What Users Say They Want

Younghee Jung, *Nokia,* Japan
Akseli Anttila, *Nokia,* Finland

This report shares our experience with a strategic design project for defining the key user experience scenarios in utilizing location information available on mobile devices.

Common & Particular Needs: A Challenge to Participatory Design

Rachel Bellamy, John Richards, Rhonda Rosenbaum, Thomas Erickson, Wendy A. Kellogg, John C. Thomas, Jonathan Brezin, Cal Swart, *IBM,* USA

We argue that participatory design projects that appear to lead to a successful technical solution may appear less successful when viewed from the perspectives of how well the solution will support evolving work practices, or how well the solution supports the particular and contextual tasks of individuals. We illustrate these issues with a design story in which a risk and compliance visualization is designed to support controllers who monitor IBM's controls process. To address the issues we raise, we conclude by reframing the participatory design problem as the design, education, and socialization of end-user programming.

Learning Observation Skills by Making Peanut Butter and Jelly Sandwiches

Juan P. Hourcade, Olga Garcia, Keith Perry, *University of Iowa,* USA

In this report we describe our experience conducting a class activity where students learned and practiced observation skills in small groups making peanut butter and jelly sandwiches. The groups then used their observations to sketch designs for a peanut butter and jelly maker that they presented to the class. We found that the activity helped students learn about the difficulties involved in observing and being observed. It also taught them about the value of observing users, even if they are performing tasks familiar to the observer.

Pottering: A Design-Oriented Investigation

Susan P. Wyche, *Georgia Institute of Technology,* USA
Alex Taylor, *Microsoft,* UK
Joseph 'Jofish' Kaye, *Cornell University,* USA

In this paper we examine a ubiquitous yet overlooked aspect of home-life, pottering. The Oxford English Dictionary defines pottering as "To occupy oneself in an ineffectual or trifling way; to work or act in a feeble or desultory manner; to trifle, to dabble." We attempt to give shape to the practice of pottering, and in doing so aim to demonstrate its value in exploring how technology should manifest itself in the home.

PAPERS | ROOM: B1-B4

EMPIRICAL STUDIES OF WEB INTERACTION

SESSION CHAIR: Joanna McGrenere, *University of British Columbia*, Canada

PAPER | An Exploration of Web-Based Monitoring: Implications for Design

Melanie Kellar, Carolyn Watters, Kori M. Inkpen, *Dalhousie University,* Canada

Examines web-based monitoring in the context of web information tasks. Provides both general and task specific implications for the design of future monitoring tools.

PAPER | Investigating Attractiveness in Web User Interfaces

Jan Hartmann, Alistair Sutcliffe, Antonella De Angeli, *University of Manchester,* UK

Introduces a theoretical framework for assessing the attractiveness of websites, influence of context, and user-background on experience with websites. which is analyzed in an empirical study. Implications for UI-design are discussed.

PAPER | The Relationship Between Accessibility and Usability of Websites

Helen Petrie, Omar Kheir, *University of York,* UK

Possible relationships between accessibility and usability and the importance of the ratings of user problems are addressed. A study with blind and sighted participants is presented to address these issues.

■ ALT.CHI | ROOM: C2

EVALUATING EVALUATION

SESSION CHAIR: Barry Brown, *Glasgow University,* UK

The Evolution of Evaluation (30 min)

Joseph 'Jofish' Kaye, Phoebe Sengers, *Cornell University,* USA

We provide a historical context for assessing evaluation methods by explicating the history of evaluation in HCI. We trace the history of evaluation in the field from electrical engineering and computer science, to experimental approaches drawn from cognitive science, to usability's emphasis on in-situ studies and expertise.

From Mice to Men – 24 Years of Evaluation in CHI (20 min)

Louise Barkhuus, *University of Glasgow,* UK
Jennifer A. Rode, *University of California, Irvine,* USA

This paper analyzes trends in the approach to evaluation taken by CHI Papers in the last 24 years. A set of papers was analyzed according to our schema for classifying type of evaluation. Our analysis traces papers' trend in type and scope of evaluation. Findings include an increase in the proportion of papers that include evaluation and a decrease in the median number of subjects in quantitative studies.

Make Evaluation Poverty History (20 min)

Gilbert Cockton, *University of Sunderland,* UK

Argues for the need to ground evaluation in achieved worth rather than established psychological measures, and proposes the use of worth maps, based on approaches from consumer psychology, to do so, providing a shared representation for design and evaluation.

Public Usability Laboratory (20 min)

Ana Klasnja, *Ontario Science Centre,* Canada

This case study describes the concept of a public usability laboratory within a science museum environment. The integration of formal and community education will improve accessibility of cutting edge research and stimulate creativity.

■ SPECIAL INTEREST GROUP | ROOM: C4

LET'S GET EMOTIONAL: EMOTION RESEARCH IN HUMAN COMPUTER INTERACTION

MODERATORS:
Elizabeth Crane, *University of Michigan,* USA
N. Sadat Shami, *Cornell Univeristy,* USA
Christian Peter, *Fraunhofer Institute for Computer Graphics,* Germany

The aim of this SIG is to bring together an interdisciplinary group of researchers and practitioners actively working on projects where emotion is an essential component. The goals of the SIG are to identify current themes related to emotion specific HCI work and discuss strategies for moving forward.

COURSE 12 | ROOM: A6

Usability Process Improvement — ISO Standards

11:30–13:00

INSTRUCTOR:
Nigel Bevan, *Professional Usability Services,* UK

Benefits: Participants will become familiar with the ISO 18529 model for human-centred design, and learn how to use this to identify areas where an organization needs to improve its usability capability. The approach can be used informally for process improvement, or for more formal assessments of usability capability.

Intended Audience: Anyone who has some responsibility for user centered design in their organization, or who would like to make a case for improving their organizational capability. Basic familiarity with the area of user centered design is assumed.

COURSE 13 | ROOM: A6

An Introduction to Human-Robot Interaction Design and Evaluation

14:30–18:00

INSTRUCTOR:
Jean Scholtz, *Pacific Northwest National Laboratory,* USA

Benefits: The objective of this course is to provide experienced HCI researchers and practitioners with an overview of a new area: human-robot interaction (HRI). The course will introduce the types of robots and the challenges associated with user interfaces for various robot types. The evaluation segment will describe current efforts in usability and utility evaluation and outline areas where modification of traditional HCI methods are needed for HRI evaluation.

Intended Audience: The audience should be knowledgeable in HCI evaluation methods (usability testing, user modeling, field studies, etc.). The design segment of the course will outline the challenges associated with designing user interfaces and interactions for robots. This material is essential to understand in order to design effective evaluations.

COURSE 9 | ROOM: A7

How to Collect Field Data and Produce a Tested Design in 1–8 Weeks

11:30–13:00

INSTRUCTOR:
Karen Holtzblatt, *InContext Enterprises,* USA

Benefits: Rapid Contextual Design provides tools for infusing customer data into designs, even when resources and schedules are restricting. Learn guidelines for selecting customers, creating schedules, and working inside agile development iterations.

Intended Audience: No background is expected; the course will off the most value to those leading user experience aspects of projects. Attendees will learn the 3 variants of Rapid CD and how to select the right one, guidelines for selecting the right number and mix of customers given available time and project type, and how to create day-by-day schedules based on project scope and available time, including agile iterations

COURSE 10 | ROOM: A7

Top Field Interview Mistakes: Recognizing and Preventing Them

14:30–16:00

INSTRUCTOR:
Karen Holtzblatt, *InContext Enterprises,* USA

Benefits: The Top Mistakes format serve as a framework to explain the underlying principles of Contextual Inquiry interviewing and point out the most common or problematic pitfalls that interviewers can fall into. Attendees will learn tested techniques for getting the most out of interviews with users, which they can both use for improving their own skills and as a framework for assisting others in their organizations. The course also provides practical

Do's and Don'ts tips for interviewing, and interviewing style characterizations that illustrate ineffective styles.

Intended Audience: No specific background is required. It is appropriate for all roles.

COURSE 11 | ROOM: A7

After the Interviews: Making Sense of Fieldwork Data

16:30–18:00

INSTRUCTOR:
Sara Bly, *Sara Bly Consulting,* USA

Benefits: A growing number of HCI researchers and practitioners use the results of fieldwork to guide the design of interactive systems and technologies. Often it is tempting to assume that collecting the data is the main task of fieldwork. However, the need for systematic analysis of the data is a critical part of uncovering and justifying valid findings. This course provides an overview of several methods for making sense of the fieldwork data with examples and in-class exercises.

Intended Audience: The course is intended for participants who have some familiarity with open-ended interview and observation techniques and for participants who have some experience conducting fieldwork and wish to broaden their repertoire of techniques. It is not intended for those who are trained in qualitative study methodologies or for those with considerable experience in fieldwork data collection and analysis.

COURSE 7 | ROOM: C3

Collaborative Behavior and Supporting Technologies

11:30–16:00

INSTRUCTORS:
Steven Poltrock, *Boeing Phantom Works,* USA
Jonathan Grudin, *Microsoft,* USA

Benefits: You will learn about collaboration and technologies designed to support collaboration in the workplace. The focus is on collaboration practices and technologies that are currently emerging or advancing into widespread use, and on the human computer interaction challenges that are encountered.

Intended Audience: The course is designed for anyone interested in collaboration and its challenges.

COURSE 8 | ROOM: C3

Where Usability Meets Desirability: Visual Design with Personas and Goals

16:30–18:00

INSTRUCTORS:
Kim Goodwin, *Cooper,* USA
Nate Fortin, *Cooper,* USA

Benefits: Visual design contributes to usability by clarifying hierarchy and relationships, making type more readable, and making screens less cluttered. It enhances desirability by appealing to our aesthetic sense and emotions. This course focuses on how field research, personas, and requirements provide effective means for doing so.

After this course, attendees should understand how to differentiate between interaction design and visual interface design skills, use research and personas to guide the emotional and aesthetic aspects of a design, develop and get consensus on visual design requirements, and use requirements to develop and present visual design style studies.

Intended Audience: Usability and design practitioners who want a rigorous way to approach visual design decisions. Some familiarity with field research, personas, and using scenarios to guide interaction design is helpful, but not required.

COURSE 5 | ALMADEN BALLROOM I

Personal Information Management in Theory and Practice

11:30–18:00

INSTRUCTORS:
William Jones, *University of Washington,* USA
Jacek Gwizdka, *Rutgers University,* USA

Benefits: Personal Information Management (PIM) includes the acquisition, organization, maintenance and retrieval of information by an individual in support of his/her roles and activities. This course provides an overview of PIM both as a field of inquiry and as an activity that all of us perform every day.

Intended Audience: The course is designed for a general audience. Researchers will learn about PIM as a field of inquiry and will be able to map from key activities and fundamental problems of PIM to an evaluation of tools and strategies. Everyone who attends will gain a deeper understanding of PIM, its fundamental problems, the roles it plays in daily life, how selected strategies and supporting tools can help, and how the new directions in research and development will likely impact our practices of PIM.

COURSE 6 | ALMADEN BALLROOM II

Usability and Product Development

11:30–18:00

INSTRUCTOR:
Jon Meads, *Usability Architects, Inc.,* USA

Benefits: Attendees will obtain a better understanding of why usability engineering is needed — why something that seems so simple is so difficult to achieve in practice. They will obtain an understanding of what the various usability engineering techniques and methods provide when they are appropriate, and how to integrate them into the development process (both standard and Agile). Finally they will understand the strategic value of usability engineering, where to find the ROI for it, and how to include the usability engineering function in their organization.

This is a course on product development — not one on user interface guidelines or on the "how to" of usability engineering methods and techniques

Intended Audience: Managers and project leaders with responsibility for developing usable products who have little or no knowledge of usability engineering techniques and methods.

Notes

PAPERS REVIEWERS – CONTINUED

S. Shyam Sundar, *The Pennsylvania State University,* USA
Alistair Sutcliffe, *University of Manchester,* UK
Gunnvald Svendsen, *Telenor R&D,* Norway
Leila Takayama, *Stanford University,* USA
Desney Tan, *Microsoft,* USA
Charlotte Tang, *University of Calgary,* Canada
Anthony Tang, *University of British Columbia,* Canada
John Tang, *IBM,* USA
Steven Tanimoto, *University of Washington,* USA
Craig Tashman, *Georgia Institute of Technology,* USA
Deborah Tatar, *Virginia Polytechnic Institute and State University,* USA
Alex Taylor, *Microsoft,* UK
Jaime Teevan, *MIT,* USA
Alexandru Telea, *Eindhoven University of Technology,* the Netherlands
Lucia Terrenghi, *Ludwig Maximilian University Munich,* Germany
Michael Terry, *University of Waterloo,* Canada
Loren Terveen, *University of Minnesota,* USA
Jakob Tholander, *Södertörn University College,* Sweden
Bruce Thomas, *University of South Australia,* Australia
John Thomas, *IBM,* USA
Jennifer Thom-Santelli, *Cornell University,* USA
James Thornton, *PARC,* USA
Ramayah Thurasamy, *Universiti Sains Malaysia,* Malaysia
Peter Tolmie, *Nottingham University,* UK
Stefanie Tomko, *Carnegie Mellon University,* USA
Bill Tomlinson, *University of California, Irvine,* USA
Elaine Toms, *Dalhousie University,* Canada
Cristen Torrey, *Carnegie Mellon University,* USA
Melanie Tory, *University of Victoria,* Canada
Noam Tractinsky, *Ben-Gurion University,* Israel
Erin Treacy, *Tufts University,* USA
Marilyn Tremaine, *Rutgers University,* USA
Shari Trewin, *IBM,* USA
Jennifer Trich Kremer, *The Pennsylvania State University Erie, The Behrend College,* USA
Philippe Truillet, *IRIT CNRS,* France
Khai Truong, *University of Toronto,* Canada
Theophanis Tsandilas, *University of Toronto,* Canada
Manfred Tscheligi, *University of Salzburg,* Austria
Edward Tse, *University of Calgary,* Canada
Yuan-Chi Tseng, *University of Manchester,* UK
Joe Tullio, *Carnegie Mellon University,* USA
Susan Turner, *Napier University,* UK
Michael Twidale, *University of Illinois, Urbana-Champaign,* USA
Brygg Ullmer, *MIT,* USA
Richard Urban, *University of Illinois, Urbana-Champaign,* USA
Gerrit van der Veer, *Open Universiteit Nederland,* the Netherlands
Frank van Ham, *IBM,* USA
Nancy Van House, *University of California, Berkeley,* USA
Henriette Van Vugt, *Free University,* the Netherlands
Jarke van Wijk, *Technische Universiteit Eindhoven,* the Netherlands
Ravi Vatrapu, *University of Hawaii, Manoa,* USA
Catherine Vaucelle, *MIT,* USA
Elizabeth Veinott, *Klein Associates,* USA
Gina Venolia, *Microsoft,* USA
Colin Venters, *University of Manchester,* UK
Alonso Vera, *NASA,* USA
Frederic Vernier, *Université Paris XI,* France
Roel Vertegaal, *Queen's University,* Canada
Fernanda Viégas, *IBM,* USA
Stephen Viller, *University of Queensland,* Australia
Juergen Vogel, *European Media Lab,* Germany
Daniel Vogel, *University of Toronto,* Canada
Stephen Voida, *Georgia Institute of Technology,* USA
Amy Voida, *Georgia Institute of Technology,* USA
Lucian Voinea, *Technische Universiteit Eindhoven,* the Netherlands
Dirk Vom Lehn, *King's College London,* UK
Ron Wakkary, *Simon Fraser University,* Canada
Bruce Walker, *Georgia Institute of Technology,* USA
Steven Wall, *University of Glasgow,* UK
Gerd Waloszek, *SAP,* Germany
Shuo Wang, *Microsoft,* China
Matthew Ward, *Worcester Polytechnic Institute,* USA
Nigel Ward, *University of Texas, El Paso,* USA
Martin Wattenberg, *IBM,* USA
Leon Watts, *University of Bath,* UK
Gerhard Weber, *Multimedia Campus Kiel,* Germany
Dane Webster, *Virginia Polytechnic Institute and State University,* USA
Stephan Weibelzahl, *National College of Ireland,* Ireland
Alexandra Weilenmann, *University of Göteborg,* Sweden
Suzanne Weisband, *University of Arizona,* USA
Justin Weisz, *Carnegie Mellon University,* USA
Martin Wetterstrand, *Århus University,* Denmark
Alan Wexelblat, *Charles River Associates,* USA
Ryen White, *Microsoft,* USA
Sean White, *Columbia University,* USA
Steve Whittaker, *Sheffield University,* UK
Mikael Wiberg, *Umea University,* Sweden
Susan Wiedenbeck, *Drexel University,* USA
Daniel Wigdor, *University of Toronto,* Canada
Eric Wilcox, *IBM,* USA
Pete Willemsen, *University of Minnesota, Duluth,* USA
Amanda Williams, *University of California, Irvine,* USA
Gary Wills, *University of Southampton,* UK
Max Wilson, *University of Southampton,* UK
Michael Wilson, *CCLRC Rutherford Appleton Laboratory,* UK
Andrew Wilson, *Microsoft,* USA
Stefan Winkler, *National University of Singapore,* Singapore
Terry Winograd, *Stanford University,* USA
Jacob Wobbrock, *University of Washington,* USA
Tracee Wolf, *IBM,* USA
Steven Wolfman, *University of British Columbia,* Canada
Christa Womser-Hacker, *University of Hildesheim,* Germany
Pak-Chung Wong, *Pacific Northwest National Laboratory,* USA
Jeffrey Wong, *Carnegie Mellon University,* USA
Kenneth Wood, *Microsoft,* UK
Allison Woodruff, *Intel,* USA
Christopher Wren, *Mitsubishi Electric Research Laboratory,* USA
Mike Wu, *The University of Toronto,* Canada
Susan Wyche, *Georgia Institute of Technology,* USA
Peta Wyeth, *University of Queensland,* Australia
Yan Xiao, *Human Factors & Technology Research,* USA
Jun Xiao, *Georgia Institute of Technology,* USA
Lu Xiao, *The Pennsylvania State University,* USA
Xing Xie, *Microsoft,* China
Murat Yakici, *University of Strathclyde,* UK
Jing Yang, *University of North Carolina, Charlotte,* USA
Nicole Yankelovich, *Sun Microsystems,* USA
Yunwen Ye, *University of Colorado,* USA
Ka-Ping Yee, *University of California, Berkeley,* USA
Ron Yeh, *Stanford University,* USA
Alvin Yeo, *Universiti Malaysia Sarawak,* Malaysia
Min Yin, *IBM,* USA
Beth Yost, *Virginia Polytechnic Institute and State University,* USA
Richard Young, *University College London,* UK
Mihaela Zahariev, *Simon Fraser University,* Canada
Panayiotis Zaphiris, *City University,* UK
Robert Zeleznik, *Brown University,* USA
Shumin Zhai, *IBM,* USA
Xiaolong Zhang, *University of Arizona,* USA
Sam Zheng, *Seimens,* USA
Michelle Zhou, *IBM,* USA
Martina Ziefle, *RWTH Aachen University,* Germany
Juergen Ziegler, *University of Duisburg-Essen,* Germany
Jamie Zigelbaum, *Tufts University,* USA
John Zimmerman, *Carnegie Mellon University,* USA
Alexander Zotov, *Microsoft,* USA

NOTES ASSOCIATE CHAIRS

Simone Barbosa, *PUC-Rio*, Brazil
Julian Bleecker, *University of Southern California*, USA
Barry Brown, *University of Glasgow*, UK
AJ Brush, *Microsoft*, USA
Mike Byrne, *Rice University*, USA
Patrick Chiu, *FX Palo Alto Laboratory*, USA
Davor Cubranic, *Business Objects SA*, Canada
Laurent Denoue, *FX Palo Alto Laboratory*, USA
Garett Dworman, *Tec-Ed*, USA
Ame Elliott, *PARC*, USA
Shelly Farnham, *Farnham Research*, USA
Danyel Fisher, *Microsoft*, USA
Scott Golder, *Hewlett-Packard*, USA
Marti Hearst, *University of California, Berkeley*, USA
Jim Herbsleb, *Carnegie Mellon University*, USA
Jim Hudson, *PayPal*, USA
Satoshi Ichimura, *Tokyo University of Technology*, Japan
Katherine Isbister, *Rensselaer Polytechnic Institute*, USA
Quentin Jones, *New Jersey Institute of Technology*, USA
Andruid Kerne, *Texas A&M University*, USA
Joe McCarthy, *Nokia*, USA
Meredith Morris, *Microsoft*, USA
Dianne Murray, *Independent Consultant*, UK
Les Nelson, *PARC*, USA
Elin Pederson, *Microsoft*, USA
Mark Perry, *Brunel University*, UK
Pearl Pu, *Swiss Federal Institute of Technology*, Switzerland
Frank Ritter, *The Pennsylvania State University*, USA
Diane Schiano, *PARC*, USA
Frank Vetere, *University of Melbourne*, Australia
Fernanda Viegas, *IBM*, USA

NOTES REVIEWERS

Mark Ackerman, *University of Michigan,* USA
Piotr Adamczyk, *University of Illinois, Urbana-Champaign,* USA
Ray Adams, *Middlesex University,* UK
Eytan Adar, *University of Washington,* USA
John Adcock, *FX Palo Alto Laboratory,* USA
Ammar Ahmed, *CSIRO,* Australia
Ryan Aipperspach, *Intel,* USA
Fahim Akhter, *Zayed University,* United Arab Emirates
Diane Alonso, *University of Maryland, Baltimore County,* USA
Brian Amento, *AT&T,* USA
Morgan Ames, *Stanford University,* USA
Pedro Antunes, *University of Lisboa,* Portugal
Ana Carolina Araujo, *PUC-Rio,* Brazil
Timo Arnall, *Oslo School of Architecture & Design,* Norway
Ashwini Asokan, *Intel,* USA
Brent Auernheimer, *California State University, Fresno,* USA
Anne Aula, *Tampere University of Techonlogy,* Finland
Jeff Axup, *University of Queensland,* Australia
Julie Baca, *Mississippi State University,* USA
Maribeth Back, USA
Brian Bailey, *University of Illinois,* USA
Sameer Bajaj, *New York University,* USA
Marko Balabanovic, *lastminute.com,* UK
Sandrine Balbo, *The University of Melbourne,* Australia
Dirk Balfanz, *PARC,* USA
Rafael Ballagas, *RWTH Aachen University,* Germany
Simone Barbosa, *PUC-Rio,* Brasil
Jeffrey Bardzell, *Indiana University,* USA
Louise Barkhuus, *University of Glasgow,* UK
Arianna Bassoli, *London School of Economics,* UK
Thomas Baudel, *ILOG,* France
Patrick Baudisch, *Microsoft,* USA
Eric Baumer, *University of California, Irvine,* USA
Martin Beer, *Sheffield Hallam University,* UK
Andrew Begel, *Microsoft,* USA
Wolfgang Beinhauer, *Fraunhofer Institute for Industrial Engineering,* Germany
Blaine Bell, *Schrodinger,* USA
Marek Bell, *University of Glasgow,* UK

CONTINUES ON BACK

NOTES REVIEWERS – CONTINUED

Peter Benda, *The University of Melbourne,* Australia
Steve Benford, *University of Nottingham,* UK
Regina Bernhaupt, *Salzburg University,* Austria
Suresh Bhavnani, *University of Michigan,* USA
Jacob Biehl, *University of Illinois, Urbana-Champaign,* USA
Kim Binsted, *University of Hawaii,* USA
Jeremy Birnholtz, *University of Toronto,* Canada
Staffan Björk, *Interactive Institute,* Sweden
Julian Bleecker, *Art Technologist,* USA
Eli Blevis, *Indiana University,* USA
Mark Blythe, *University of York,* UK
Richard Boardman, *Google,* USA
Clara Boj, *Interaction and Entertainment Research Center,* Singapore
Susanne Boll, *University of Oldenburg,* Germany
Claus Bossen, *University of Aarhus,* Denmark
Dominic Bouwhuis, *Technical University Eindhoven,* the Netherlands
Susan Boyce, *Tellme Networks,* USA
Danah Boyd, *University of California, Berkeley,* USA
Erin Bradner, *University of California, Irvine,* USA
Stephen Brewster, *University of Glasgow,* UK
Christina Brodersen, *University of Aarhus,* Denmark
Peter Brown, *RealityAllStarz,* USA
Lorna Brown, *Microsoft,* UK
Barry Brown, *University of Glasgow,* UK
Amy Bruckman, *Georgia Institute of Technology,* USA
Duncan Brumby, *Drexel University,* USA
A.J. Brush, *Microsoft,* USA
Mike Brzozowski, *Hewlett-Packard,* USA
Sam Bucolo, *Australasian CRC for Interaction Design,* Australia
Daniela Busse, *SAP,* USA
Michael Byrne, *Rice University,* USA
Kelly Caine, *Georgia Institute of Technology,* USA
John Canny, *University of California, Berkeley,* USA
Luis Carriço, *University of Lisbon,* Portugal
Scott Carter, *University of California, Berkeley,* USA
Will Carter, USA
Marc Cavazza, *University of Tesside,* UK
Anna Cavender, *University of Washington,* USA
Ann-Marie Chadwick-Dias, *Fidelity Investments,* USA
Bay-Wei Chang, *Google,* USA
Angela Chang, *MIT,* USA
Dr Jarinee Chattratichart, *Kingston University,* UK
Ling Chen, *Zhejiang University,* China
Li-Te Cheng, *IBM,* USA
Gifford Cheung, *University of Washington,* USA
Ed Chi, *PARC,* USA
Mario Chiesa, *Istituto Superiore Mario Boella,* Italy
Patrick Chiu, *FX Palo Alto Laboratory,* USA
Konstantinos Chorianopoulos, *Bauhaus University of Weimar,* Germany
Georgios Christou, *Cyprus College,* Cyprus
Yu Shan Chuang, *Yahoo!,* USA
Luigina Ciolfi, *University of Limerick,* Ireland
Nathalie Colineau, *CSIRO,* Australia
Katherine Connelly, *Indiana University,* USA
Stéphane Conversy, *Ecole Nationale de l'Aviation Civile,* France
Matthew Cooper, *FX Palo Alto Laboratory,* USA
Tim Coughlan, *University of Bath,* UK
Scott Counts, *Microsoft,* USA
Lorrie Cranor, *Carnegie Mellon University,* USA
Davor Cubranic, *University of British Columbia,* Canada
James Cunningham, *AT&T,* USA
Dave Curbow, *NASA,* USA
William Curtis-Davidson, *IBM,* USA
Laura Dabbish, *Carnegie Mellon University,* USA
Brinda Dalal, *PARC,* USA
Ben Daniel, *University of Saskatchewan,* Canada
Kushal Dave, *IBM,* USA
Scott Davidoff, *Carnegie Mellon University,* USA
Richard Davis, *University of California, Berkeley,* USA
Antonella De Angeli, *University of Manchester,* UK
Flavio De Paoli, *Universita' di Milano Bicocca,* Italy
Maira de Paula, *Pontifícia Universidade Católica do Rio de Janeiro,* Brasil
Marco de Sá, *University of Lisbon,* Portugal
Clarisse de Souza, *PUC-Rio,* Brazil
David Demirdjian, *MIT,* USA
Brent Dennis, *North Carolina State University,* USA
Laurent Denoue, *FX Palo Alto Laboratory,* USA
Guy Dewsbury, *Lancaster University,* UK
Nicholas Diakopoulos, *Georgia Institute of Technology,* USA
Joan DiMicco, *MIT,* USA
Ellen Yi-Luen Do, *Carnegie Mellon University,* USA
Ellen Yi-Luen Do, *Georgia Institute of Technology,* USA
Hilko Donker, *Dresden University of Technology,* Germany
Steven Dow, *Georgia Institute of Technology,* USA
Silke Dr. Lang, *ETH Zurich,* Switzerland
Carlos Duarte, *Universidade de Lisboa,* Portugal
Andrew Duchowski, *Clemson University,* USA
Garett Dworman, *Tec-Ed, Inc.,* USA
Catherine Dwyer, *Pace University,* USA
Serge Egelman, *Carnegie Mellon University,* USA
Ame Elliott, *PARC,* USA
David England, *Liverpool John Moores University,* UK
Mattias Esbjörnsson, *Mobility, The Interactive Institute,* Sweden
Katherine Everitt, *University of Washington,* USA
Rod Farmer, *The University of Melbourne,* Australia
Shelly Farnham, *Microsoft,* USA
J. Shawn Farris, *Atlantic Human Factors,* USA
Jonathan Feinberg, *IBM,* USA
Daniel Felix, *ergonomie & technologie (e&t) GmbH,* Switzerland
Sue Fenley, *Reading University,* UK
Bob Fields, *Middlesex University,* UK
Thomas Finholt, *University of Michigan,* USA
Andrew Fiore, *University of California, Berkeley,* USA
Danyel Fisher, *Microsoft,* USA
Andrea Forte, *Georgia Institute of Technology,* USA
Brooke Foucault, *Northwestern University,* USA
Katrin Franke, *Fraunhofer IPK,* Germany
Peter Fröhlich, *Telecommunications Research Center Vienna,* Austria
Erik Frøkjær, *Københavns Universitet,* Denmark
Sara Gatmir motahari, *New Jersey Institute of Technology,* USA
William Gaver, *Goldsmiths College,* UK
Darren Gergle, *Northwestern University,* USA
Jennifer Gibbs, *Rutgers University,* USA
Juan Gilbert, *Auburn University,* USA
David Gilmore, *Intel,* USA
Audrey Girouard, *Tufts University,* USA
Paul Gnanayutham, *University of Portsmouth,* UK
Scott Golder, *Hewlett-Packard,* USA
Gene Golovchinsky, *FX Palo Alto Laboratory,* USA
Gloria Gomez, *Swinburne University of Technology,* Australia
Joy Goodman, *University of Cambridge,* UK
Elizabeth Goodman, *University of California, Berkeley,* USA
Dina Goren-Bar, *Ben-Gurion University,* Israel
Dorian Gorgan, *Technical University of Cluj-Napoca,* Romania
Sukeshini Grandhi, *New Jersey Institute of Technology,* USA
Phil Gray, *University of Glasgow,* UK
Georges G. Grinstein, *University of Massachusetts, Lowell,* USA
Kaj Gronbak, *University of Aarhus,* Denmark
Mark Gross, *Carnegie Mellon University,* USA
Ben Gross, *University of Illinois, Urbana-Champaign,* USA
Dennis Groth, *Indiana University,* USA
Jonathan Grudin, *Microsoft,* USA
Zhiwei Guan, *University of Washington, Seattle,* USA
Catherine Guastavino, *McGill University,* Canada
Yves GUIARD, *CNRS & U2 Marseille France,* France
Francois Guimbretiere, *University of Maryland,* USA
Anuj Gujar, *DARTdevices Corporation,* USA
Glenn Gunzelmann, *Air Force Research Laboratory,* USA
Feng Guo, *Arizona State University,* USA
Ankur Gupta, *New Jersey Institute of Technology,* USA
Jonna Häkkilä, *Nokia,* Finland
Malcolm Hall, *University of Glasgow,* UK
Michael Haller, *Upper Austria University of Applied Sciences,* Austria
Dong-Han Ham, *Middlesex University,* UK
Tracy Hammond, *Texas A&M University,* USA
Mark Handel, *University of Michigan,* USA
Thomas Hansen, *Aarhus University,* Denmark
Chandra Harrison, *University of York,* UK
Bjoern Hartmann, *Stanford University,* USA
Kirstie Hawkey, *Dalhousie University,* Canada
Gillian Hayes, *Georgia Institute of Technology,* USA
Christopher Healey, *North Carolina State University,* USA
Marti Hearst, *University of California, Berkeley,* USA
Chris Heathcote, *Nokia,* Finland
Jeffrey Heer, *University of California, Berkeley,* USA
Ilona Heldal, *Chalmers University of Technology,* Sweden
Austin Henderson, *Pitney Bowes,* USA
Jim Herbsleb, *Carnegie Mellon University,* USA
Roxanne Hiltz, *New Jersey Institute of Technology,* USA
Bernie Hogan, *University of Toronto,* Canada
Jason Hong, *Carnegie Mellon University,* USA
Kristina Hook, *Stockholm University,* Sweden
Ben Hooker, *Royal College of Art,* UK
Eva Hornecker, *Technical University Vienna,* Austria
Thomas Horton, *North Carolina State University,* USA
Juan Pablo Hourcade, *University of Iowa,* USA
Steve Howard, *The University of Melbourne,* Australia
Andrew Howes, *University of Manchester,* UK
Elaine Huang, *Georgia Institute of Technology,* USA
Jim Hudson, *PayPal,* USA
Amy Hurst, *Carnegie Mellon University,* USA
Hilary Hutchinson, *Google,* USA
Ebba Thora Hvannberg, *University of Iceland,* Iceland
Giovanni Iachello, *Georgia Institute of Technology,* USA
Satoshi Ichimura, *Tokyo University of Technology,* Japan
Pourang Irani, *University of Manitoba,* Canada
Katherine Isbister, USA
Yuichi Itoh, *Osaka University,* Japan
Wassim Jabi, *New Jersey Institute of Technology,* USA
Alejandro Jaimes, *FujiXerox,* Japan
Jhilmil Jain, *Hewlett-Packard,* USA
Frankie James, *SAP,* USA
Anthony Jameson, *German Research Institute for Artificial Intelligence,* Germany
Arnav Jhala, *North Carolina State University,* USA
Mike Tian-Jian Jiang, *National Tsing Hua University,* Taiwan
Qun Jin, *Waseda University,* Japan
Adam Joinson, *The Open University,* UK
William Jones, *University of Washington,* USA
Quentin (Gad) Jones, *New Jersey Institute of Technology,* USA
Anker Jorgensen, *IT University of Copenhagen,* Denmark
Wendy Ju, *Stanford University,* USA
Oskar Juhlin, *Interactive Institute,* Sweden
Susanne Jul, USA
Hyunjoon Jung, *Republic of Korea Telecom,* Republic of Republic of Korea
Ajay Kamath, *New Jersey Institute of Technology,* USA
Maryam Kamvar, *Google,* USA
Eser Kandogan, *IBM,* USA
Anu Kankainen, *Idean Research,* Finland
Thomas Kannampallil, *The Pennsylvania State University,* USA
Laurie Kantner, *Tec-Ed, Inc.,* USA
Karrie Karahalios, *MIT,* USA
Demetrios Karis, *Verizon Labs,* USA
Amy Karlson, *University of Maryland,* USA
Kristiina Karvonen, *Helsinki University of Technology,* Finland
Judy Kay, *University of Sydney,* Australia
Joseph Kaye, *Cornell University,* USA

CONTINUES NEXT TAB

	9:00–10:00	10:00–10:30	11:30–13:00	14:30–16:00	16:30–18:00
CIVIC AUDITORIUM	**Social Impact Award** Gary Marsden Doing HCI Differently —Stories from the Developing World Page 48	**CHI MADNESS** Page 48	**Interactive Session** "Get Real!" What's Wrong with HCI Prototyping & How Can We Fix It? Page 49	**Interactive Session** Moving UX Into a Position of Corporate Influence Page 53	**Interactive Session** Along the Path of Pervasive Computing: GUI & TUI Design Page 57
Room A1			SIG Sustainability & Interaction Page 49	Experience Reports Education & Culture Page 53	Papers Tasks Page 57
Room A2			Papers Gaze & Eye Tracking Page 49	Papers Tangibility Page 53	Papers Emergency Action Page 57
Room A3			Papers Online Representation of Self Page 50	Papers Design Theory Page 54	Papers Design Methods Page 58
Room A4 & A5			Papers Innovative Interactions Page 50	Papers Web Usability Page 54	Papers Mobile Interaction Techniques II Page 58
Room A8			Experience Reports Usability Page 50	Papers Empirical Models Page 55	Papers Home Spirituality Page 58
Room B1 - B4			Papers Programming by Professionals Page 51	Papers Mobile Interaction Techniques I Page 55	Papers Games Page 59
Room C2			Interactivity Play & Exercise Page 51	ALT.CHI Re-Thinking Humans, Computers, Interaction, and Design Page 55	SIG Capturing Longitudinal Usability Page 59
Room C4			SIG Beyond Usability for Safety Critical Systems Page 52	SIG Trust 2.1 Advancing the Trust Debate Page 56	SIG End User Software Engineering Page 59
Room A6	Course 21 Web Usability for Assistive Technology Page 60			Course 22 Rapid Prototyping & Evaluation with Web Mashups Page 60	
Room A7	Course 19 Information Foraging Theory Page 60			Course 17 An Introduction to Designing for the Scent of Information Page 60	Course 18 Designing for the Scent of Information: Advanced Concepts Page 61
Room C3	Course 16 Design of Spatial Applications Page 61			Course 20 Building Affinity Diagrams to Reveal User Needs & Engage Developers Page 61	
Almaden Ballroom I	Course 14 Card Sorting & Cluster Analysis for Information Architecture Design Page 61				
Almaden Ballroom II	Course 15 Understanding Users in Context: An In-Depth Introduction to Fieldwork Page 62				

= 15 minutes = 30 minutes = unscheduled time

COMMONS

Exhibits, Interactivity, & Info Booth
10:30–18:00

SPECIAL EVENTS

Spotlight on Work-in-Progress Posters (#61-104)
10:30–11:30
Concourse

Job Fair
18:00–20:00
Commons

■ AWARD TALK | CIVIC AUDITORIUM

SOCIAL IMPACT AWARD: GARY MARSDEN

SESSION CHAIR: Ben Shneiderman, *University of Maryland,* USA

Doing HCI Differently — Stories from the Developing World

Gary Marsden, *University of Cape Town,* South Africa

Using case studies and examples, this talk looks at the challenges of applying standard HCI techniques in a developing world context. We look at how HCI can have a fantastic impact on communities in the developing world, but there is still some way to go in understanding how HCI can best benefit the developing world.

■ CHI MADNESS | CIVIC AUDITORIUM

SESSION CHAIRS:
Patrick Baudisch, *Microsoft,* USA
Gonzalo Ramos, *University of Toronto,* Canada

CHI's 30 second Madness, which premiered in Montréal, returns to give everyone a lightning speed overview of the days program.

■ INTERACTIVE SESSION | CIVIC AUDITORIUM

"GET REAL!" WHAT'S WRONG WITH HCI PROTOTYPING AND HOW CAN WE FIX IT?

MODERATOR:
William Jones, *University of Washington,* USA

PANELISTS:
Michael Arent, *SAP,* USA
Victoria Bellotti, *PARC,* USA
Mary Czerwinski, Jonathan Grudin, *Microsoft,* USA
Tom Rodden, *University of Nottingham,* UK
Jared M. Spool, *User Interface Engineering,* USA

A prototype – as a means to evaluate and communicate a good idea – is often an essential step towards useful, shipping products and also towards a deeper understanding of what people really need. Prototyping and user evaluation can be enormously expensive and failure rates are high. Moreover, prototype user evaluations are often far from real with respect to user representatives, tasks, and measures. But to "get real" in HCI prototyping and evaluations risks placing even greater (more unrealistic) demands upon the HCI researcher. Do very real costs and constraints force HCI prototyping to the margins? Can we change acceptable HCI prototyping methods, helping HCI prototyping "get real", in both its conduct and the implications of its results?

■ SPECIAL INTEREST GROUP | ROOM: A1

SUSTAINABILITY AND INTERACTION

MODERATORS:
Jennifer Mankoff, Susan R. Fussell, *Carnegie Mellon University,* USA
Paul Resnick, *University of Michigan,* USA
Batya Friedman, *University of Washington,* USA
Phoebe Sengers, *Cornell University,* USA
Alan Borning, *University of Washington,* USA
Eli Blevis, *Indiana University,* USA
Jay Hasbrouck, Allison Woodruff, *Intel,* USA

The goal of this SIG is to raise awareness of these issues in the CHI community and to start a conversation about the possibilities and responsibilities we have to address issues of sustainability.

■ PAPERS | ROOM: A2

GAZE & EYE TRACKING

SESSION CHAIR: Chris North, *Virginia Polytechnic Institute and State University*, USA

PAPER | What Are You Looking For? An Eye-Tracking Study of Information Usage in Web Search

Edward Cutrell, *Microsoft,* USA
Zhiwei Guan, *Microsoft & Univeristy of Washington,* USA

This paper describes a Web search study using eye-tracking methodologies. The study shows that increasing the amount of contextual information in search results improves performance for informational tasks, but hurts performance on navigational tasks.

NOTE | An Eye Tracking Study on How People Search When the Target is Not Shown on Top of the List

Zhiwei Guan, *University of Washington, Seattle,* USA
Edward Cutrell, *Microsoft,* USA

An empirical study showing inefficiency of ordered result display for people's search when the best result isn't shown on top. Provide evidence invoking future redesign of search result interface.

NOTE | A Minimal Model for Predicting Visual Search

Tim Halverson, Anthony J. Hornof, *University of Oregon,* USA

This research extends a rich lineage of computational models designed specifically with HCI tasks in mind. A minimal visual search model is presented that will benefit automated interface analysis tools.

PAPER | EyePoint: Practical Pointing and Selection Using Gaze and Keyboard

Manu Kumar, Andreas Paepcke, Terry Winograd, *Stanford University,* USA

We present the first practical and universally-applicable (for disabled and able-bodied users) solution for gaze-based pointing and selection for everyday computing tasks. Users preferred EyePoint over pointing with a mouse.

PAPERS | ROOM: A3

ONLINE REPRESENTATION OF SELF

SESSION CHAIR: A. J. Bernheim Brush, *Microsoft,* USA

PAPER | A Familiar Face(book): Profile Elements as Signals in an Online Social Network

Cliff Lampe, Nicole Ellison, Charles Steinfield, *Michigan State University,* USA

This study shows that different elements in a user profile have different effects on participation outcomes. Profile fields that enable common points of reference are associated with more "friend" links.

NOTE | Constructing My Online Self: Avatars that Increase Self-Focused Attention

Asimina Vasalou, *Imperial College London,* UK
Adam Joinson, *Open University,* UK
Jeremy Pitt, *Imperial College London,* UK

We show that the individuating properties emitted by online avatars to their owners can increase self-focused attention. In computer-mediated communication, self-focused attention has the ability to effect online behavior.

NOTE | The Truth about Lying in Online Dating Profiles

Jeffrey T. Hancock, Catalina Toma, *Cornell University,* USA
Nicole Ellison, *Michigan State University,* USA

By cross-validating profile information with observed personal characteristics, this study is the first to gauge actual practices of deception in online dating profiles, revealing deceptions to be frequent but small.

PAPER | He Says, She Says: Conflict and Coordination in Wikipedia

Aniket Kittur, *University of California, Los Angeles,* USA
Bongwon Suh, Bryan A. Pendleton, Ed H. Chi, *PARC,* USA

Characterizes growing conflict and interference costs in Wikipedia and presents machine learning and visualization tools to support continued growth. Can assist designers in developing and improving collaborative knowledge systems.

PAPERS | ROOM: A4 & A5

INNOVATIVE INTERACTIONS

SESSION CHAIR: Kellogg S. Booth, *University of British Columbia,* Canada

PAPER | Modeling Pointing at Targets of Arbitrary Shapes

Tovi Grossman, Nicholas Kong, Ravin Balakrishnan, *University of Toronto,* Canada

Empirically investigates user ability to point at graphical targets of arbitrary shapes. Contributes empirical data and a validated model which was shown to accurately predict movement times for the task.

PAPER | Perception of Elementary Graphical Elements in Tabletop and Multi-Surface Environments

Daniel Wigdor, *Mitsubishi Electric Research Labs & University of Toronto,* USA & Canada
Chia Shen, Clifton Forlines, *Mitsubishi Electric Research Labs,* USA
Ravin Balakrishnan, *University of Toronto,* Canada

Empirically investigates user ability to accurately perceive information graphics under perspective distortion inherent in tabletop and multi-surface environments. Contributes empirical data, design guidelines, and recommendations for visualization design.

PAPER | Exploring and Reducing the Effects of Orientation on Text Readability in Volumetric Displays

Tovi Grossman, Daniel Wigdor, Ravin Balakrishnan, *University of Toronto,* Canada

Empirically investigates user ability to read text in a 3D volumetric display from different viewing angles. Contributes empirical data and evaluated design solutions for improving the text readability.

EXPERIENCE REPORTS | ROOM: A8

USABILITY

SESSION CHAIR: Bonnie E. John, *Carnegie Mellon University,* USA

Coming to Terms: Comparing and Combining the Results of Multiple Evaluators Performing Heuristic Evaluation

Hanna Yehuda, *EMC Corp.,* USA
Jennifer McGinn, *Sun Microsystems, Inc.,* USA

We describe a new way to perform heuristic evaluations which allows multiple evaluators to easily compare and combine the results of their reviews. This method was developed to provide a single, reliable, result to the client, but it also allowed us to easily negotiate differences in our findings and to prioritize usability problems. An unexpected side effect of this evaluation method is the measure and predictability of the effect of usability improvements.

When Two Methods Are Better Than One: Combining User Study with Cognitive Modeling

Andrea Knight, *Google,* USA
Guy Pyrzak, Collin Green, *SJSU Foundation & NASA,* USA

We discuss the benefits of combining user studies and cognitive modeling in the context of Firefox tabbed browsing. We studied new users' ability to use tabbed browsing without assistance, and then evaluated alternatives. In general, our experience highlights the advantages of using user studies and modeling together to do user interface evaluation.

Persona Based Rapid Usability Kick-Off

Nina Khalayli, *Telenor Research & Innovation,* Norway
Tone Terum, *Telenor Nordic Mobile,* Norway
Silja Nyhus, Kari Hamnes, *Telenor Research & Innovation,* Norway

The paper reports on the evaluation of a rapid usability kick-off technique (RUKO), designed for non-usability experts (NUEs), to enable them to perform usability work. The effect was that usability awareness and end user focus in projects increased. However, so did the need for usability expertise in latter phases.

Usability On Patrol

Maria Callander, *Carlsbad Police Department,* USA
Lorna Zorman, *California State University, San Marcos,* USA

The introduction of computers into police patrol cars comes with an increase in driver distraction issues. We will describe the usability process and techniques we adapted to study computers in law enforcement patrol cars based on a combination of a National Highway Traffic Safety Administration (NHTSA) workload assessment protocol and cognitive modeling. Using cognitive modeling, we could identify the potential problems for certain tasks, such as running a license plate with typical mouse-keyboard interface compared with doing the same task via radio contact with dispatcher.

■ PAPERS | ROOM: B1–B4

PROGRAMMING BY PROFESSIONALS

SESSION CHAIR: Margaret Burnett, *Oregon State University,* USA

PAPER | Let's Go to the Whiteboard: How and Why Software Developers Use Drawings

Mauro Cherubini, *Swiss Federal Institute of Technology,* Switzerland
Gina Venolia, Rob DeLine, *Microsoft,* USA
Andrew J. Ko, *Carnegie Mellon University,* USA

How and why developers draw code? Informal notation was often used to support face-to-face communication, so standards don't help. Software engineering differs from other engineering disciplines, which can affect tool design.

PAPER | Aligning Development Tools with the Way Programmers Think About Code Changes

Marat Boshernitsan, *Agitar Software, Inc,* USA
Susan L. Graham, Marti A. Hearst, *University of California, Berkeley,* USA

We present a novel visual language and interaction model for performing structural transformations in source code. The language matches programmer intuitions and performs well on objective and subjective usability measures.

PAPER | Task and Social Visualization in Software Development: Evaluation of a Prototype

Jason B. Ellis, *IBM,* USA
Shahtab Wahid, *Virginia Polytechnic Institute and State University,* USA
Catalina Danis, Wendy A. Kellogg, *IBM,* USA

An empirical evaluation of an interactive visualization tool supporting distributed development based on interviews and a comparison of tasks carried out in the tool vs. a traditional bug tracking system.

■ INTERACTIVITY | ROOM: C2

PLAY & EXERCISE

SESSION CHAIR: Elizabeth Goodman, *University of California, Berkeley*, USA

Learning Shape Writing by Game Playing

Per Ola Kristensson, *Linköpings universitet,* Sweden
Shumin Zhai, *IBM,* USA

We present a computer game demonstration designed to efficiently and playfully teach users shape writing – a new text entry method for pen-based devices.

Building Upon Everyday Play

Haiyan Zhang, *IDEO,* USA
Bjoern Hartmann, *Stanford University,* USA

Building Upon Everyday Play is the result of a collaboration of Control Freaks, a pervasive gaming experience project, and Exemplar, a toolkit that uses programming-by-demonstration to map continuous sensor data to high-level events. The project consists of a combination of a portable, wireless game controller that can be attached to everyday objects and a programming-by-demonstration system that turns sensor data reported by the controller into suitable game events.

REXplorer: A Mobile, Pervasive Spell-Casting Game for Tourists

Rafael Ballagas, *RWTH Aachen University,* Germany
Steffen Walz, *ETH Zurich,* Germany
Sven Kratz, *RWTH Aachen University,* Germany
Claudia Fuhr, *ETH Zurich,* Germany
Eugen Yu, *RWTH Aachen University,* Germany
Martin Tann, *ETH Zurich,* Germany
Jan Borchers, *RWTH Aachen University,* Germany
Ludger Hovestadt, *ETH Zurich,* Germany

REXplorer is a mobile, pervasive spell-casting game designed for tourists of Regensburg, Germany. Uses location sensing to create player encounters with spirits (historical figures) that are associated with historical buildings in an urban setting and a novel mobile interaction mechanism of "casting a spell" (making a gesture by waving a mobile phone through the air) allows the player to awaken and communicate with a spirit to continue playing the game. The game is designed to make learning history fun for young (and young at heart) tourists and influence their path through the city.

NOTE | Jogging the Distance

Shannon O'Brien, *Commonwealth Scientific Industrial Research Organisation,* Australia
Florian 'Floyd' Mueller, *Georgia Institute of Technology,* USA

"Jogging over a Distance" allows joggers to socialize and motivate each other while jogging in geographically distant locations through the use of spatially distributed audio. We hope our approach encourages active and future joggers to jog more often, while simultaneously supporting their social friendships.

Jogging Over a Distance

Florian 'Floyd' Mueller, *Georgia Institute of Technology,* USA
Shannon O'Brien, Alex Thorogood, *CSIRO & Connecting People Group \ ICT Centre,* Australia

Jogging is a healthy activity and many people enjoy jogging with others for social and motivational reasons. However, it was found through surveying, that jogging partners might not always live in the same location and it may be difficult to find a local jogger who runs at the same pace. "Jogging over a Distance" allows joggers to socialize and motivate each other while jogging in geographically distant locations through the use of spatially distributed audio.

BodySpace: Inferring Body Pose for Natural Control of a Music Player

Steven Strachan, *Hamilton Institute,* UK
Roderick Murray-Smith, *University of Glasgow & Hamilton Institute,* UK
Sile O'Modhrain, *Queens University,* UK

We describe the BodySpace system, which uses inertial sensing and pattern recognition to allow the gestural control of a music player by placing the device at different parts of the body. We demonstrate a new approach to the segmentation and recognition of gestures for this kind of application and show how simulated physical model-based techniques can shape gestural interaction.

■ SPECIAL INTEREST GROUP | ROOM: C4

BEYOND USABILITY FOR SAFETY CRITICAL SYSTEMS

MODERATORS:
Philippe Palanque, Sandra Basnyat, *University Toulouse,* France
Regina Bernhaupt, *Universität Salzburg,* Austria
Ronald Boring, *Idaho National Laboratory,* USA
Chris Johnson, *University of Glasgow,* UK
Peter Johnson, *University of Bath,* UK

The aim of this SIG is to provide a forum for both researchers and practitioners interested in safety critical interactive systems. Our goal is to define a roadmap of activities to cross fertilize usability, reliability and safety for these kinds of systems to minimize duplicate efforts and reuse knowledge in all the communities involved.

■ INTERACTIVE SESSION | CIVIC AUDITORIUM

MOVING UX INTO A POSITION OF CORPORATE INFLUENCE: WHOSE ADVICE REALLY WORKS?

MODERATOR:
Richard Anderson, *Riander,* USA

PANELISTS:
Jeremy Ashley, *Oracle,* USA
Tobias Herrmann, *mobilkom austria,* Austria
Justin Miller, *eBay,* Switzerland
James Nieters, *Cisco Systems,* USA
Shauna Sampson Eves, *Blue Shield of California,* USA
Secil Watson, *Wells Fargo,* USA

Professionals working to move user experience (UX) into a position of corporate influence are impeded by conflicting recommendations, including those regarding the roles of documenting and evangelizing UX work, ownership of UX, organizational positioning, calculating return on investment, and conducting "ethnographic" research. In this interactive session, a group of senior UX management personnel who have moved UX into positions of rapidly increasing influence in their varied places of work debate.

■ EXPERIENCE REPORTS | ROOM: A1

EDUCATION & CULTURE

SESSION CHAIR: Charles van der Mast, *Delft University of Technology,* the Netherlands

Mandala: Supporting Social Presence and Interaction in the Chinese Home

Neema Moraveji, *Microsoft,* China
A.R.D. Rajan, *National Institute of Design,* India
Liu Like, *Sichuan University,* China

Multiple factors lead social software to be unevenly adopted by differing age segments in urban China. This paper presents user research to understand the discrepancy between parents and their children and attempts to address them with the design of an information appliance. The appliance attempts to support interaction ranging from peripheral awareness to real-time conversation.

A Theory-Based Approach to Designing Student Learning Context

Jarinee J. Chattratichart, *Kingston University London,* USA

This paper describes how educational research findings were deployed to address the issues of engaging students of different levels of technical ability across four semesters in an HCI module at a UK university. Kolbís experiential learning cycle was successfully applied to the design and scheduling of course content and learning activities to enhance students' learning outcomes.

Education, Entertainment, and Authenticity: Lessons Learned from Designing an Interactive Exhibit about Medieval Music

Marius Wolf, Eric Lee, Jan Borchers, *RWTH Aachen,* Germany

We describe the design experience gathered from creating an interactive exhibit about medieval music. We focused our work on three major goals: educational value, entertainment aspects, and historic authenticity. We present insight into the challenges in designing a system with these goals and how they could be solved.

Establishing Relationships For Designing Rural Information Systems

Yael Schwartzman, Tapan S. Parikh, *University of Washington,* USA

Designing for the developing world presents unique challenges. Establishing rapport with local partners is important to overcome contextual unfamiliarity and ensure the relevance of proposed solutions. We discuss our experiences designing CAM is a camera-based mobile application framework design and how we used a system based on this design to do data capture for Asobagri, a rural coffee cooperative in Barillas, Guatemala.

A Bridging Design Prototype for Investigating Concept Mapping in the Preschool Community

Gloria Gomez, *Swinburne University of Technology,* Australia

We report on pilot studies where teachers from two different preschools incorporated a bridging design prototype (BDP) for concept mapping into classroom activities. Designed under inclusive, participatory, user-centered principles, the BDP was used to perform observations assessing an interaction problem and in familiarizing the researcher with the user community. Results showed voice-input devices promote illiterate children's authoring and self-regulation skills when adding meaning to symbols.

■ PAPERS | ROOM: A2

TANGIBILITY

SESSION CHAIR: Chia Shen, *Mitsubishi Electric Research Labs,* USA

NOTE | Senspectra: A Computationally Augmented Physical Modeling Toolkit for Sensing and Visualization of Structural Strain

Vincent LeClerc, Amanda Parkes, Hiroshi Ishii, *MIT,* USA

Senspectra is a computationally augmented physical modeling toolkit for sensing and visualization of structural strain, incorporating the material quality of malleable elements of an interface into its digital control structure.

NOTE | Tangible User Interface for Chemistry Education: Comparative Evaluation and Re-Design

Morten Fjeld, Jonas Fredriksson, Martin Ejdestig, Florin Duca, *Chalmers TH,* Sweden
Kristina Bötschi, *University of Zurich,* Switzerland
Benedikt Voegtli, Patrick Juchli, *HyperWerk, FHBB,* Switzerland

Augmented Chemistry (AC) is a tangible application to learn organic chemistry. The evaluation presented compared learning effectiveness and user acceptance of AC versus ball-and-stick model. The AC system was then re-designed, which gave improved subjective opinions on use.

PAPER | Mechanical Constraints as Computational Constraints in Tabletop Tangible Interfaces

James Patten, Hiroshi Ishii, *MIT,* USA

Describes a new tabletop tangible interface and series of interaction techniques that use mechanical constraints to aid problem solving. This may expand the roles readers consider for tangibles in UIs.

PAPERS | ROOM: A3

DESIGN THEORY

SESSION CHAIR: Jon Kolko, *Savannah College of Art & Design*, USA

PAPER | Research Through Design as a Method for Interaction Design Research in HCI

John Zimmerman, Jodi Forlizzi, Shelley Evenson, *Carnegie Mellon University,* USA

Contributes a model for design research that allows the HCI research community to engage "wicked problems". Benefits HCI by employing design thinking in research and improved research transfer to practice.

PAPER | Sustainable Interaction Design: Invention & Disposal, Renewal, & Reuse

Eli Blevis, *Indiana University, Bloomington,* USA

Describes and defends the perspective that sustainability can and should be a central focus of interaction design. Provides a rubric and principles for designing interactivity sustainably and illustrates their application.

PAPER | Computational Composite

Anna Vallgårda, *IT University of Copenhagen,* Denmark
Johan Redström, *Danish Royal Academy of Fine Arts,* Denmark

Presents a theoretical contribution on how to understand computers as a design material. People involved with technology development for interaction design and designers can benefit from the proposed perspective.

PAPERS | ROOM: A4 & A5

WEB USABILITY

SESSION CHAIR: Ed H. Chi, *PARC,* USA

PAPER | Presenting Web Image Search Results in Semantic Clusters

Shuo Wang, Feng Jing, *Microsoft,* China
Jibo He, *Peking University,* China
Qixing Du, *Tsinghua University,* China
Lei Zhang, *Microsoft,* China

The paper addresses an evaluative exploration of interface using image clustering for web image searches. Users prefer this organized result UI over traditional list views.

PAPER | Web Page Revisitation Revisited: Implications of a Long-Term, Click-Stream Study of Browser Usage

Hartmut Obendorf, Harald Weinreich, *University of Hamburg,* Germany
Eelco Herder, *University of Hannover,* Germany
Matthias Mayer, *University of Hamburg,* Germany

Updates findings concerning revisitation behavior based on an extensive long-term click-stream study of Web usage. Differentiates types of revisits and suggests implications for support by Web designers and Web browsers.

PAPER | Noticing Notice: A Large Scale Experiment on the Timing of Software License Agreements

Nathaniel S. Good, Jens Grossklags, Deirdre K. Mulligan, *University of California, Berkeley,* USA
Joseph A. Konstan, *University of Minnesota,* USA

A large scale experiment of the timing of software license agreements demonstrating the applicability of HCI techniques to fundamental legal questions regarding notice and consent.

■ PAPERS | ROOM: A8

EMPIRICAL MODELS

SESSION CHAIR: Ann Blandford, *University College London*, UK

PAPER | Meta-Analysis of Correlations Among Usability Measures

Kasper Hornbæk, *University of Copenhagen,* Denmark
Effie Lai-Chong Law, *Eidgenössische Technische Hochschule, Zürich,* Switzerland

Investigates how usability measures are correlated and which factors that shapes the correlations. Provides extensive empirical evidence about correlations and uses it to discuss models of usability and usability studies.

PAPER | A Predictive Model of Menu Performance

Andy Cockburn, *University of Canterbury,* New Zealand
Carl Gutwin, *University of Saskatchewan,* Canada
Saul Greenberg, *University of Calgary,* Canada

Presents a model predicting efficiency of menu designs, incorporating components for Fitts' pointing time, visual search time when novice, Hick-Hyman decision time when expert, and for novice to expert transition.

PAPER | Endpoint Prediction Using Motion Kinematics

Edward Lank, *University of Waterloo,* Canada
Nikko Cheng, *San Francisco State University,* USA
Jaime Ruiz, *University of Waterloo,* Canada

Develops a model of endpoint prediction based on kinematic laws of human motion. Enhances our understanding of motion in interfaces and its use in prediction-based interaction techniques.

■ PAPERS | ROOM: B1-B4

MOBILE INTERACTION TECHNIQUES I

SESSION CHAIR: Stephen Brewster, *University of Glasgow,* UK

PAPER | Direct-Touch vs. Mouse Input for Tabletop Displays

Clifton Forlines, *Mitsubishi Electric Research Laboratories & University of Toronto,* USA & Canada
Chia Shen, *Mitsubishi Electric Research Laboratories,* USA
Daniel Wigdor, *Mitsubishi Electric Research Laboratories & University of Toronto,* USA & Canada
Ravin Balakrishnan, *University of Toronto,* Canada

Presents empirical data investigating differences between direct-touch and mouse input for unimanual and bimanual tasks on tabletop displays. Results can help guide the design of tabletop interfaces.

PAPER | Shift: A Technique for Operating Pen-Based Interfaces Using Touch

Daniel Vogel, *University of Toronto,* Canada
Patrick Baudisch, *Microsoft,* USA

Describes a technique for operating pen-based devices using touch by preventing targets from getting occluded by the user's finger. User study finds performance benefits over existing offset cursor technique.

PAPER | An Alternative to Push, Press, and Tap-Tap-Tap: Gesturing on an Isometric Joystick for Mobile Phone Text Entry

Jacob O. Wobbrock, *University of Washington,* USA
Duen Horng Chau, Brad A. Myers, *Carnegie Mellon University,* USA

Presents a novel input strategy involving the use of isometric joysticks on mobile phones. Describes a gestural text entry method competitive with Multitap and T9 but preferred by users.

■ ALT.CHI | ROOM: C2

RE-THINKING HUMANS, COMPUTERS, INTERACTION, AND DESIGN

SESSION CHAIR: Louise Barkhuus, *Glasgow University,* UK

The Three Paradigms of HCI (30 min)

Steve Harrison, Deborah Tatar, *Virginia Polytechnic Institute and State University,* USA
Phoebe Sengers, *Cornell University,* USA

Informal histories of HCI commonly document two major intellectual waves that have formed the field: the first orienting from engineering/human factors with its focus on optimizing man-machine fit and the second stemming from cognitive science, with an increased emphasis on theory and on what is happening not only in the computer but, simultaneously, in the human mind. In this paper, we document underlying forces that constitute a third wave in HCI and suggest systemic consequences for the CHI community.

Questioning the Technological Panacea: Three Reflective Questions for Designers (20 min)

Eric Baumer, Bill Tomlinson, *University of California, Irvine,* USA

This paper argues that asking whether or not a technological solution is appropriate should be an explicit and exposed part of the design process. It raises three questions that should be addressed during the design process: Are there other, possibly non-technological, solutions that could address the problem equally well, if not better? Are designers creating solutions to problems that users themselves do not need to have? Are these technological solutions treating a problem rather than its cause?

Uptake of Situationism Considered Harmful (20 min)

Lucian Leahu, Claudia Pederson, Jennifer Thom-Santelli, Pavel Dmitriev, Phoebe Sengers, *Cornell University,* USA

We examine Situationist art practice as an inspiration for HCI design. We argue that methods from Situationist art practice have often been picked up without regard for their underlying sensibility. We describe an experiment in incorporating Situationist sensibility in design and use it to elucidate the challenges that face HCI in truly integrating the arts.

Imagination as Holographic Processor for Text Animation (20 min)

Adim Astakhov, Tamara Astakhova, Brian Sanders, *University of California San Diego,* USA

Imagination is the critical point in developing of realistic artificial intelligence (AI) systems. One way to approach imagination would be simulation of its properties and operations. We developed two models "Brain Network Hierarchy of Languages" and "Semantical Holographic Calculus" and simulation system ScriptWriter that emulate the process of imagination through an automatic animation of English texts.

■ SPECIAL INTEREST GROUP | ROOM: C4

TRUST 2.1 ADVANCING THE TRUST DEBATE

MODERATORS:
Jens Riegelsberger, *Google,* UK
Asimina Vasalou, *Imperial College London,* UK

Our aim is to provide a basis for the discussion of trust research at a this SIG, but also to give researchers and practitioners with an interest in the field an entry point to existing work. More importantly we hope that the SIG and this abstract will help in driving and structuring future trust research.

INTERACTIVE SESSION | CIVIC AUDITORIUM

ALONG THE PATH OF PERVASIVE COMPUTING: SELECTED WORKS IN GUI AND TUI DESIGN

MODERATOR:
Bill Lucas, *Maya Design,* USA

PANELISTS:
Hiroshi Ishii, *MIT,* USA
Jake Kolojejchick, *General Dynamics,* USA
Peter Lucas, *MAYA Design,* USA
David Rose, *Ambient Devices,* USA

This invited session discusses two bodies of research. Both continuously oriented toward pervasive computing since the early '90s. In 1995, MAYA Design introduced the notion of an "information-centric" GUI – where displays are arrangements of elements that can be broken apart by users and directly manipulated, giving people the sense of "getting their hands on the data". Today, General Dynamics is working with the US Army to deploy collaborative, "infocentric" systems all over the world. Similarly, in 1995, the Tangible Media Group at the MIT Media Lab started to design seamless interfaces between humans, digital information, and the physical environment. Their notion of "Tangible Bits," giving physical form to digital information, sparked the formation of a company, Ambient Devices, that has sold over 200,000 simple, glanceable information objects and a nationwide bit-tricking network to power them.

PAPERS | ROOM: A1

TASKS

SESSION CHAIR: Scott R. Klemmer, *Stanford University,* USA

PAPER | Disruption and Recovery of Computing Tasks: Field Study, Analysis, and Directions

Shamsi T. Iqbal, *University of Illinois, Urbana-Champaign,* USA
Eric Horvitz, *Microsoft,* USA

Presents results from a field study investigating user behavioral patterns during disruption and recovery from notifications in computing environments. Based on the findings, design implications for recovery tools are discussed.

PAPER | CAAD: An Automatic Task Support System

Tye Rattenbury, John Canny, *University of California, Berkeley,* USA

We present a system that automatically discovers and displays task representations. Through a feasibility study, we demonstrate that automation is a viable direction for future task support and management applications.

PAPER | Understanding and Developing Models for Detecting and Differentiating Breakpoints During Interactive Tasks

Shamsi T. Iqbal, Brian P. Bailey, *University of Illinois, Urbana-Champaign,* USA

Demonstrates the feasibility of building models that are able to detect and differentiate breakpoints during free-form tasks. These models can enable interruption management systems to realize defer-to-breakpoint policies in practice.

PAPERS | ROOM: A2

EMERGENCY ACTION

SESSION CHAIR: John M. Carroll, *The Pennsylvania State University,* USA

PAPER | Implicit Coordination in Firefighting Practice: Design Implications for Teaching Fire Emergency Responders

Zachary O. Toups, Andruid Kerne, *Texas A&M University,* USA

Investigates how information flows through teams of fire emergency responders and develops design recommendations for training systems to teach coordination and communication capabilities.

PAPER | Back Stage on the Front Lines: Perspectives and Performance in the Combat Information Center

Paul M. Aoki, *Intel,* USA

Presents a view of naval command and control as CSCW, focusing on social interaction and self-presentation issues. Provides designers of future systems with considerations beyond task analysis and human factors

PAPER | Citizen Communications in Crisis: Anticipating a Future of ICT-Supported Public Participation

Leysia Palen, Sophia B. Liu, *University of Colorado, Boulder,* USA

Information science can help understand, design for, and support an emerging, large-scale arena for computer-mediated interaction: public participation in crisis events.

PAPERS | ROOM: A3

DESIGN METHODS

SESSION CHAIR: Steve Harrison, *Virginia Polytechnic Institute and State University*, USA

PAPER | Transfer Scenarios: Grounding Innovation with Marginal Practices

Sara Ljungblad, *Viktoria Institute,* Sweden
Lars Erik Holmquist, *Swedish Institute of Computer Science,* Sweden

Transfer scenarios is a method that supports the design of innovative technology. It involves groups that are not the intended users in the design process to encourage a changed mindset.

PAPER | Work-Centered Design of a Mixed-Initiative Scheduler

Keith A. Butler, *Microsoft,* USA
Chris Esposito, *The Boeing Co.,* USA
Jiajie Zhang, *University of Texas,* USA
Ron Hebron, Ali Bahrami, *The Boeing Co.,* USA
David Kieras, *University of Michigan,* USA

A new design method for HCI where the information work requires technical problem-solving; A break-through application that integrates aircraft scheduling for missions and maintenance.

EXPERIENCE REPORT | Making Personas Memorable

James Nieters, Subbarao Ivaturi, Iftikhar Ahmed, *Cisco,* USA

Although Cisco's tag line for fiscal year 2007 is "Lead the Experience", not all Cisco product teams have historically focused on designing products that facilitate user success and delight. The Cisco User Experience Design (UXD) Group provides tools that stimulate a UXD culture, one of which is personas to catalyze a common understanding of users and a centralized persona database. The challenge has been that engineers at Cisco could opt out of using personas. In November 2005, the UXD team won an award for developing best practices in product development for creating these personas by vice presidents from across Cisco.

PAPERS | ROOM: A4 & A5

MOBILE INTERACTION TECHNIQUES II

SESSION CHAIR: Shumin Zhai, *IBM*, USA

PAPER | Pointing Lenses

Gonzalo Ramos, *University of Toronto,* Canada
Andy Cockburn, *University of Canterbury, New Zealand*
Ravin Balakrishnan, *University of Toronto,* Canada
Michel Beaudouin-Lafon, *Université Paris-Sud & CNRS, INRIA,* France

Presented three Pointing Lenses, which improve stylus-based input. Our studies show that lenses are beneficial for targets smaller than five pixels, and that this benefit may extend to larger targets.

PAPER | Comparing Physical, Automatic, and Manual Map Rotation for Pedestrian Navigation

Will P. J. Seager, *University College London,* UK
Danae Stanton-Fraser, *University of Bath,* UK

This paper presents findings concerning the effectiveness of different means of maintaining track-up alignment on map-based mobile navigation assistants. The findings suggests design improvements to facilitate more effective track-up alignment.

PAPER | Intimate Interfaces in Action: Assessing the Usability and Subtlety of EMG-Based Motionless Gestures

Enrico Costanza, *Ecole Polytechnique Fédérale de Lausanne,* Switzerland
Samuel A. Inverso, *The Australian National University,* Australia
Rebecca Allen, *University of California, Los Angeles,* USA
Pattie Maes, *MIT,* USA

This paper expands the research on "subtle, intimate interfaces" for mobile HCI. Use of motionless gestures in a realistic multimodal interface and their noticeability are examined through a user study.

PAPERS | ROOM: A8

HOME SPIRITUALITY

SESSION CHAIR: Michael J. Muller, *IBM,* USA

PAPER | Sabbath Day Home Automation: "It's Like Mixing Technology and Religion"

Allison Woodruff, *Intel,* USA
Sally Augustin, *PlaceCoach, Inc.,* USA
Brooke Foucault, *Intel,* USA

Presents a qualitative study of the use of home automation by 20 Orthodox Jewish families. Offers insights and design implications for user experience with smart home technology and religious technology.

PAPER | Enhancing Ubiquitous Computing with User Interpretation: Field Testing the Home Health Horoscope

William Gaver, *Goldsmiths College,* UK
Phoebe Sengers, *Cornell University,* USA
Tobie Kerridge, *Goldsmiths College,* UK
Joseph 'Jofish' Kaye, *Cornell University,* UK
John Bowers, *Goldsmiths College,* UK

The paper illustrates how designing to encourage user interpretation may supplement sensor-based inferencing in a home environment. Offers a new approach to those interested in developing domestic ubiquitous computing applications.

PAPER | Home Networking and HCI: What Hath God Wrought?

Erika Shehan, W. Keith Edwards, *Georgia Institute of Technology,* USA

We analyze why home networking is difficult, argue that the HCI community needs to be involved in resolving these problems, and discuss potential research efforts in home network usability.

■ PAPERS | ROOM: B1-B4

GAMES

SESSION CHAIR: Carl Gutwin, *University of Saskatchewan,* Canada

PAPER | Project Massive: Self-Regulation and Problematic Use of Online Gaming

A. Fleming Seay, *University of Texas,* USA
Robert E. Kraut, *Carnegie Mellon University,* USA

This work contributes longitudinal analysis and examination of the concept of self-regulation to the ongoing discussion of problematic use of online video games.

PAPER | The Life and Death of Online Gaming Communities: A Look at Guilds in World of Warcraft

Nicolas Ducheneaut, *PARC,* USA
Nicholas Yee, *Stanford University,* USA
Eric Nickell, Robert J. Moore, *PARC,* USA

Using longitudinal data from more than 300,000 characters, identifies some of the factors linked to group survival and performance in massively multiplayer online games.

NOTE | Testing the Technology: Playing Games with Video Conferencing

Archer L. Batcheller, Brian Hilligoss, Kevin Nam, Emilee Rader, Marta Rey-Babarro, Xiaomu Zhou, *University of Michigan,* USA

Experimental results suggest playing games over video is as enjoyable as playing while collocated, despite video users developing artificial alliances. Implies that video can be successfully used in casual situations.

NOTE | Using Heart Rate to Control an Interactive Game

Ville Nenonen, Aleksi Lindblad, Ville Häkkinen, Toni Laitinen, Mikko Jouhtio, Perttu Hämäläinen, *Helsinki University of Technology,* Finland

Describes a exercise game where heart rate is used for user interaction with any training form. Shows that heart rate can be used for user interaction with positive results.

■ SPECIAL INTEREST GROUP | ROOM: C2

CAPTURING LONGITUDINAL USABILITY

MODERATORS:
Misha Vaughn, *Oracle,* USA
Catherine Courage, *Salesforce.com,* USA

In this SIG the attendees will discuss methods for capturing usability data over time. Specifically, we will share industry best practices, brainstorm alternative solutions, as well as compare and contrast usability engineering methods for capturing usability problems that persist over time. We will also explore why longitudinal research is not a more common UCD practice.

■ SPECIAL INTEREST GROUP | ROOM: C4

END USER SOFTWARE ENGINEERING

MODERATORS:
Brad A. Myers, *Carnegie Mellon University,* USA
Margaret Burnett, *Oregon State University,* USA
Susan Wiedenbeck, *Drexel University,* USA
Andrew J. Ko, *Carnegie Mellon University,* USA

This SIG meeting has three purposes: to bring the results of a recent (February 2007) week-long "Dagstuhl" meeting on end-user software engineering to interested researchers at CHI, to incorporate attendees' ideas and feedback into an emerging survey of the state of this interesting new subarea; and generally to bring together the community of researchers who are addressing this topic, with the companies that are creating end-user programming tools.

COURSE 21 | ROOM: A6

Web Usability for Assistive Technology

9:00–13:00

INSTRUCTORS:
Caroline Boyden, *University of California, Berkeley,* USA
Lucy Greco, *University of California, Berkeley,* USA

Benefits: Is your website accessible to users of assistive technology? How do you know? This course will provide you with practical knowledge and techniques to understand accessibility, evaluate your sites and applications, and improve user experience.

Intended Audience: Web designers and developers. Usability and HCI professionals. This is an introductory course; no specialized skills or knowledge are required. However, a familiarity with commonly-accepted accessibility standards is helpful.

COURSE 22 | ROOM: A6

Rapid Prototyping and Evaluation with Web Mashups

14:30–18:00

INSTRUCTORS:
M. Cameron Jones, *University of Illinois, Urbana-Champaign,* USA
Michael B. Twidale, *University of Illinois, Urbana-Champaign,* USA
Richard J. Urban, *University of Illinois, Urbana-Champaign,* USA

Benefits: This course is intended to appeal to a number of different kinds of CHI attendees: people who are intrigued by the mash-up concept and want to learn more, people interested in rapid lightweight development methods, people looking for ways to explore a possibility space, people interested in Web2.0 issues, people interested in ways to encourage development creativity and people who want a quick way of trying out a research concept.

Intended Audience: Participants should have previous programming experience and be comfortable with reading and writing code. Participants should also be familiar with HTML and CSS and be able to quickly and easily generate simple web pages. It is recommended, although not strictly required, that participants have some background in web programming. A strong background in general programming languages and practices can compensate for a lack of web-specific programming experience.

COURSE 19 | ROOM: A7

Information Foraging Theory

9:00–13:00

INSTRUCTOR:
Peter Pirolli, *PARC,* USA

Benefits: This course aims to explain and predict how people will best shape themselves to their information environments, and how information environments can best be shaped to people. The approach involves a kind of reverse engineering in which the analyst asks (a) what is the nature of the task and information environments, (b) why is a given system a good solution to the problem, and (c) how is that solution realized (approximated) by mechanism. Typically, the key steps in developing a model of information foraging involve: (a) a rational analysis of the task and information environment (often drawing on optimal foraging theory from biology) and (b) a computational production system model of the cognitive structure of task. This course provides an introduction and overview of Information Foraging Theory, detailed examples, an overview of applications of the theory to the formulation of usability guidelines and cognitive engineering models, and discussion of new opportunities for research. Participants should have sufficient background by the end of the course to perform exercise analyses in information foraging and to have gained resources for research, design and development, and teaching.

Intended Audience: The course is aimed primarily at researchers, although practitioners will definitely be welcomed to participate and learn from the course. It is assumed that participants will not faint if confronted with a few equations or raw code samples during the course.

COURSE 17 | ROOM: A7

An Introduction to Designing for the Scent of Information

14:30–16:00

INSTRUCTOR:
Jared M. Spool, *User Interface Engineering,* USA

Benefits: If your users can't find the content they are seeking, your site will fail. One of the biggest secrets of successful web sites is that they design for Scent.

In recent research, we've uncovered that users know when they are on the right track to finding their content – they follow the Scent of Information. By understanding how users pick up and keep the scent, you can design more usable web sites. We'll demonstrate how the successful sites provide a strong scent, and what happens when they don't. Using the results of hundreds of usability tests, we'll show you how users follow a scent trail and the different ways your design could be blocking scent. We'll also discuss how the quality of links, page length, page density, and graphics affect whether users find the content they're looking for.

Intended Audience: Web Designers & Usability Practitioners

COURSE 18 | ROOM: A7

Designing for the Scent of Information: Advanced Concepts

16:30–18:00

INSTRUCTOR:
Jared M. Spool, *User Interface Engineering,* USA

Benefits: You work hard providing top-notch content on your site. Will your users find it? If they don't find it, all that effort is for nothing. Our research has uncovered three ways to predict when users will fail finding the content they desire. We'll show you what these three predictors are and how to counter the effects in your design.

We will share the secrets behind successful designs including Lands' End, the Bureau of Labor and Statistics, CNN, and the BBC. You'll learn why trigger words are critical to users successfully finding their content, why the best sites prevent users from using Search, how exposing a site's hierarchy can increase the success of the user, how designing longer pages helps users find what they seek, and how to best use lateral links and breadcrumbs.

Intended Audience: Web designers & usability practitioners who have had experience designing web sites. Attendance at the introductory course will provide the necessary background needed to understand this course but is not required.

COURSE 16 | ROOM: C3

Design of Spatial Applications

9:00–13:00

INSTRUCTOR:
Matthew Hockenberry, *MIT,* USA

Benefits: The course offers a practical, focused but detailed overview of traditional approaches to spatial representation. The course provides a review of the state of the art regarding technologies and designs for presenting spatial information and the user goals which necessitate this support. It provides a detailed set of resources for further exploration into each of these areas. The course additionally offers applied practical experience in formulating successful design goals and approaches that produce efficient, effective, and novel spatial applications that satisfy practical user needs. Inspiration, something we always need more of, also comes included.

Intended Audience: For all attendees with interest in the roles of spatial information in application development.

COURSE 20 | ROOM: C3

Building Affinity Diagrams to Reveal User Needs and Engage Developers

14:30–18:00

INSTRUCTOR:
Shelley Wood, *InContext Enterprises,* USA

Benefits: Affinity diagramming is fairly well known in the CHI community and used as a technique for organizing large amounts of information, especially qualitative data. However, the full potential of affinity diagramming — both as a technique for revealing design implications and as a powerful communication tool — is not being fully exploited.

This course teaches how to build more powerful affinities, offers a process for managing organizational issues, and provides a mechanism for using the affinity as a communication tool across the organization.

Intended Audience: No specific background is required. It is appropriate for all roles.

COURSE 14 | ALMADEN BALLROOM I

Card Sorting & Cluster Analysis for Information Architecture Design

9:00–18:00

INSTRUCTORS:
Jianming Dong, *PayPal.com,* USA
Janice James, *Simply Usable Through Design,* USA
Carol Righi, *Perficient, Inc.,* USA
Larry Wood, *Parallax, LLC,* USA

Benefits: This course will provide user researchers with practical guidance and hands-on experience in the use of card sorting and cluster analysis methods and tools. After attending the course, attendees are expected to be able to: 1. Practice at a basic level the skills of planning and conducting card sorting and cluster analysis. 2. Determine the most appropriate methods and tools to fit the needs of specific projects. 3. Interpret card sort data to provide clear recommendations on architectural design.

Intended Audience: This course is designed for both those new to the field of usability/UCD/information architecture, as well as for advanced practitioners who are very familiar with the concept, but wish to learn a new tool and method. Attendees should have some background and familiarity with the concept of information architecture.

COURSE 15 | ALMADEN BALLROOM II

Understanding Users in Context: An In-Depth Introduction to Fieldwork

9:00–18:00

INSTRUCTORS:
Susan M. Dray, *Dray & Associates, Inc.,* USA
David A. Siegel, *Dray & Associates, Inc.,* USA

Benefits: You will learn how to plan for and carry out studies of users in the field. Rather than teaching a single methodology to do field research, we provide you with the tools to think critically and make informed decisions about the many planning and methodological choices you will have to make. For each technique, we identify its key challenges, while helping you learn how to get its benefits. You will have the chance to practice skills for several fieldwork techniques.

Intended Audience: This hands-on session is aimed at practitioners planning, doing, and leading observational field research projects, including developers, designers, and managers who are responsible for user experience or user requirements identification. This is an introductory to intermediate level tutorial. It will be useful for beginners in fieldwork, as well as those with some experience who want to broaden their knowledge of a range of approaches.

Notes

NOTES REVIEWERS – CONTINUED

Melanie Kellar, *Dalhousie University,* Canada
Andruid Kerne, *Texas A&M,* USA
Pekka Ketola, *Usability Engineer,* Finland
Sanshzar Kettebekov, *Keane Inc,* USA
Azam Khan, *Autodesk,* Canada
Michael Khoo, *National Science Digital Library,* USA
Julie Kientz, *Georgia Institute of Technology,* USA
Hans Kim, *Santa Clara University,* USA
Steven Kimbrough, *University of Pennsylvania,* USA
Esin Kiris, *AT&T,* USA
Rick Kjeldsen, *IBM,* USA
Palle Klante, *Pixelpark AG,* Germany
Gary Klatsky, *Oswego, SUNY,* USA
John Knight, *Intiuo Research and Design,* UK
Andrew Ko, *Carnegie Mellon University,* USA
Minoru Kobayashi, *Nippon Telegraph and Telephone Corporation,* Japan
Michael Koch, *Technische Universitaet Muenchen,* Germany
Eunyee Koh, *Texas A&M University,* USA
Joseph Konstan, *University of Minnesota,* USA
Jesse Kriss, *IBM,* USA
Per Ola Kristensson, *Linkoping University,* Sweden
Ernst Kruijff, *Graz University of Technology,* Austria
John Krumm, *Microsoft,* USA
Michael Kuniavsky, *ThingM,* USA
Gordon Kurtenbach, *Autodesk,* Canada
Hideaki Kuzuoka, *University of Tsukuba,* Japan
Jennifer Lai, *IBM,* USA
Denis Lalanne, *University of Fribourg,* Switzerland
Tessa Lau, *IBM,* USA
Effie Law, *Swiss Federal Institute of Technology (ETH Zurich),* UK
Eric Lee, *RWTH Aachen University,* Germany
Brian Lee, *Stanford University,* USA
Surapong Lertsithichai, *Silpakorn University,* Thailand
James Lester, *North Carolina State University,* USA
Du Li, *Texas A&M University,* USA
Yang Li, *University of Washington,* USA
James Lin, *IBM,* USA
Lorna Lines, *Brunel University,* UK
Shih-yen Liu, *National Taiwan University,* Taiwan
Mark Livingston, *Naval Research Laboratory,* USA
Sara Ljungblad, *Viktoria Institute,* Sweden
Peter Ljungstrand, *Chalmers University of Technology,* Sweden
Steve Love, *Brunel University,* UK
Christopher Lueg, *University of Tasmania,* Australia
Jay Lundell, *Intel,* USA
Johan Lundin, *Viktoria Institute,* Sweden
Jan-Maarten Luursema, *University of Twente,* the Netherlands
Catriona Macaulay, *University of Dundee,* UK
José Macías iglesias, *Universidad Autónoma de Madrid,* Spain
Christine MacKenzie, *Simon Fraser University,* Canada
Sascha Mahlke, *Berlin University of Technology,* Germany
Scott Mainwaring, *Intel,* USA
Heidy Maldonado, *Stanford University,* USA
Regan Mandryk, *Dalhousie University,* Canada
Jennifer Mankoff, *Carnegie Mellon University,* USA
Ana Maria Marhan, *Institutul de Filosofie si Psihologie,* Romania
Panos Markopoulos, *Technical University Eindhoven,* the Netherlands
Catherine C. Marshall, *Microsoft,* USA
Stefan Marti, *Samsung,* USA
Masood Masoodian, *The University of Waikato,* New Zealand
Michael Massimi, *University of Toronto,* Canada
Takashi Matsumoto, *Keio University,* Japan
Tara Matthews, *University of California, Berkeley,* USA
Joe McCarthy, *Nokia,* USA
David McDonald, *University of Washington,* USA
Jane McGonigal, *University of California, Berkeley,* USA
David McGookin, *University of Glasgow,* UK
Sean McNee, *Attenex Corporation,* USA
Yevgeniy Medynskiy, *Georgia Institute of Technology,* USA
David Millen, *IBM,* USA
Jessica Miller, *University of Washington,* USA
Craig Miller, *DePaul University,* USA
Rob Miller, *MIT,* USA
Audris Mockus, *Avaya,* USA
David Moffat, *Glasgow Caledonian University,* UK
Karyn Moffatt, *University of British Columbia,* Canada
Daniel Morris, *Microsoft,* USA
Meredith Morris, *Microsoft,* USA
Denis Mottet, *Université de Montpellier,* France
Jackie Moyes, *News Digital Media,* Australia
Christian Mueller-Tomfelde, *CSIRO,* Australia
Michael Muller, *IBM,* USA
Guadalupe Muñoz, *University Rey Juan Carlos,* Spain
Dianne Murray, UK
Roderick Murray-Smith, *Glasgow University & Hamilton Institute,* UK
Frank Nack, *Université de Lyon,* France
Kumiyo Nakakoji, *University of Tokyo,* Japan
Hideyuki Nakanishi, *Kyoto University,* Japan
Bonnie Nardi, *Agilent Technologies,* USA
Les Nelson, *PARC,* USA
Carman Neustaedter, *University of Calgary,* Canada
David Nguyen, *University of California, Irvine,* USA
Jeffrey Nichols, *Carnegie Mellon University,* USA
Lira Nikolovska, *MIT,* USA
Alexander Nischelwitzer, *University of Applied Sciences, Joanneum,* Austria
Nicolas Nova, *Ecole Polytechnique Fédérale de Lausannne,* Switzerland
Nuno Nunes, *University of Madeira,* Portugal
Kenton O'Hara, *Hewlett-Packard,* UK
Masao Ohira, *Nara Institute of Science and Technology,* Japan
Jim Oliver, *eBay, Inc.,* USA
Joshua O'Madadhain, *Microsoft & University of California, Irvine,* USA
Takehiko Oono, *NTT Department II,* Japan
Benoit Otjacques, *Public Research Centre - Gabriel Lippmann,* Luxembourg
Volker Paelke, *University of Hannover,* Germany
Andreas Paepcke, *Stanford University,* USA
Philippe Palanque, *Université Paul Sabatier,* France
Leysia Palen, *University of Colorado, Boulder,* USA
Bing Pan, *Cornell University,* USA
Tapan Parikh, *University of Washington,* USA
Shwetak Patel, *Georgia Institute of Technology,* USA
Sameer Patil, *University of California, Irvine,* USA
Andrew Patrick, *National Research Council of Canada,* Canada
Eric Paulos, *Intel,* USA
Jon Pearce, *University of Melbourne,* Australia
Sonja Pedell, *The University of Melbourne,* Australia
Elin Pedersen, *Microsoft,* USA
Trevor Pering, *Intel,* USA
Mark Perry, *Brunel University,* UK
Christian Peter, *Fraunhofer Institute for Computer Graphics Rostock,* Germany
Susan Petrick, *Intuit,* USA
Mårten Pettersson, *Malmö University,* Sweden
Doantam Phan, *Stanford University,* USA
Bruce Phillips, *Microsoft,* USA
David Pinelle, *University of Saskatchewan,* Canada
Claudio Pinhanez, *IBM,* USA
Niels Pinkwart, *TU Clausthal,* Germany
Barry Po, *Cogneto Development Inc.,* Canada
Sascha Pohflepp, *UDK, Berlin,* Germany
Christopher Power, *University of York,* Canada
Raquel Prates, *Federal University of Minas Gerais,* Brazil
Scott Preece, *Motorola,* USA
Wolfgang Prinz, *Fraunhofer FIT,* Germany
Thomas Psik, *Vienna Universtity of Technology,* Austria
Pearl Pu, *Human Computer Interaction Group,* Switzerland
Aaron Quigley, *University College Dublin,* Ireland
David Racz, *Nokia,* USA
Roope Raisamo, *University of Tampere,* Finland
Rebecca Randell, *City University,* UK
Pei-Luen Patrick Rau, *Tsinghua University,* China
Janet Read, *University of Central Lancashire,* UK
Stuart Reeves, *University of Nottingham,* UK
Tim Regan, *Microsoft,* UK
Karen Renaud, *University of Glasgow,* UK
Heather Richter, *University of North Carolina, Charlotte,* USA
Jens Riegelsberger, *University College London,* UK
Frank Ritter, *The Pennsylvania State University,* USA
Daniel Robbins, *Microsoft,* USA
Erica Robles, *Stanford University,* USA
Kerry Rodden, *Google,* USA
Jennifer Rode, *University of California, Irvine,* USA
Steven Rohall, *IBM,* USA
John Rooksby, *Lancaster University,* UK
Mattias Rost, *Viktoria Institute,* Sweden
James Rowan, *University of West Georgia,* USA
Enrico Rukzio, *University of Munich,* Germany
Daniel Russell, *Google,* USA
Cristian Rusu, *Pontificia Universidad Catolica de Valparaiso,* Chile
Kathy Ryall, *Mitsubishi Electric Research Laboratories,* USA
Dan Saffer, *Carnegie Mellon University,* USA
Jaime Sánchez, *University of Chile,* Chile
Aleksandra Sarcevic, *Rutgers University,* USA
Diane Schiano, *Stanford University,* USA
m c schraefel, *University of Southampton,* UK
Martin Schrepp, *SAP,* Germany
Richard Schuler, *New Jersey Institute of Technology,* USA
Jordan Schwartz, *Microsoft,* USA
Stacey Scott, *MIT,* USA
Abigail Sellen, *Microsoft,* UK
Phoebe Sengers, *Cornell University,* USA
N. Sadat Shami, *Cornell University,* USA
Chris Shaw, *Simon Fraser University Surrey,* Canada
Wingly Shih, *National Chiao Tung University,* Taiwan
Bruno Silva, *PUC-Rio,* Brasil
Carla Simone, *Universita' di Milano-Bicocca,* Italy
Rashmi Sinha, USA
Roger Slack, *University of Edinburgh,* UK
Diana Smetters, *PARC,* USA
Marc Smith, *Microsoft,* USA
Timothy Sohn, *University of California, San Diego,* USA
Tomas Sokoler, *Malmoe University,* Sweden
Dezhen Song, *Department of Computer Science,* USA
Eyal Sonsino, *IBM,* Israel
Suzanne Soroczak, *University of Washington,* USA
Vladimir Soroka, *IBM,* Israel
Mirjana Spasojevic, *Yahoo!,* USA
Robert St. Amant, *North Carolina State University,* USA
John Stasko, *Georgia Institute of Technology,* USA
Molly Stevens, *Georgia Institute of Technology,* USA
James Stewart, *Queen's Univeristy,* Canada
Maureen Stone, *StoneSoup Consulting,* USA
Hank Strub, *Siemens,* USA
Sriram Subramanian, *University of Saskatchewan,* Canada
Bongwon Suh, *PARC,* USA
Martin Svensson, *Swedish Institue of Computer Science,* Sweden
Laurel Swan, *Brunel University,* UK
Desney Tan, *Microsoft,* USA
Diane Tang, *Google,* USA
Anthony Tang, *University of British Columbia,* Canada
Matthew Tarpy, *PCTEL, Inc.,* USA
Hiroyuki Tarumi, *Kagawa University,* Japan
Laura Tateosian, *North Carolina State University,* USA
Alex Taylor, *Microsoft,* UK
Kimberly Tee, *University of Calgary,* Canada
Jaime Teevan, *MIT,* USA
Monica Tentori, *CICESE,* Mexico
Andrea Thomaz, *MIT,* USA
Jennifer Thom-Santelli, *Cornell University,* USA
James Thornton, *PARC,* USA

CONTINUES ON BACK

NOTES REVIEWERS – CONTINUED

Ramayah Thurasamy, *Universiti Sains Malaysia,* Malaysia
Bill Tomlinson, *University of California, Irvine,* USA
Zachary Toups, *Texas A&M University,* USA
Stefan Trausan-Matu, *Polytechnic University Bucharest,* Romania
Shari Trewin, *IBM,* USA
Khai Truong, *University of Toronto,* Canada
Manfred Tscheligi, *University of Salzburg - ICT&S,* Austria
Edward Tse, *University of Calgary,* Canada
Lorna Uden, *Staffordshire University,* UK
Frank van Ham, *IBM,* USA
Charles VanderMast, *Delft University of Technology,* the Netherlands
Ravi Vatrapu, *University of Hawaii, Manoa,* USA
Catherine Vaucelle, *MIT,* USA
Elizabeth Veinott, *Klein Associates,* USA
Frank Vetere, *University of Melbourne,* Australia
Paul Vickers, *Northumbria University,* UK
Fernanda Viégas, *IBM,* USA
Nadine VIGOUROUX, *Institut de Recherche en Informatique, Centre National de la Recherche Scientifique,* France
Nicolas Villar, *Lancaster University,* UK
Stephen Viller, *University of Queensland,* Australia
Robert Virzi, *Verizon,* USA
Juergen Vogel, *European Media Lab,* Germany
Amy Voida, *Georgia Institute of Technology,* USA
Luis von Ahn, *Carnegie Mellon University,* USA
Ron Wakkary, *Simon Fraser University,* Canada
Steven Wall, *University of Glasgow,* UK
Michael Wallick, *University of Wisconsin, Madison,* USA
QianYing Wang, *Stanford University,* USA
Shuo Wang, *Microsoft,* China
Nigel Ward, *University of Texas, El Paso,* USA
Andrew Warr, *University of Oxford,* UK
Martin Wattenberg, *IBM,* USA
Leon Watts, *University of Bath,* UK
Gerhard Weber, *Multimedia Campus Kiel,* Germany
Alexandra Weilenmann, *IT-University of Göteborg,* Sweden
Catherine Weir, *The University of Edinburgh,* UK
Martin Wetterstrand, *Århus University,* Denmark
Ryen White, *Microsoft,* USA
Mikael Wiberg, *Umea University,* Sweden
Charlotte Wiberg, *Umea University,* Sweden
Amanda Williams, *University of California, Irvine,* USA
Jacob Wobbrock, *University of Washington,* USA
Christa Womser-Hacker, *University of Hildesheim,* Germany
Pak-Chung Wong, *Pacific Northwest National Laboratory,* USA
Alan Woolrych, *University of Sunderland,* UK
Susan Wyche, *Georgia Institute of Technology,* USA
Sha Xin Wei, *Concordia University,* Canada
Jeonghwa Yang, *Georgia Institute of Technology,* USA
Nicole Yankelovich, *Sun Microsystems,* USA
Hiroaki Yano, *University of Tsukuba,* Japan
Yunwen Ye, *University of Colorado,* USA
Ka-Ping Yee, *University of California, Berkeley,* USA
Ron Yeh, *Stanford University,* USA
Alvin Yeo, *Universiti Malaysia Sarawak,* Malaysia
Richard Young, *University College London,* UK
Alexandra Zafiroglu, *Intel,* USA
Panayiotis Zaphiris, *City University,* UK
Nora Zelhofer, *Ludwig-Maximilians-Universität Munich,* Germany
Shengdong Zhao, *University of Toronto,* Canada
Qixing Zheng, *University of British Columbia,* Canada
Martina Ziefle, *RWTH Aachen University,* Germany
Juergen Ziegler, *University of Duisburg-Essen,* Germany
Jamie Zigelbaum, *Tufts University,* USA
John Zimmerman, *Carnegie Mellon University,* USA
Aaron Zinman, *MIT,* USA

COURSES REVIEWERS

Michael Atwood, *Drexel University,* USA
Scott Berkun, *Scott Berkun Consulting,* USA
Sara Bly, *Sara Bly Consulting*, USA
Jonathan Boardman, *AVEVA*, USA
Ruven Brooks, *Rockwell Software*, USA
Keith Butler, PhD, *Microsoft*, USA
Thomas Erickson, *IBM*, USA
Michael Faoro, *Microsoft*, USA
Lois Frankel, *Carleton University*, USA
Robert J.K. Jacob, *Tufts University*, USA
Robin Jeffries, *Google*, USA
Jon Kolko, *Savannah College of Art and Design*, USA
Joseph A. Konstan, *University of Minnesota*, USA
Jon Meads, *Usability Architects*, *Inc.*, USA
Katie Minardo, *The MITRE Corporation,* USA
John 'Scooter' Morris, *UC San Francisco,* USA
Tek-Jin Nam, *KAIST*, Republic of Korea
Erik Nilsen, *Lewis & Clark College*, USA
Fabio Paternò, *ISTI-CNR*, Italy
Kari-Jouko Räihä, *University of Tampere*, Finland
Scott Robertson, *Drexel University*, USA
Fred Sampson, *IBM*, USA
Christian Sturm, *Universidad Tecnológica de la Mixteca*, Mexico
John C. Thomas, *IBM*, USA
Susan Wiedenbeck, *Drexel University*, USA

CONTEMPORARY TRENDS AND EXPERIENCES REVIEWERS

Piotr Adamczyk, *University of Illinois, Urbana-Champaign,* USA
Ray Adams, *Middlesex University,* UK
Stefan Agamanolis, *Media Lab Europe,* Ireland
Bipin B. Agravat, *Media Lab Asia,* India
Fahim Akhter, *Zayed University,* United Arab Emirates
Chap Ambrose, *A Red & Gray Group,* USA
Pedro Antunes, *University of Lisboa,* Portugal
Timo Arnall, *Oslo School of Architecture & Design,* Norway
Jeremy Ashley, *Oracle,* USA
Brent Auernheimer, *California State University, Fresno,* USA
Jason Babcock, *Positive Science, LLC,* USA
Julie Baca, *Mississippi State University,* USA
Maribeth Back, USA
Lynne Baillie, *Forschungszentrum Telekommunikation Wien,* Austria
Arianna Bassoli, *London School of Economics,* UK
Patrick Baudisch, *Microsoft,* USA
Russell Beale, *University of Birmingham,* UK
Peter Benda, *The University of Melbourne,* Australia
David Benyon, *Napier University,* UK
Scott Berkun, *UIWeb,* USA
Andrea Berman, *Sikorsky Aircraft Corporation,* USA
Nigel Bevan, *Profesional Usability Services,* UK
Suresh Bhavnani, *University of Michigan,* USA
David Bianciardi, *Audio, Video & Controls, Inc.,* USA
Mark Billinghurst, *University of Washington,* New Zealand
Durrell Bishop, UK
Staffan Björk, *Interactive Institute,* Sweden
Alan Blackwell, *University of Cambridge,* UK
Tina Blaine, *Carnegie Mellon University,* USA
Julian Bleecker, *Art Technologist,* USA
Eli Blevis, *Indiana University,* USA
Jonathan Boardman, UK
Clara Boj, *Interaction and Entertainment Research Center,* Singapore
Mark Bolas, *University of Sothern California,* USA
Deirdre Bonini, *Yuseo,* France
Dominic Bouwhuis, *Eindhoven University of Technology,* the Netherlands
Jennifer Bove, *Schematic,* USA
Chris Bregler, USA
Johanna Brewer, *University of California, Irvine,* USA
Christina Brodersen, *University of Aarhus,* Denmark
Barry Brown, *University of Glasgow,* UK
Amy Bruckman, *Georgia Institute of Technology,* USA
Nick Bryan-Kinns, *Queen Mary College, University of London,* UK
Sam Bucolo, *Australasian CRC for Interaction Design,* Australia
Anthony Burke, *University of California, Berkeley,* USA
Daniela Busse, *SAP Labs,* USA
Licia Calvi, *Katholieke Universiteit Leuven,* Belgium
Anxo Cereijo Roibas, *University of Brighton,* UK
Ann-Marie Chadwick-Dias, *Fidelity Investments,* USA
Wilson Chan, *Adobe,* USA
Michele Chang, *Intel,* USA
Angela Chang, *MIT,* USA
Mario Chiesa, *Istituto Superiore Mario Boella,* Italy
Luigina Ciolfi, *University of Limerick,* Ireland
Gilbert Cockton, *University of Sunderland,* UK
Nathalie Colineau, *CSIRO,* Australia
Chris Connors, *Apple,* USA
Sunny Consolvo, *Intel,* USA
Perry Cook, *Princeton University,* USA
John Crowley, *MAYA Design,* USA
Abe Crystal, *University of North Carolina, Chapel Hill,* USA
James Cunningham, *AT&T,* USA
Shiraz Cupala, *Autonomy Systems, LLC,* USA
William Curtis-Davidson, *IBM,* USA
Ben Daniel, *University of Saskatchewan,* Canada
Antonella De Angeli, *University of Manchester Institute of Science and Technology,* UK
Marco de Sá, *University of Lisbon,* Portugal
Pierre Dillenbourg, *Ecole Polytechnique Fédérale de Lausanne,* Switzerland
Ellen Yi-Luen Do, *Georgia Institute of Technology,* USA
Claire Dormann, *Carleton University,* Canada
Silke Dr. Lang, *ETH Zurich,* Switzerland
Henry Been-Lirn Duh, *Nanyang Technological University,* Singapore
Hakan Duman, *University of Essex,* UK
Lynne Dunckley, *Thames Valley University,* UK
Thomas Erickson, *IBM,* USA
Mattias Esbjörnsson, *Mobility, The Interactive Institute,* Sweden
Bernd Ewert, *PayPal, Inc,* USA
Doria Fan, *Interactive Telecommunications Program,* USA
Rod Farmer, *The University of Melbourne,* Australia
J. Shawn Farris, *Atlantic Human Factors,* USA
Daniel Felix, *ergonomie & technologie (e&t) GmbH,* Switzerland
Sue Fenley, *Reading University,* UK
Mikael Fernstrom, *Interaction Design Centre,* Ireland
Jodi Forlizzi, *Carnegie Mellon University,* USA
Andrea Forte, *Georgia Institute of Technology,* USA
Brooke Foucault, *Northwestern University,* USA
Karmen Franinovic, *Zero-Th Association,* Canada
Leo Frishberg, *Tektronix, Inc.,* USA
Peter Fröhlich, *Telecommunications Research Center Vienna,* Austria
William Gaver, *Goldsmiths College,* UK
Lalya Gaye, *Viktoria Institute,* Sweden
Francine Gemperle, *MAYA Design,* USA
David Gilmore, *Intel,* USA
Paul Gnanayutham, *University of Portsmouth,* UK
Gloria Gomez, *Swinburne University of Technology,* Australia
Elizabeth Goodman, *University of California, Berkeley,* USA
Peter Gorny, *University of Oldenburg,* Germany
Saul Greenberg, *University of Calgary,* Canada
Tom Gross, *Bauhaus-University Weimar,* Germany
Dan Grossman, *The Savannah College of Art and Design,* USA
Alexander Grunsteidl, *Digital Wellbeing Labs,* UK
Anne Haake, *Rochester Institute of Technology,* USA
Maria Håkansson, *Viktoria Institute,* Sweden
Michael Haller, *Upper Austria University of Applied Sciences,* Austria
Dong-Han Ham, *Middlesex University,* London
Thomas Hansen, *Aarhus University,* Denmark
Bjoern Hartmann, *Stanford University,* USA
Nick Hausman, USA

CONTINUES NEXT TAB

	9:00–10:00	10:00–10:30	11:30–13:00	14:30–16:00	16:30–18:00
CIVIC AUDITORIUM	**Lifetime Achievement Award** Jim Foley Past, Present, & Future of HCC Education: What We Teach, How We Teach Page 66	**CHI MADNESS** Page 66	**Interactive Session** Web 2.0 and the Enterprise Page 67	**Interactive Session** Industrial Design: Towards an Integrated Product Development Process Page 70	**Interactive Session** Semantic Web HCI: Discussing Research Implications Page 74
Room A1			Papers Video Page 67	Papers Multimodal Interactions Page 70	Papers Novel Navigation Page 74
Room A2			Papers Security Page 67	Papers Distributed Interaction Page 70	Papers People, Looking at People Page 74
Room A3			Papers Emotion & Empathy Page 67	Papers Learning & Education Page 71	Papers Input Techniques Page 75
Room A4 & A5			Papers Collaboration at Work Page 68	Papers Designing for Specific Cultures Page 71	Papers Location Aware Systems Page 75
Room A8			Competition Student Design Competition Page 68	Experience Reports Development Process Page 72	Experience Report Ethnography Page 75
Room B1 - B4			Papers Tags, Tagging, & Notetaking Page 68	Papers Mobile Kits & Stuff Page 72	Papers Social Network Sharing Page 76
Room C2			Interactivity Adaptation & Augmentation Page 69	ALT.CHI Life on Mars: HCI in Space, Cyberspace, and Beyond Page 72	Competition Student Research Competition Page 76
Room C4			SIG Engineering Community Page 69	SIG Research Community Page 73	SIG Design Community Page 76
Room A6	Course 28 Ajax – Design & Usability Page 77			Course 32 Avoiding "We Can't Change THAT!": An Introduction to Usability and Software Architecture Page 77	Course 33 Avoiding "We Can't Do THAT Either!": Usability Supporting Software Architecture Patterns Page 77
Room A7	Course 26 Faceted Metadata for Information Architecture & Search Page 78			Course 27 Empirical Research Methods for Human Computer Interaction Page 78	
Room C3	Course 31 Expert Reviews – For Experts Page 78			Course 29 How to Build Rich Personas from Field Data Page 78	Course 30 Usability Testing: Creating Good Test Tasks Page 79
Almaden Ballroom I	Course 23 Analyzing Qualitative Data From Field Studies Page 79				
Almaden Ballroom II	Course 24 Understanding Mobile Interaction Design Page 79			Course 25 Doing Mobile Interaction Design Page 79	

= 15 minutes = 30 minutes = unscheduled time

COMMONS

Exhibits, Interactivity, & Info Booth
10:30–18:00

SPECIAL EVENTS

Spotlight on Work-in-Progress Posters (#105-156)
10:30–11:30
Concourse

SIGCHI Member Meeting
18:10–19:30
B1-B4

Hospitality Events
18:30–20:30
Marriott Hotel, Fairmont Hotel

20:30–22:30
Tech Museum

■ AWARD TALK | CIVIC AUDITORIUM

LIFETIME ACHIEVEMENT AWARD: JIM FOLEY

SESSION CHAIR: Stuart K. Card, *PARC,* USA

Past, Present, and Future of HCC Education: What We Teach, How We Teach

Jim Foley, *Georgia Institute of Technology,* USA

I have several goals with this talk. One is to briefly trace the evolution of HCI education from the 1970s to the present, including the development of a broader emphasis on Human-Centered Computing. The second goal is to describe my current research in re-designing how to teach HCI – by taking the lecture out of the classroom onto the web, so that class can be more about doing and discussing and less about listening. Our classroom experiments show that students learn more and better enjoy this approach as opposed to a more lecture-oriented style. Also, our lab studies show that students learn more from watching web lectures that include video versus only audio, PowerPoint, table of contents and viewing controls. Third, I describe our evolving HCC Educational Digital Library (EDL) – a resource for teachers and learners – and the ResultMap visualization used in the library.

■ CHI MADNESS | CIVIC AUDITORIUM

Patrick Baudisch, *Microsoft,* USA
Gonzalo Ramos, *University of Toronto,* Canada

CHI's 30 second Madness, which premiered in Montréal, returns to give everyone a lightning speed overview of the day's program.

INTERACTIVE SESSION | CIVIC AUDITORIUM

WEB 2.0 AND THE ENTERPRISE: THE BUSINESS IMPACT OF MODERN TECHNOLOGICAL APPROACHES TO WEB APPLICATION DESIGN

MODERATOR:
Jon Kolko, *Savannah College of Art & Design,* USA

PANELISTS:
Jeff Veen, *Google and Founder of Adaptive Path,* USA
Jonathan Grubb, *Chief Product Officer, Satisfaction – Rubyred Labs,* USA

"Web 2.0" has become the accepted phrase used to refer to newer, more fluid client/server interactions on the web, as combined with a philosophical view of user-empowerment and shared content ownership. This session will bring together several individuals responsible for the application of Web 2.0 strategies in the enterprise. They will discuss the implications these advanced web approaches have on business-centered web application development and will share insight into the cultural, business, and technological issues raised by these new approaches to product development.

PAPERS | ROOM: A1

VIDEO

SESSION CHAIR: Wendy Mackay, *INRIA,* France

PAPER | Consuming Video on Mobile Devices

Kenton O'Hara, *Hewlett-Packard,* UK
April Slayden Mitchell, Alex Vorbau, *Hewlett-Packard,* USA

The paper presents a user study of everyday practices with mobile video devices, identifying underlying social motivations and values. Implications for adoption and design of mobile video technologies are discussed.

PAPER | Effects of Audio and Visual Surrogates for Making Sense of Digital Video

Yaxiao Song, Gary Marchionini, *University of North Carolina, Chapel Hill,* USA

This paper provides strong evidence that combined visual-audio surrogates are effective, are strongly preferred, and do not penalize efficiency; and that audio surrogates are better than visual surrogates alone.

PAPER | Watching Together: Integrating Text Chat with Video

Justin D. Weisz, Sara Kiesler, Hui Zhang, Yuqing Ren, Robert E. Kraut, *Carnegie Mellon University,* USA
Joseph A. Konstan, *University of Minnesota,* USA

Investigates the shared experience of live streaming video online with chat. Demonstrates that chat is distracting but does not impede the user experience and improves social relationships.

PAPERS | ROOM: A2

SECURITY

SESSION CHAIR: Carlos Jensen, *Oregon State University,* USA

PAPER | Pictures at the ATM: Exploring the Usability of Multiple Graphical Passwords

Wendy Moncur, *Aberdeen University,* UK
Gregory Leplatre, *Napier University,* UK

Extends graphical authentication mechanism research by evaluating the memorability of multiple graphical passwords. Supports practitioners seeking to establish usable alternatives to knowledge-based approaches to security.

PAPER | Password Sharing: Implications for Security Design Based on Social Practice

Supriya Singh, Anuja Cabraal, *Royal Melbourne Institute of Technology & Smart Internet Technology CRC,* Australia
Catherine Demosthenous, *Griffith University & Smart Internet Technology CRC,* Australia
Gunela Astbrink, Michele Furlong, *GSA Information Consultants & Smart Internet Technology CRC,* Australia

Security design needs to go beyond the individual to users in their social and cultural context to take into account the common practice of sharing domestic banking access codes.

PAPER | Protecting People from Phishing: The Design and Evaluation of an Embedded Training Email System

Ponnurangam Kumaraguru, Yong Rhee, Alessandro Acquisti, Lorrie Cranor, Jason I. Hong, Elizabeth Nunge, *Carnegie Mellon University,* USA

We present the design and evaluation of an email-based embedded training system that teaches people how to protect themselves from phishing attacks, and outline some design principles for such systems.

PAPERS | ROOM: A3

EMOTION & EMPATHY

SESSION CHAIR: Diane Schiano, *PARC,* USA

NOTE | Studying Antecedents of Emotional Experiences in Interactive Contexts

Sascha S. Mahlke, Manfred M. Thüring, *Berlin University of Technology,* Germany

Presents a comprehensive approach to the experimental study of user experience processes and illustrates its application by an exemplary study on variations of mobile digital audio player design properties.

NOTE | Expressing Emotion in Text-Based Communication

Jeffrey T. Hancock, Chris Landrigan, Courtney Silver, *Cornell University,* USA

The present study examines how positive and negative affect is expressed and assessed in computer-mediated communication, providing insight into how emotion is linguistically enacted in text-based conversation.

PAPER | Patterns of Empathy in Online Communication

Ulrike Pfeil, Panayiotis Zaphiris, *City University London,* UK

We clarify the phenomenon of online empathy. Our code scheme goes beyond existing research and provide a framework for analyzing the nature and degree of empathy within an online community.

PAPER | Exploring Affective Design for Physical Controls

Colin Swindells, Karon E. MacLean, Kellogg S. Booth, Michael J. Meitner, *University of British Columbia,* Canada

Case-study of emotional design for physical controls. Assists designers in i) improving emotional appropriateness and ii) better understanding resulting performance trade-offs, when designing ubiquitous computing systems.

■ PAPERS | ROOM: A4 & A5

COLLABORATION AT WORK

SESSION CHAIR: Wendy A. Kellogg, *IBM,* USA

NOTE | Koala: Capture, Share, Automate, Personalize Business Processes on the Web

Greg Little, *MIT,* USA
Tessa Lau, Allen Cypher, James Lin, Eben Haber, Eser Kandogan, *IBM,* USA

Koala presents a new paradigm in end-user programming: programming by demonstration where recorded actions are human readable and editable; data stores to automatically personalize procedures; and a wiki for procedures.

NOTE | Understanding Memory Triggers for Task Tracking

A. J. Bernheim Brush, Brian R. Meyers, Desney S. Tan, Mary Czerwinski, *Microsoft,* USA

Describes an observational field study of status report writing. Presents implications for the design of computer assisted time tracking systems that support personal introspection and status report writing.

PAPER | Recent Shortcuts: Using Recent Interactions to Support Shared Activities

John C. Tang, James Lin, Jeffrey S. Pierce, *IBM,* USA
Steve Whittaker, *Sheffield University,* UK
Clemens Drews, *IBM,* USA

We describe an empirical study identifying opportunities to support user work on shared activities through improved access to recently used computer objects and present a prototype to realize those opportunities.

PAPER | A Study of Out-of-Turn Interaction in Menu-Based, IVR, Voicemail Systems

Saverio Perugini, Taylor J. Anderson, William F. Moroney, *University of Dayton,* USA

Presents a study of an interaction technique for IVRs which explores a new dimension of the design space. Results indicate that this technique saves the user time and improves usability.

■ COMPETITION | A8

STUDENT DESIGN COMPETITION

SESSION CHAIRS:
Steven A. Wall, *University of Glasgow,* UK
Ilona Posner, *Usability Consultant,* Canada

JUDGES:
Richard Banks, *Microsoft,* UK
Apala Lahiri Chavan, *Human Factors International,* India
Silvia Zimmermann, *Usability.ch,* Switzerland

This is the third and final round of the CHI 2006 Student Design Competition. This session offers the four finalist student teams the opportunity to present their design projects to CHI attendees. A panel of expert judges will evaluate and score the projects on the basis of this presentation, considering the design process as well as the final product.

■ PAPERS | ROOM: B1-B4

TAGS, TAGGING, & NOTETAKING

SESSION CHAIR: Gina Venolia, *Microsoft,* USA

PAPER | Why We Tag: Motivations for Annotation in Mobile and Online Media

Morgan G. Ames, *Yahoo!, Stanford University, & University of California, Berkeley,* USA
Mor Naaman, *Yahoo! & Stanford University,* USA

Provides a taxonomy of motivations for tagging photographs, using photo-sharing site Flickr and prototype cameraphone application ZoneTag. Gives designers and researchers methods for encouraging annotation in tagging and image applications.

PAPER | Selection-Based Note-Taking Applications

Aaron Bauer, Kenneth R. Koedinger, *Carnegie Mellon University,* USA

Presents a study comparing the note-taking behaviors and learning outcomes of four different note-taking applications. Describes implications for the design of selection-based note-taking applications.

NOTE | Mobile Interaction with Visual and RFID Tags – A Field Study on User Perceptions

Kaj Mäkelä, *Nokia,* USA
Sara Belt, *University of Oulu,* Finland
Dan Greenblatt, *Georgia Institute of Technology,* USA
Jonna Häkkilä, *Nokia,* Finland

Our field study of 50 users charts existing user perceptions on mobile interaction with RFID and visual tags and reveals potential usability risks related to them.

NOTE | Getting Our Head in the Clouds: Toward Evaluation Studies of Tagclouds

A. W. Rivadeneira, *University of Maryland,* USA
Daniel M. Gruen, Michael J. Muller, David R. Millen, *IBM,* USA

Two studies explore impact of tagclouds' textual and positional attributes on task effectiveness, leading toward a paradigm for tagcloud evaluation. Can help researchers and designers to improve social software displays.

■ INTERACTIVITY | ROOM: C2

ADAPTATION & AUGMENTATION

SESSION CHAIR: Tom Igoe, *New York University,* USA

Interactive Exploration of City Maps with Auditory Torches

Wilko Heuten, Niels Henze, *OFFIS,* Germany
Susanne Boll, *University of Oldenburg,* Germany

To provide a nonvisual access to map information, we developed an interactive auditory city map, which uses 3D nonspeech sound to convey the position, shape, and type of geographic objects. We designed a virtual walk-through, equipped the user with an auditory torch, and introduced a bird's eye view on the auditory map. Our evaluation shows that our approaches enable the user to gain an understanding of the explored environment.

BluetunA: Let Your Neighbor Know What Music You Like

Stephan Baumann, *DFKI GmbH,* Germany
Arianna Bassoli, *The London School of Economics,* UK
Björn Jung, *Technical University of Kaiserslautern,* Germany
Martin Wisniowski, *Academy of Media Arts, Cologne,* Germany

BluetunA is an application running on Bluetooth-enabled mobile phones that allows users to share information about their favorite music. With BluetunA people can select a list of favorite artists or songs and see who else in proximity share their taste in music, or they can search whom nearby has selected specific artists, and check out what other preferences in terms of music these people have. Moreover, BluetunA users can exchange messages with each other over Bluetooth, connect to the Internet to download their profile and obtain music recommendations from Last.fm website.

Dreaming of Adaptive Interface Agents

Bill Tomlinson, Eric Baumer, Man Lok Yau, Paul Mac Alpine, Lorenzo Canales, Andrew Correa, Bryant Hornick, Anju Sharma, *University of California, Irvine,* USA

In the project described here, the system adapts when the user allows it to go to sleep long enough to have a dream. In addition, the dream itself is a visualization of the transformation of the interface, so that a person may see what changes have occurred.

imPulse

Gilad Lotan, Christian Croft, *ITP – NYU,* USA

imPulse is a modular design object that senses pulse and allows users to wirelessly transmit their heartbeat rhythms to companion imPulse units. By synchronizing light and vibrations with users' personal heartbeats, these devices create intimacy across distance.

The Mixed Reality Book: A New Multimedia Reading Experience

Raphael Grasset, Mark Billinghurst, Andreas Duesner, Hartmut Seichter, *HIT Lab NZ, & University of Canterbury,* New Zealand

We are introducing a new type of digitally enhanced book which symbiotically merges different type of media in a seamless approach. By keeping the traditional book (and its affordances) and visually and aurally enhancing it, we are hoping to provide a highly efficient combination of the physical and digital world. Our solution is based on recent developments in computer vision tracking, advanced GPU graphics, and spatial sound rendering. The demonstration will also show the collaborative possibilities of the system by allowing other users to be part of the story.

■ SPECIAL INTEREST GROUP | ROOM: C4

ENGINEERING COMMUNITY SIG

MODERATORS:
Alan Blackwell, *Cambridge University,* UK
John 'Scooter' Morris, *University of California, San Francisco,* USA

This SIG will provide a forum for people interested in bringing the best of the field of engineering to the field of HCI.

INTERACTIVE SESSION | CIVIC AUDITORIUM

INDUSTRIAL DESIGN: CHALLENGES AND SUCCESSES TOWARDS AN INTEGRATED PRODUCT DEVELOPMENT PROCESS

MODERATOR:
David Gilmore, *Intel,* USA

PANELISTS:
Jeremy Ashley, *Vice President User Experience, Oracle,* USA
Tucker Viemeister, *Vice President Creative, Studio Red,* USA
Tim Wood, *Creative Director, Kodak,* USA

Inexpensive components and increased user demand have led to an influx in consumer electronics in many of our daily lives. These physical products commonly have both a physical interface and a digital interface. This session will examine the converging worlds of Industrial Design and Interaction Design; the invited speakers will discuss their thoughts, experiences, and concerns as related to a holistic view of product development – development that incorporates a single team of designers responsible for a seamless physical and digital user experience.

PAPERS | ROOM: A1

MULTIMODAL INTERACTIONS

SESSION CHAIR: Edward Cutrell, *Microsoft,* USA

PAPER | Supporting Multi-Point Interaction in Visual Workspaces

Garth Shoemaker, *Idelix Software,* Canada
Carl Gutwin, *University of Saskatchewan,* Canada

Introduces the concept of a multi-point interaction task. Presents a design framework and three novel techniques for supporting these tasks. Demonstrates that the new techniques are superior to standard methods.

PAPER | Multimodal Redundancy Across Handwriting and Speech During Computer Mediated Human-Human Interactions

Edward C Kaiser, Paulo Barthelmess, Candice Erdmann, Phil Cohen, *Adapx,* USA

We show that public presenters typically say what they handwrite, redundantly. We argue that this focuses attention on dialogue-critical terms, and describe leveraging that redundancy for unsupervised, dynamic vocabulary learning.

EXPERIENCE REPORT | Minimizing Modality Bias When Exploring Input Preferences for Multimodal Systems in New Domains: The Archivus Case Study

Agnes Lisowska, Susan Armstrong, *University of Geneva,* Switzerland
Martin Rajman, *Ecole Polytechnique Federal de Lausanne,* Switzerland
Mireille Betrancourt, *University of Geneva,* Switzerland

In this paper we discuss the problems faced when trying to design an evaluation protocol for a multimodal system using novel input modalities and in a new domain. In particular, we focus on the problem of trying to minimize bias towards certain modalities and interaction patterns that might be introduced by experimenters in the instructions given to users which explain how the system can be used.

PAPERS | ROOM: A2

DISTRIBUTED INTERACTION

SESSION CHAIR: Susan Fussell, *Carnegie Mellon University,* USA

PAPER | An Empirical Study of the Use of Visually Enhanced VoIP Audio Conferencing: The Case of IEAC

Xianghua Ding, *University of California, Irvine,* USA
Thomas Erickson, Wendy A. Kellogg, Stephen Levy, James Christensen, Jeremy Sussman, Tracee Vetting Wolf, William E. Bennett, *IBM,* USA

The first study of the use of a widely deployed visually enhanced VoIP audio conferencing system. Sheds light on how and why callers use the visualization to achieve their ends.

PAPER | Voyagers and Voyeurs: Supporting Asynchronous Collaborative Information Visualization

Jeffrey Heer, *University of California, Berkeley,* USA
Fernanda B. Viégas, Martin Wattenberg, *IBM,* USA

Describes mechanisms for asynchronous collaboration around interactive data visualizations. Includes novel collaboration mechanisms and design considerations for interactive visual media and presents observations of social data analysis processes.

PAPER | Turn it This Way: Grounding Collaborative Action with Remote Gestures

David Kirk, Tom Rodden, *University of Nottingham,* UK
Danae Stanton-Fraser, *University of Bath,* UK

Generates a deeper understanding of the effects of remote gesturing technologies on the grounding of collaborative language, deriving from this significant implications for the development and deployment of these technologies.

PAPERS | ROOM: A3

LEARNING & EDUCATION

SESSION CHAIR: Deborah Tatar, *Virginia Polytechnic Institute and State University,* USA

PAPER | The Validity of a Virtual Human Experience for Interpersonal Skills Education

Kyle Johnsen, Andrew Raij, Amy Stevens, *University of Florida,* USA
D. Scott Lind, *Medical College of Georgia,* USA
Benjamin Lok, *University of Florida,* USA

We add critical validation results using life-size interactive virtual humans for interaction skills education. Readers gain insight into virtual humans, how they can be validated, and the benefits of validation.

PAPER | Modeling and Understanding Students' Off-Task Behavior in Intelligent Tutoring Systems

Ryan S. J. D. Baker, *University of Nottingham,* UK

Presents a machine-learned model and motivational profile of off-task behavior in an intelligent tutoring system. Can be used to drive adaptation to off-task behavior and to inform design.

NOTE | Improvisation Principles and Techniques for Design

Elizabeth Gerber, *Stanford University,* USA

This paper explores the application of the principles and techniques of improvisation to the practice of design, demonstrating potential successful outcomes at the individual and group level in design.

NOTE | Supporting Multidisciplinary Collaboration: Requirements from Novel HCI Education

Piotr D. Adamczyk, Michael B. Twidale, *University of Illinois, Urbana-Champaign,* USA

Suggests reasons for the poor rate of adoption of existing collaborative support tools and outline specific suggestions for directions in both ethnographic studies of multidisciplinary collaboration and collaborative systems design.

PAPERS | ROOM: A4 & A5

DESIGNING FOR SPECIFIC CULTURES

SESSION CHAIR: John C. Thomas, *IBM,* USA

PAPER | How HCI Interprets the Probes

Kirsten Boehner, Janet Vertesi, Phoebe Sengers, *Cornell University,* USA
Paul Dourish, *University of California, Irvine,* USA

Analyses the use of cultural probes and allied methods in HCI design practice. Provides an alternative account of the relationship between data gathering and knowledge production in HCI.

PAPER | Social Dynamics of Early Stage Co-Design in Developing Regions

Divya Ramachandran, Matthew Kam, *University of California, Berkeley,* USA
Jane Chiu, *Google,* USA
John Canny, *University of California, Berkeley,* USA
James L. Frankel, *Frankel and Associates, Inc.,* USA

Generalizes lessons from three field studies for effectively engaging local stakeholders in developing regions in early stage design based on using technology artifacts, and observations of social networks in communities.

PAPER | Localized Iterative Design for Language Learning in Underdeveloped Regions: The PACE Framework

Matthew Kam, Divya Ramachandran, Varun Devanathan, *University of California, Berkeley,* USA
Anuj Tewari, *Dhirubhai Ambani Institute of Information and Communication Technology,* India
John Canny, *University of California, Berkeley,* USA

A framework and process for localizing language learning software for underdeveloped regions. Facilitates the rapid, cost-effective design of usable and pedagogically effective language learning software by promoting reuse and scalability.

EXPERIENCE REPORTS | ROOM: A8

DEVELOPMENT PROCESS

SESSION CHAIR: Kumiyo Nakakoji, *University of Tokyo & SRA-KTL Inc.*, Japan

Software Design and Engineering as a Social Process

William Stubblefield, Tania Carson, *Sandia National Laboratories,* USA

Traditionally, software engineering processes are based on a formalist model that emphasizes strict documentation, procedural, and validation standards, which can be a poor fit for multidisciplinary research and development communities. We have approached this dilemma through a process model derived from theories of collaborative work rather than formal process control.

UI Toolkit for Non-Designers in the Enterprise Applications Industry

Liang-Cheng Lin, *Microsoft,* USA
Wai On Lee, *FLOW UX Design & Research,* USA

This report describes a user interface (UI) toolkit used for prototyping by non-designers. The toolkit enables the development of standardized UI wireframes and click-through prototypes that comply with User Experience UI style guides and design specifications.

Evolution of a Concept: From Technology to End-User to Enterprise

Lynne Brotman Karmin, Doree Seligmann, Mike Sammon, Ed Peebles, *Avaya Labs Research,* USA

We describe our experiences designing and trialing a hands-free, context-aware, mobile communications system for enterprise workers. Our concept, inspired by a new consumer technology, was designed with a heavy focus on the end-user.

PAPERS | ROOM: B1-B4

MOBILE KITS & STUFF

SESSION CHAIR: Yvonne Rogers, *Open University,* UK

PAPER | iStuff MobilRapidly Prototyping New Mobile Phone Interfaces for Ubiquitous Computing

Rafael Ballagas, Faraz Memon, Rene Reiners, Jan Borchers, *RWTH Aachen University,* Germany

Introduces the first toolkit for rapid prototyping of sensor-based interfaces for existing mobile phones. Provides a low threshold and high ceiling for prototyping, as demonstrated through examples and an evaluation.

PAPER | Appropriation of a MMS-Based Comic Creator: From System Functionalities to Resources for Action

Antti Salovaara, *Helsinki Institute for Information Technology,* Finland

Analyses users' appropriation processes in a field trial of a mobile comic strip creator. Suggests resources as an analytical concept to understand how to design system functionalities to support appropriation.

PAPER | Mobile Kits and Laptop Trays: Managing Multiple Devices in Mobile Information Work

Antti Oulasvirta, Lauri Sumari, *Helsinki Institute for Information Technology,* Finland

Reports that mobile workers migrate work across devices and describes the involved problems and strategies. This can help us understand how more flexible management of multiple devices can be supported.

ALT.CHI | ROOM: C2

LIFE ON MARS: HCI IN SPACE, CYBERSPACE, AND BEYOND

SESSION CHAIR:
Lars Erik Holmquist, *Swedish Institute of Computer Science,* Sweden

Challenges in Human-Computer Interaction for Manned Mars Exploration (30 min)

Kim Binsted, *University of Hawaii,* USA

A seven-member crew (including the author) will spend four full months at the Flashline Mars Arctic Research Station (FMARS) in Haughton Crater on Devon Island in the Canadian Arctic, in a Mars manned exploration simulation. The simulation will be as realistic as possible: limited water, cramped quarters, going outside in EVA (extra-vehicular activity) suits only, preserved food, etc. The author will present remotely from the FMARS habitat, giving a tour of the facility and its equipment, and discuss various human-computer interaction issues.

Augmented Nature: Activated, Actuated, and Animated Small Natures with Pervasive Computers (20 min)

Hiroya Tanaka, Yusuke Murata, *Keio-University,* Japan

This paper proposes our novel way to design new-style "nature-mediated" interactive gadgets. It can also be called "computer-embedded small natures". We adopted small, natural and inorganic earth materials such as rough stones (on the street) and raw shells (on the beach), and embedded small micro-controllers into them for giving interactive functions.

Full-Context Videos for First-Time, Non-Literate PC Users (20 min)

Indrani Medhi, Kentaro Toyama, *Microsoft,* India

Following previous work focused on non-literate users, we observed that in spite of our subjects' understanding of the UI mechanics, they experienced barriers beyond illiteracy in interacting with the computer: lack of awareness of what the PC could deliver, fear and mistrust of the technology, and lack of comprehension about how information relevant to them was embedded in the PC. In this paper, we address these challenges with full-context video, which includes dramatizations of how a user might use the application and how relevant information comes to be contained in the computer, in addition to a tutorial of the UI.

Power of the Few vs. Wisdom of the Crowd: Wikipedia and the Rise of the Bourgeoisie (20 min)

Aniket Kittur, *University of California, Los Angeles,* USA
Ed H. Chi, Bryan A. Pendleton, Bongwon Suh, *PARC,* USA
Todd Mytkowicz, *University of Colorado, Boulder,* USA

In this study we examined how the influence of "elite" vs. "common" users changed over time in Wikipedia. The results suggest that although Wikipedia was driven by the influence of "elite" users early on, more recently there has been a dramatic shift in workload to the "common" user. We also show the same shift in del.icio.us, a very different type of social collaborative knowledge system

■ SPECIAL INTEREST GROUP | ROOM: C4

RESEARCH COMMUNITY SIG

MODERATORS:
David Gilmore, *Intel,* USA
Desney S. Tan, *Microsoft,* USA

In this SIG, we will focus on lessons learned from the last 25 years as well as discussing how we can continue to develop these tracks as we move forward. Specifically, we will explore the roles of the various archival (e.g. papers, notes) and non-archival (e.g. posters, demos, alt.chi) tracks, and what they mean both to members of the community and to people outside the community (e.g. many tenure committees). Furthermore, we will discuss how we might expand the tracks to support non-traditional research, and how we can improve the review process so that we continue to accept the most innovative and impactful content.

INTERACTIVE SESSION | CIVIC AUDITORIUM

SEMANTIC WEB HCI: DISCUSSING RESEARCH IMPLICATIONS

PANELISTS:
Duane Degler, *IPGems,* USA
Scott Henninger, *University of Nebraska, Lincoln,* USA
Lisa Battle, *Design for Context,* USA

Semantic Web progress is very active – and this past year shows a much greater focus on the subject of user interaction. W3C leaders talk about the importance and "grand challenges" for user interaction. Workshops showcase more well-developed projects and innovative interaction designs. A W3C mailing list has begun. But what are the implications for the HCI community? What research and practice contributions can be made and what relationships can be fostered with the semantic web research community? This collaborative, interactive session will give CHI participants a chance to discuss the issues that have surfaced at recent semantic web workshops.

PAPERS | ROOM: A1

NOVEL NAVIGATION

SESSION CHAIR: Anind K. Dey, *Carnegie Mellon University,* USA

PAPER | Command Strokes With and Without Preview: Using Pen Gestures on Keyboard for Command Selection

Per Ola Kristensson, *Linköpings Universitet,* Sweden
Shumin Zhai, *IBM,* USA

Describes a novel method of command entry for pen interfaces. Provides three user studies, that among other things, show benefit with technique over pull-down menus and that visual preview helps.

PAPER | Shallow-Depth 3D Interaction: Design and Evaluation of One-, Two-, and Three-Touch Techniques

Mark Hancock, Sheelagh Carpendale, *University of Calgary,* Canada
Andy Cockburn, *University of Canterbury,* New Zealand

Presents and compares three new direct-touch shallow-depth 3D interaction techniques for the tabletop display. Can assist in designing effective 3D interactions for tabletop information organizing and sharing.

PAPER | Affordances for Manipulation of Physical vs. Digital Media on Interactive Surfaces

Lucia Terrenghi, *Ludwig Maximilian University of Munich,* Germany
David Kirk, *University of Nottingham,* UK
Abigail Sellen, Shahram Izadi, *Microsoft,* UK

We inform interface design for surface computing by discussing the results of a comparative study which elicits the different affordances for manipulation of physical versus digital media on interactive surfaces.

PAPERS | ROOM: A2

PEOPLE, LOOKING AT PEOPLE

SESSION CHAIR: Catalina Danis, *IBM*, USA

PAPER | Effects of Presenting Geographic Context on Tracking Activity between Cameras

Andreas Girgensohn, *FX Palo Alto Laboratory,* USA
Frank Shipman, *Texas A&M University,* USA
Thea Turner, Lynn Wilcox, *FX Palo Alto Laboratory,* USA

Presents designs for providing geographic cues to aid cross-camera activity tracking and compares user performance and preferences. Shows implications for the design of interfaces for video surveillance or multi-video applications.

PAPER | Dynamic Shared Visual Spaces: Experimenting with Automatic Camera Control in a Remote Repair Task

Abhishek Ranjan, Jeremy P. Birnholtz, Ravin Balakrishnan, *University of Toronto,* Canada

Presents evaluation of automatic camera control in a remote helper task. Results used to guide designs of automatic camera control systems.

NOTE | "Look!" – Using the Gaze Direction of Embodied Agents

Johann Schrammel, Arjan Geven, Reinhard Sefelin, *Center for Usability Research & Engineering,* Austria
Manfred Tscheligi, *University of Salzburg,* Austria

Experiments investigating whether users can detect an agent's line of sight and whether the agent's gaze patterns support users in performing different tasks. Can assist in developing embodied agents.

NOTE | Museum Guide Robot Based on Sociological Interaction Analysis

Yoshinori Kuno, Kazuhisa Sadazuka, Michie Kawashima, Keiichi Yamazaki, *Saitama University,* Japan
Akiko Yamazaki, *Future University, Hakodate,* Japan
Hideaki Kuzuoka, *University of Tsukuba,* Japan

Describes a museum guide robot that turns its head while explaining an exhibit. Shows when to turn the robot's head for improving the engagement between the human and the robot.

■ PAPERS | ROOM: A3

INPUT TECHNIQUES

SESSION CHAIR: Gonzalo Ramos, *University of Toronto,* Canada

PAPER | Bubbling Menus: A Selective Mechanism for Accessing Hierarchical Drop-Down Menus

Theophanis Tsandilas, *University of Toronto,* Canada
m c schraefel, *University of Southampton,* UK

Introduces a new technique for accelerating selection in customized views of hierarchical pull-down menus. The new technique is evaluated by two user studies.

PAPER | Command Line or Pretty Lines? Comparing Textual and Visual Interfaces for Intrusion Detection

Ramona S. Thompson, Esa Rantanen, *University of Illinois, Urbana-Champaign,* USA
William Yurcik, *National Center for Supercomputing Applications,* USA
Brian P. Bailey, *University of Illinois, Urbana-Champaign,* USA

Conducted a comparative user study of textual and visual interfaces for intrusion detection. Provides insight about strengths and weaknesses of interfaces and guidelines for the design of future interfaces.

PAPER | Pointing and Beyond: An Operationalization and Preliminary Evaluation of Multi-Scale Searching

Emmanuel Pietriga, Caroline Appert, Michel Beaudouin-Lafon, *INRIA & Université Paris-Sud & CNRS INRIA,* France

Defines an operationalization of a multi-scale search task. Evaluates four multi-scale navigation techniques on this task and reports results showing that overview+detail outperforms the other techniques.

■ PAPERS | ROOM: A4 & A5

LOCATION AWARE SYSTEMS

SESSION CHAIR: Dianne Murray, *City University,* UK

PAPER | Social Practices in Location-Based Collecting

Kenton O'Hara, Timothy Kindberg, *Hewlett-Packard,* USA
Maxine Glancy, Luciana Baptista, Byju Sukumaran, Gil Kahana, Julie Rowbotham, *BBC,* UK

The paper presents a user study of a location-based application at London Zoo focusing on collecting and keeping of location-based content in contrast simple in situ consumption of content.

PAPER | Capturing, Sharing, and Using Local Place Information

Pamela J. Ludford, Reid Priedhorsky, Ken Reily, Loren Terveen, *University of Minnesota,* USA

Two user studies uncover the benefits of shared local place information applications. We also detail privacy preferences in this domain and show how they can be used to positively inform related system design.

NOTE | Show Me the Way to Monte-Carlo: Density-Based Trajectory Navigation

Steven Strachan, *Hamilton Institute,* Ireland
John Williamson, Roderick Murray-Smith, *University of Glasgow,* UK

Describes a handheld system for actively exploring context densities using inertial sensing, GPS, Monte Carlo sampling, and music feedback, enabling eyes-free navigation along trajectories unfamiliar to the user.

NOTE | MapMover: A Case Study of Design-Oriented Research into Collective Expression and Constructed Publics

Carl DiSalvo, Jeff Maki, *Carnegie Mellon University,* USA
Nathan Martin, *DeepLocal, Inc,* USA

Describes design-oriented research of an interactive system for collective expression and introduces the concept of constructed publics. This concept can be used to inform design and for analysis in research.

■ EXPERIENCE REPORTS | ROOM: A8

ETHNOGRAPHY

SESSION CHAIR: Steven R. Haynes, *The Pennsylvania State University,* USA

How Informances Can Be Used in Design Ethnography

Ron Wakkary, Poon Madison, Maestri Leah, Kirton Travis, Julihn Corey, Betts Ryan, *Simon Fraser University,* Canada

In this paper we discuss how we've adapted the technique of informance design for use in design ethnography. We detail our design ethnography workflow method and describe our informances.

Surrogate Users — A Pragmatic Approach to Defining User Needs

Matthew A. Lievesley, Joyce S. R. Yee, *Northumbria University,* UK

It is often difficult for practising interaction designers to engage with real end-users because of the competing economic pressures on projects. Preliminary research with end-users may be squeezed in favor of more tangible, later-stage project deliverables. This case-study paper presents a pragmatic approach to getting closer to end-users by briefing project stakeholders to think as surrogate-users within managed 90 to 120 minute-long focus groups. It finds that the method described is particularly useful in multi-stakeholder projects and provides a rich design brief with clear, agreed, user-centred design goals.

In-Between Theory and Practice: Dialogues in Design Research

Arianna Bassoli, *The London School of Economics and Political Science,* UK
Johanna Brewer, *University of California, Irvine,* USA
Karen Martin, *University College London,* UK

Why Wait? and Betwixt are two of the workshops we have recently run on the theme of in-between-ness. The approach of social computing, where researchers with different background collaborate to understand how the socio-cultural aspects of human life relate to the design of new technologies, was the starting point for our investigation. By observing actual instances of in-between-ness in context we explored how design activities can be interpreted as an opportunity to discuss and take positions on a specific theme, and as a space for resolving the tension existing in design research between theoretical and practical thinking.

■ PAPERS | ROOM: B1-B4

SOCIAL NETWORK SHARING

SESSION CHAIR: Danyel Fisher, *Microsoft,* USA

PAPER | Follow the Reader: Filtering Comments on Slashdot

Cliff Lampe, Erik Johnston, *Michigan State University,* USA
Paul Resnick, *University of Michigan,* USA

We show that automated methods for filtering large-scale, online discussions can be derived from the behavior of other users, especially of those who are more likely to change settings.

PAPER | Exploring Patterns of Social Commonality Among File Directories at Work

John C. Tang, Clemens Drews, Mark Smith, *IBM,* USA
Fei Wu, *University of Washington,* USA
Alison Sue, Tessa Lau, *IBM,* USA

Examining how users within work organizations store files yields patterns of social practice that can be applied in applications for file backup and restore and social networking.

PAPER | CoMedia: Mobile Group Media for Active Spectatorship

Giulio Jacucci, Antti Oulasvirta, Tommi Ilmonen, John Evans, Antti Salovaara, *Helsinki Institute for Information Technology,* Finland

Presents a design for large-scale events that integrates awareness features and event information to a media-sharing application. Support spectators to interweave their changing activities inside and outside the system.

■ COMPETITION | ROOM: C2

STUDENT RESEARCH COMPETITION

SESSION CHAIRS:
Kori M. Inkpen, *Dalhousie University,* Canada
Robert C. Miller, *MIT,* USA

JUDGES:
Robert St. Amant, *North Carolina State University,* USA
Michael J. Muller, *IBM,* USA
Takeo Igarashi, *University of Tokyo,* Japan
Terry Winograd, *Stanford University,* USA
Elizabeth F. Churchill, *Yahoo!,* USA
Andrew Monk, *University of York,* UK
Fabio Paterno, *ISTI-CNR,* Italy
Geraldine Fitzpatrick, *University of Sussex,* UK
Carl Gutwin, *University of Saskatchewan,* Canada
Robin Jeffries, *Google,* USA

This is the final round of the CHI 2007 Student Research Competition, in which the student finalists give short talks about their research to CHI attendees. A panel of expert judges will evaluate and score both the research and the presentation, and select the winning entries.

■ SPECIAL INTEREST GROUP | C4

DESIGN COMMUNITY SIG

MODERATORS:
Jon Kolko, *Savannah College of Art and Design,* USA
Bill Lucas, *MAYA Design,* USA
Elizabeth Dykstra-Erickson, *ACCESS Systems America,* USA
Sebastiano Bagnara, *University of Sassari, Alghero,* Italy

This SIG will be a forum for reflection, discussion and planning. The 2007 Design Community Co-Chairs will talk about their goals, successes and shortcomings. Subsequently, attendees will be encouraged to deliberate matters of Design within academia and industry; thereby helping to strategize optimal integration at CHI 2008 and beyond.

COURSE 28 | ROOM: A6

AJAX – DESIGN AND USABILITY

9:00–13:00

INSTRUCTOR:
William Hudson, *Syntagm Ltd.,* UK

Benefits: This half-day interactive course breaks new ground in relating Ajax technology to key principals of Computer-Human Interaction.

Intended Audience: Web and intranet designers, information architects, usability, and HCI professionals. No specialist skills or knowledge are required.

COURSE 32 | ROOM: A6

AVOIDING "WE CAN'T CHANGE THAT!": AN INTRODUCTION TO USABILITY AND SOFTWARE ARCHITECTURE

14:30–16:00

INSTRUCTORS:
Bonnie E. John, *Carnegie Mellon University,* USA
Len Bass, *Carnegie Mellon University,* USA
Elspeth Golden, *Carnegie Mellon University,* USA

Benefits: The usability analyses or user test data are in; the development team is poised to respond. The software had been carefully modularized so that modifications to the UI can be fast and easy. When the usability problems are presented, someone around the table exclaims, "Oh, no, we can't change THAT!" This course will introduce software architecture and the interactions between architecture design decisions and usability requirements that cause "We can't change that!" at detailed design meetings. We introduce a method for solving this problem at architecture design time. (An advanced course, We can't change THAT, either!: Usability-Supporting Architectural Patterns, gives details of an approach to solve this problem).

Intended Audience: Usability professionals desiring more involvement with early software decisions.

Software developers who want to understand the usability implications of architectural decisions. No prior knowledge of software architecture is needed.

COURSE 33 | ROOM: A6

AVOIDING "WE CAN'T CHANGE THAT EITHER!": USABILITY SUPPORTING ARCHITECTURAL PATTERNS

16:30–18:00

INSTRUCTOR:
Bonnie E. John, *Carnegie Mellon University,* USA
Len Bass, *Carnegie Mellon University,* USA
Elspeth Golden, *Carnegie Mellon University,* USA

Benefits: Additional usability analyses or user test data are in; the development team is poised to respond. The software had been carefully modularized so that modifications to the UI can be fast and easy. When the usability problems are presented, someone around the table exclaims, "Oh, no, we can't change THAT, either!" This course builds on an understanding of software architecture and details a method for avoiding "We can't change THAT!" through the application of usability-supporting architectural patterns. Through detailed examples, controlled experiments to validate the value of the method, and personal experience with the construction of real-world systems, we present attendees with the materials necessary to be effective at bringing usability concerns to architecture design discussions. (An introductory course, Avoiding "We can't change THAT!": An Introduction to Usability and Software Architecture" prepares attendees with no prior experience in software architecture to benefit from this course). Participants in this course already understand basic principles of software architecture for interactive systems.

Through this course will, they will:

- Understand patterns of software architecture that facilitate usability,
- Be able to recognize architectural decisions that preclude usability of the end product so that they can effectively bring usability considerations into early architectural design.

Intended Audience: Usability professionals desiring more involvement with early software decisions. Software developers who want to understand the usability implications of architectural decisions. Prior knowledge of software architecture is required. This knowledge can be obtained by attending the introductory course, Avoiding "We can't change THAT!": An Introduction to Usability and Software Architecture.

COURSE 26 | ROOM: A7

FACETED METADATA FOR INFORMATION ARCHITECTURE AND SEARCH

9:00–13:00

INSTRUCTORS:
Marti A. Hearst, *University of California, Berkeley,* USA
Preston Smalley, *eBay,* USA

Benefits: The information architecture community has begun to embrace the use of faceted hierarchical metadata for navigation and search over information collections (museum images, product catalogs, digital libraries). Attendees will learn the advantages of and strategies for using faceted metadata for integrated browsing and search of large information collections. Examples will be drawn both from formal studies and from results of real-world application, with an emphasis on interface design issues.

Intended Audience: The intended audience is usability professionals, especially information architects, but will be of interest to search interface researchers as well.

COURSE 27 | ROOM: A7

EMPIRICAL RESEARCH METHODS FOR HUMAN COMPUTER INTERACTION

14:30–18:00

INSTRUCTOR:
Scott MacKenzie, *York University,* Canada

Benefits: This course will empower attendees to undertake a program of empirical research on a topic in HCI relevant to their interests. After attending this tutorial, attendees will have the specific skills necessary for the following: (1) discover and narrow in on topics suitable for research in HCI, (2) formulate "testable" research questions, (3) design and conduct an experiment to answer the research questions, (4) collect and analyze empirical data from an experiment, and (5) write a research paper based on the experiment.

Intended Audience: This course is intended for those who are interested in learning about or refining their skills in empirical research methods in human-computer interaction (HCI). Prior knowledge of statistical tests is not required.

COURSE 31 | ROOM: C3

EXPERT REVIEWS – FOR EXPERTS

9:00–13:00

INSTRUCTOR:
Rolf Molich, *DialogDesign,* Denmark

Benefits: Expert reviews, such as heuristic evaluations and other design inspections, are the second most widely used usability method. Nonetheless, they're often conducted with poor or unsystematic methodology and thus don't always live up to their full potential. This course teaches proven methods for conducting and reporting expert reviews of a user interface design.

Intended Audience: Usability professionals who have usability testing experience and who have conducted some expert reviews. Although this course is not intended as an introduction to expert reviews, past participants with no expert review experience have rated it highly.

COURSE 29 | ROOM: C3

HOW TO BUILD RICH PERSONAS FROM FIELD DATA

14:30–16:00

INSTRUCTOR:
Karen Holtzblatt, *InContext Enterprises,* USA

Benefits: Personas have understandably become very popular in the CHI community. When done properly personas provide a powerful tool that communicates our understanding of the users to the developers and other stakeholders who must build products, systems, marketing messages, and otherwise respond to the needs of their users. This course covers what makes for an effective persona, and then provides step-by-step guidance on how to better leverage in-depth field data to write personas. It explains why personas are a valuable communication tool and raises the issue that for personas to be truly useful, they must be derived from field data. This course will both raise the issue for participants and give them a starting skill set they can use to improve their personas going forward.

Intended Audience: No specific background is required. Although the course focuses on CD models, previous experience with them is not required. It is appropriate for all roles.

COURSE 30 | ROOM: C3

USABILITY TESTING: CREATING GOOD TEST TASKS

16:30–18:00

INSTRUCTOR:
Rolf Molich, *DialogDesign,* Denmark

Benefits: The success of a usability test depends critically on the quality of the tasks used in the test. This course will present specific guidelines for creating good task sets and for evaluating the quality of a task set. It will also present common pitfalls in task sets and how to avoid them. A large part of the course is spent evaluating a sample, non-trivial task set that contains typical problems.

Intended Audience: Beginners and intermediate usability professionals who want to improve their usability test task creation skills based on extensive practical experience.

COURSE 23 | ALMADEN BALLROOM I

ANALYZING QUALITATIVE DATA FROM FIELD STUDIES

9:00–18:00

INSTRUCTOR:
David A. Siegel, *Dray & Associates, Inc.,* USA

Benefits: Field studies are essential to user-centered design, but the data from these studies can be overwhelming and ambiguous. As a result, conclusions are all too often impressionistic or anecdotal, with vague or even misleading implications for design. This course will teach you techniques for analysis to improve the credibility and validity of your findings, to keep them focused on design, and to help you avoid drowning in your data. However, the course does not focus on techniques of data gathering in fieldwork, and assumes that people have a basic knowledge of these techniques.

Intended Audience: This tutorial is intended for practitioners who want to improve the validity and credibility of their field user research. Ideally, participants will have some experience in fieldwork including ethnography, contextual inquiry, or naturalistic usability, with a practical focus on any aspect of product definition and design. However, it also will be of interest to people who have a background in more structured forms of user research, such as lab usability, who want to prepare for the less structured world of field research.

COURSE 24 | ALMADEN BALLROOM II

UNDERSTANDING MOBILE INTERACTION DESIGN

9:00–13:00

INSTRUCTOR:
Matt Jones, *University of Wales,* UK

Benefits: The course will give challenging, fresh perspectives on the goals of and approaches to mobile interaction design provide provoking questions about the form and function of effective mobile user experiences, and offer an interesting analysis to help explain previous hits and flops as well as pointing the way for successful future innovation. The design methods and perspectives presented will provide useful tools for anyone involved in developing concept and prototype systems.

Intended Audience: Developers and designers, industrial and academic researchers, students, mobile business and marketing analysts and strategists.

COURSE 25 | ALMADEN BALLROOM II

DOING MOBILE INTERACTION DESIGN

14:30–18:00

INSTRUCTORS:
Matt Jones, *University of Wales, Swansea,* UK
Gary Marsden, *University of Cape Town,* South Africa

Benefits: Participants will be exposed to tried-and-tested design solutions for key and emerging mobile applications and services. The course will present a set of research pointers. Those working on the topics of information access, image access and mobile communities will be given insights into the current and evolving thinking surrounding these application areas. The course will also provide insights and inspirations from the research community useful to all attendees.

Intended Audience: Developers and designers, industrial and academic researchers, students, mobile business and marketing analysts and strategists.

Notes

CONTEMPORARY TRENDS AND EXPERIENCES REVIEWERS – CONTINUED

Ilona Heldal, *Chalmers University of Technology,* Sweden
Sebastian Ho, *Philips Design,* Hong Kong
Lars Erik Holmquist, *Viktoria Institute,* Sweden
Kristina Hook, *Stockholm University,* Sweden
Michael Horn, *Tufts University,* USA
Andrew Howes, *University of Manchester,* UK
John Huntington, *NYC College of Technology,* USA
Ebba Thora Hvannberg, *University of Iceland,* Iceland
Tom Igoe, *New York University,* USA
Kori Inkpen, *Dalhousie University,* Canada
Poika Isokoski, *University of Tampere,* Finland
Mattias Jacobsson, *Viktoria Institute,* Sweden
Jhilmil Jain, *Hewlett-Packard,* USA
Frankie James, *SAP,* USA
Casey Jones, *UCAR,* USA
Matt Jones, *University of Waikato,* New Zealand
Wendy Ju, *Stanford University,* USA
Syahrul Junaini, *Universiti Malaysia Sarawak,* Malaysia
Hesham Kamel, *University of California, Berkeley,* USA
Hyunmo Kang, *Human Computer Interaction Lab,* USA
Kristiina Karvonen, *Helsinki University of Technology,* Finland
Irvin Katz, *Educational Testing Service,* USA
Joseph Kaye, *Cornell University,* USA
Simeon Keates, *IBM,* USA
Nicky Kern, *Marc Brandis GmbH,* Switzerland
Pekka Ketola, *Usability Engineer,* Finland
Sanshzar Kettebekov, *Keane Inc,* USA
Alex Kim, *SCAD,* USA
Esin Kiris, *AT&T,* USA
Palle Klante, *Pixelpark AG,* Germany
Gary Klatsky, *Oswego, SUNY,* USA
Chris Knowles, *University of Waikato,* New Zealand
Andreas Kohl, *musarte,* Germany
Jon Kolko, *Savannah College of Art & Design,* USA
Raffi Krikorian, *Synthesis Studios, Inc.,* USA
Per Ola Kristensson, *Linkoping University,* Sweden
Peter Krogh, *Arhus School of Architecture,* Denmark
Ernst Kruijff, *Graz University of Technology,* Austria
Sri Kurniawan, *UMIST,* UK
Frank Lantz, *ITP NYU,* USA
Eric Lee, *RWTH Aachen University,* Germany
Chia-Hsun Lee, *MIT,* USA
Golan Levin, *Carnegie Mellon University,* USA
Youn-kyung Lim, *Indiana University,* USA
James Jeng-Weei Lin, *Siemens,* USA
Feng Liu, *Mercer University,* USA
Sara Ljungblad, *Viktoria Institute,* Sweden
Bill Lucas, *MAYA Design,* USA
Arnold Lund, *Microsoft,* USA
Wendy Mackay, *INRIA,* France
Allan MacLean, *Image Semantics Ltd,* UK
Thomas Mandl, *Universität Hildesheim,* Germany
Stefan Marti, *Samsung,* USA
Joe McCarthy, *Nokia,* USA
Michael McCurdy, *NASA,* USA
Jane McGonigal, *University of California, Berkeley,* USA
Nadyne Mielke, *Microsoft,* USA
M. Milano, USA
Scott Minneman, *Onomy Labs, Inc.,* USA
Jaime Montemayor, *The John Hopkins University,* USA
Katherine Moriwaki, *Trinity College Dublin,* Ireland
Scooter Morris, *University of California, San Francisco,* USA
Emile Morse, *National Institute of Standards & Technology,* USA
Florian Mueller, *CSIRO,* Australia
Elizabeth (Betty) Murphy, *United States Census Bureau,* USA
Bilge Mutlu, *Carnegie Mellon University,* USA
Michael Olson, *New York University,* USA
Sile O'Modhrain, *Queen's University,* UK
Chris O'Shea, UK
Dan O'Sullivan, *ITP NYU,* USA
Volker Paelke, *University of Hannover,* Germany
Despina Papadoupolos, *Studio 5050,* USA
Eunkwang Park, *Nanyang Technological University,* Singapore
Amanda Parkes, *MIT,* USA
Kurt Partridge, *PARC,* USA
Fabio Paternò, *ISTI-CNR,* Italy
Sameer Patil, *University of California, Irvine,* USA
Celeste Paul, *User-Centered Design, Inc.,* USA
Eric Paulos, *Intel,* USA
Trevor Pering, *Intel,* USA
Mark Perry, *Brunel University,* UK
Jeffrey Pierce, *IBM,* USA
Claudio Pinhanez, *IBM,* USA
Beryl Plimmer, *University of Auckland,* New Zealand
Thorsten Prante, *Fraunhofer IPSI,* Germany
Yan Qu, *University of Maryland, College Park,* USA
Chris Quintana, *University of Michigan,* USA
James Reffell, *Yahoo!,* USA
Tim Regan, *Microsoft,* UK
Holger Regenbrecht, *University of Otago,* New Zealand
Carol Righi, USA
Daniel Robbins, *Microsoft,* USA
Dave Roberts, *IBM,* UK
Peter Robinson, *University of Cambridge,* UK
Mary Beth Rosson, *The Pennsylvania State University,* USA
Maria Roussou, *University College London,* Greece
Daniel Rozin, *New York University,* USA
Daniel Russell, *Google,* USA
Cristian Rusu, *Pontificia Universidad Catolica de Valparaiso,* Chile
Kimiko Ryokai, *MIT,* USA
Katie Salen, *Gamelab,* USA
Aleksandra Sarcevic, *Rutgers University,* USA
Holger Schnädelbach, *Mixed Reality Lab,* UK
Jean Scholtz, *Pacific Northwest Laboratory,* USA
Till Schümmer, *FernUniversität in Hagen,* Germany
Orit Shaer, *Tufts University,* USA
Clay Shirky, *Shirky.com,* USA
Hal Shubin, *Interaction Design, Inc.,* USA
André Silva, *State University of Campinas,* Brazil
Eric Singer, *LEMUR,* USA
Grant Skousen, *7i design,* USA
Roger Slack, *University of Edinburgh,* UK
David Smith, *College of Technology, CUNY,* USA
Dana Smith, *XPLANE,* USA
Rick Spencer, *Microsoft,* USA
Molly Stevens, *Georgia Institute of Technology,* USA
Daniel Su, *The University of Nottingham,* Malaysia
Sriram Subramanian, *University of Saskatchewan,* Canada
Bernhard Suhm, *Enterprise Integration Group,* USA
Martin Svensson, *Swedish Institue of Computer Science,* Sweden
Lucia Terrenghi, *Ludwig Maximilian University Munich,* Germany
Vello Thomasson, Sweden
Ramayah Thurasamy, *Universiti Sains Malaysia,* Malaysia
Peter Tolmie, *Nottingham University,* UK
Bill Tomlinson, *University of California, Irvine,* USA
Manfred Tscheligi, *University of Salzburg,* Austria
Susan Turner, *Napier University,* UK
Shawn Van Every, *IPT NYU,* USA
Nancy Van House, *University of California, Berkeley,* USA
Charles VanderMast, *Delft University of Technology,* the Netherlands
Ravi Vatrapu, *University of Hawaii, Manoa,* USA
Catherine Vaucelle, *MIT,* USA
Colin Venters, *University of Manchester,* UK
Bill Verplank, *Stanford University,* USA
Roel Vertegaal, *Queen's University,* Canada
Daniel Wagner, *Graz University of Technology,* Austria
Ron Wakkary, *Simon Fraser University,* Canada
Kevin Walker, *Institute of Education,* UK
Michael Wallick, *University of Wisconsin, Madison,* USA
Shuo Wang, *Microsoft,* China
Nigel Ward, *University of Texas, El Paso,* USA
Martin Wetterstrand, *Århus University,* Denmark
Alan Wexelblat, *Charles River Associates,* USA
Daniel Wigdor, *University of Toronto,* Canada
Amanda Williams, *University of California, Irvine,* USA
John Williamson, *University of Glasgow,* UK
Andrew Wilson, *Microsoft,* USA
Claudia Winegarden, *Georgia Institute of Technology,* USA
Hendrik Witt, *University of Bremen,* Germany
Christa Womser-Hacker, *University of Hildesheim,* Germany
Susan Wyche, *Georgia Institute of Technology,* USA
Peta Wyeth, *University of Queensland,* Australia
Yunwen Ye, *University of Colorado,* USA
Ron Yeh, *Stanford University,* USA
Sam Zheng, *Siemens Corporate Research,* USA
Juergen Ziegler, *University of Duisburg-Essen,* Germany

ALT.CHI REVIEWERS

Hyungil Ahn, *MIT,* USA
Vadim Astakhov, *University of California, San Diego,* USA
Louise Barkhuus, *University of Glasgow,* UK
Eric Baumer, *University of California, Irvine,* USA
Marek Bell, *University of Glasgow,* UK
Kim Binsted, *University of Hawaii,* USA
Rakesh Biswas, *Manipal University,* Malaysia
Lorna Brown, *Microsoft,* UK
Kevin Buffardi, *User Centric,* USA
Daniela Busse, *SAP,* USA
Nick Cawthon, *University of Sydney,* Australia
Seung Chan Lim, *MAYA Design,* USA
Ed Chi, *PARC,* USA
Gilbert Cockton, *University of Sunderland,* UK
Murray Crease, *National Research Council,* Canada
Amnon Dekel, *Hebrew University,* Israel
Paul Dourish, *University of California, Irvine,* USA
Florian 'Floyd' Mueller, *University of Melbourne,* Austrailia
Linda Gallant, *Bentley College,* USA
Shirley Gaw, *Princeton University,* USA
Lalya Gaye, *Viktoria Institute,* Sweden
Saul Greenberg, *University of Calgary,* Canada
Maria Håkansson, *Viktoria Institute,* Sweden
Steve Harrison, *Virginia Polytechnic Institute and State University,* USA
Drew Harry, *MIT,* USA
Harry Hochheiser, *Towson University,* USA
Mahmudul Huq, *University of Siegen,* Germany
Mattias Jacobsson, *Viktoria Institute,* Sweden
Eva Jettmar, *Stanford University,* USA
William Jones, *University of Washington,* USA
Zayira Jordan, *Iowa State University,* USA
Maria Karam, *Ryerson University,* Canada
Joseph Kaye, *Cornell University,* USA
Noah Keating, *University of Southern California,* USA
Ana Klasnja, *Ontario Science Centre,* Canada
Sara Ljungblad, *Viktoria Institute,* Sweden
Jules Maitland, *University of Glasgow,* UK
Anijo Mathew, *Mississippi State University,* USA
Takashi Matsumoto, *Keio University,* Japan
Indrani Medhi, *Microsoft,* India
David Mellis, *Copenhagen Institute of Interaction Design,* Denmark
Sonia Modeo, *CSP scarl,* Italy
Patricia Mourthe, *IxDA, AIGA,* USA
Bill Papantuniou, *National Technical University of Athens,* Greece
Nigel Papworth, *Interactive Studio,* USA
Jinsuk Park, *MIT,* USA
Mark Perry, *Brunei University,* USA
Saverio Perugini, *University of Dayton,* USA
Jennifer Rode, *University of California, Irvine,* USA
Mattias Rost, *Viktoria Institute & IT University of Göteborg,* Sweden
Martin Schedlbauer, *University of Massachusetts, Lowell,* USA
Scott Sherwood, *University of Glasgow,* UK
Mark Smith, *TruePosition, Inc.,* USA
Aaron Spaulding, *SRI International,* USA
Mark Stringer, *University of Sussex,* UK
Peter Svensson, *Mashupstation,* Sweden
Anna Swartling, *KTH,* Sweden
Hiroya Tanaka, *Keio University,* Japan

CONTINUES ON BACK

ALT.CHI REVIEWERS – CONTINUED

Alex Taylor, *Microsoft,* UK
Jenn Thom-Santelli, *Cornell University,* USA
Ravi Vatrapu, *University of Hawaii, Manoa,* USA
Ljiljana Vukelja, *University of Applied Science,* Switzerland
Wouter Walmink, *CSIRO,* Australia
Junji Watanabe, *Japan Science & Technology Agency,* Japan
Aaron Zinman, *MIT,* USA

WORK IN PROGRESS REVIEWERS

Markus Ablassmeier, *Institute for Human-Machine Communication,* Germany
Wael Aboelsaadat, *University of Toronto,* Canada
Piotr Adamczyk, *University of Illinois, Urbana-Champaign,* USA
Matt Adcock, *MIT,* USA
Bipin b Agravat, *Media lab Asia,* India
David Akers, *Stanford University,* USA
Ken Anderson, *Intel,* USA
Richard Anderson, *Riander,* USA
Trent Apted, *University of Sydney,* Australia
Jonathan Arnowitz, *SAP,* USA
Anne Aula, *Tampere University of Techonlogy,* Finland
Daniel Avrahami, *Carnegie Mellon University,* USA
Tamara Babaian, *Bentley College,* USA
Paula Bach, *The Pennsylvania State University,* USA
Robert Ball, *Virginia Polytechnic Institute and State University,* USA
Louise Barkhuus, *University of Glasgow,* UK
Tiffany Barnes, *University of North Carolina, Charlotte,* USA
Paulo Barthelmess, *Oregon Health & Science University,* USA
Patrick Baudisch, *Microsoft,* USA
Aaron Bauer, *Carnegie Mellon University,* USA
Martin Beer, *Sheffield Hallam University,* UK
Wolfgang Beinhauer, *Fraunhofer Institute for Industrial Engineering,* Germany
emily bennett, *University of Portsmouth,* UK
David Benyon, *Napier University,* UK
Andrea Berman, *Sikorsky Aircraft Corporation,* USA
Regina Bernhaupt, *Salzburg University,* Austria
Michael Bernstein, *MIT,* USA
Anastasia Bezerianos, *University of Toronto,* Canada
Jeremy Birnholtz, *University of Toronto,* Canada
Wolf-Gideon Bleek, *University of Hamburg,* Germany
Mark Blythe, *University of York,* UK
Deirdre Bonini, *Yuseo,* France
Dominic Bouwhuis, *University of Technology Eindhoven,* the Netherlands
Stephen Boyd Davis, *Middlesex University,* UK
Kelly Braun, *PayPal,* USA
Christina Brodersen, *University of Aarhus,* Denmark
Lorna Brown, *Microsoft,* UK
A. J. Brush, *Microsoft,* USA
Mike Brzozowski, *Hewlett-Packard,* USA
Sam Bucolo, *Australasian CRC for Interaction Design,* Australia
Stephanie Buisine, *LCPI-ENSAM,* France
Daniela Busse, *SAP,* USA
Kirsten Butcher, *University of Pittsburgh,* USA
Andreas Butz, *Ludwig-Maximilians-Universität Munich,* Germany
Licia Calvi, *Katholieke Universiteit Leuven,* Belgium
Jose Campos, *Universidade do Minho,* Portugal
Stefan Carmien, *University of Colorado, Boulder,* USA
Luis Carriço, *University of Lisbon,* Portugal
Anxo Cereijo Roibas, *University of Brighton,* UK
Angela Chang, *MIT,* USA
Olivier Chapuis, *Laboratoire de Recherche en Informatique,* France
Andrew Chase, *Monterey Bay Aquarium Research Inst.,* USA
Arijit Chatterjee, *Vishwakarma Institute of Technology,* India
Mario Chiesa, *Istituto Superiore Mario Boella,* Italy
Jan Chong, *Stanford University,* USA
Konstantinos Chorianopoulos, *Bauhaus University of Weimar,* Germany
Georgios Christou, *Cyprus College,* Cyprus
Yu Shan Chuang, *Yahoo!,* USA
Elizabeth Churchill, *PARC,* USA
Lillian Clark, *University of York,* UK
James Clawson, *Georgia Institute of Technology,* USA
Gilbert Cockton, *University of Sunderland,* UK
Michael Coen, *MIT,* USA
Nathalie Colineau, *CSIRO,* Australia
Eric Cook, *University of Michigan,* USA
Maria Francesca Costabile, *University of Bari,* Italy
Tim Coughlan, *University of Bath,* UK
Nadine Couture, *LIPSI-ESTIA,* France
Murray Crease, *NRC Institute for Information Technology,* Canada
James Cunningham, *AT&T,* USA
Shiraz Cupala, *Autonomy Systems, LLC,* USA
Raimund Dachselt, *Dresden University of Technology,* Germany
Brinda Dalal, *PARC,* USA
Scott Davidoff, *Carnegie Mellon University,* USA
Janet Davis, *Grinnell College,* USA
Jason Day, *Georgia Institute of Technology,* USA
Marco de Sá, *University of Lisbon,* Portugal
Anind Dey, *Carnegie Mellon University,* USA
Silke Dr. Lang, *ETH Zurich,* Switzerland
Offer Drori, *Hebrew University of Jerusalem,* Israel
Carlos Duarte, *Universidade de Lisboa,* Portugal
Geoffrey Duggan, *University of Manchester,* UK
Elizabeth Dykstra-Erickson, *Kinoma, Inc.,* USA
Kate Ehrlich, *IBM,* USA
Niklas Elmqvist, *INRIA Futurs,* France
David England, *Liverpool John Moores University,* UK
Thomas Erickson, *IBM,* USA
Bernd Ewert, *PayPal,* USA
Robert Farrell, *IBM,* USA
Robert Fish, *Panasonic Technologies,* USA
Geraldine Fitzpatrick, *University of Sussex,* UK
Brooke Foucault, *Northwestern University,* USA
Jean Fox, *United States Bureau of Labor Statistics,* USA
Katrin Franke, *Fraunhofer IPK,* Germany
Scott Frees, *Ramapo College of New Jersey,* USA
Leo Frishberg, *Tektronix, Inc.,* USA
Jon Froehlich, *University of Washington,* USA
Bernd Froehlich, *Bauhaus-Universität Weimar,* Germany
Areti Galani, *University of Glasgow,* UK
Franca Garzotto, *HOC-Politecnico di Milano,* Italy
Francine Gemperle, *MAYA Design,* USA
Werner Geyer, *IBM,* USA
Gloria Gomez, *Swinburne University of Technology,* Australia
Victor Gonzalez, *University of Manchester,* UK
Dorian Gorgan, *Technical University of Cluj-Napoca,* Romania
Ben Gross, *University of Illinois, Urbana-Champaign,* USA
Joshua Gross, *The Pennsylvania State University,* USA
Stefan Grünvogel, *Cologne University of Applied Sciences,* Germany
Agnes Guerraz, *INRIA,* France
Anuj Gujar, *DARTdevices Corporation,* USA
Michelle Gumbrecht, *Stanford University,* USA
Priyanka Gupta, *Auburn University,* USA
Carl Gutwin, *University of Saskatchewan,* Canada
Eben Haber, *IBM,* USA
Michael Haller, *Upper Austria University of Applied Sciences,* Austria
John Halloran, *Coventry University,* UK
Martin Halvey, *University College Dublin,* Ireland
Tracy Hammond, *Texas A&M University,* USA
Gillian Hayes, *Georgia Institute of Technology,* USA
William Hazlewood, *Indiana University, Bloomington,* USA
Daryl Hepting, *University of Regina,* Canada
Shlomo Hershkop, *Columbia University,* USA
Otmar Hilliges, *University of Munich,* Germany
Mark Hindmarch, *University of Central England, Birmingham,* UK
Sebastian Ho, *Philips Design,* Hong Kong
Danny Ho, *University of Maryland,* USA
Laurian Hobby, *Virginia Polytechnic Institute and State University,* USA
Harry Hochheiser, *Towson University,* USA
Hans-Jürgen Hoffmann, *Darmstadt University of Technology,* Germany
Paul Holleis, *University of Munich,* Germany
Michael Horn, *Tufts University,* USA
Dan Horn, *United States Army Research Institute,* USA
Md. Altab Hossain, *Saitama University,* Japan
Jiang Hu, *Stanford University,* USA
Dugald Hutchings, *Bowling Green State University,* USA
Takeo Igarashi, *The University of Tokyo,* Japan
Kori Inkpen, *Dalhousie University,* Canada
Poika Isokoski, *University of Tampere,* Finland
Jhilmil Jain, *Hewlett-Packard,* USA
Monique Janneck, *University of Hamburg,* Germany
Bernard Jansen, *The Pennsylvania State University,* USA
Clinton Jeffery, *University of Idaho,* USA
Eva Jettmar, *Stanford University,* Austria
Qun Jin, *Waseda University,* Japan
Casey Jones, *UCAR,* USA
Eser Kandogan, *IBM,* USA
Karin Kappel, *Vienna University of Technology,* Austria
Kristiina Karvonen, *Helsinki University of Technology,* Finland
Julie Kientz, *Georgia Institute of Technology,* USA
Yosuke Kinoe, *Hosei University,* Sweden
Esin Kiris, *AT&T,* USA
Chris Knowles, *University of Waikato,* New Zealand
Andrew Ko, *Carnegie Mellon University,* USA
Michael Koch, *Technische Universitaet Muenchen,* Germany
Andreas Kohl, *musarte,* Germany
Thomas Költringer, *Vienna University of Technology,* Austria
Hannu Korhonen, *Nokia,* Finland
Matthias Kranz, *University of Munich,* Germany
Christian Kray, *Newcastle University,* UK
Per Ola Kristensson, *Linkoping University,* Sweden
Ernst Kruijff, *Graz University of Technology,* Austria
Manu Kumar, *Stanford University,* USA
Andreas Kunz, *Swiss Federal Institute of Technology Zurich,* Switzerland
Brian Landry, *Georgia Institute of Technology,* USA
Rosa Lanzilotti, *University of Bari,* Italy
Shaun Lawson, *University of Lincoln,* UK
Eric Lee, *RWTH Aachen University,* Germany
Will Lee, *Virginia Polytechnic Institute and State University,* USA
Alpha Lee, *Auckland University of Technology,* New Zealand
Jason Lee, *Virginia Polytechnic Institute and State University,* USA
Gilly Leshed, *Cornell University,* USA
Sandro Leuchter, *Fraunhofer Institute for Information and Data Processing (IITB), Karlsruhe,* Germany
Rock Leung, *University of British Columbia,* Canada
Tobias Ley, *Know-Center,* Austria
Pamela Ludford, *University of Minnesota,* USA
Christopher Lueg, *University of Tasmania,* Australia
Arnold Lund, *Microsoft,* USA
Kris Luyten, *Limburgs Universitair Centrum,* Belgium
Leilah Lyons, *University of Michigan,* USA
Allan MacLean, *Image Semantics Ltd,* UK
Sascha Mahlke, *Berlin University of Technology,* Germany
Alessio Malizia, *University "La Sapienza" of Rome,* Italy
Nikos Manouselis, *Agricultural University of Athens,* Greece
Stefan Marti, *Samsung,* USA
Goran Martinovic, *J.J. Strossmayer University of Osijek,* Croatia
Adrienne Massanari, *University of Washington,* USA
Anijo Mathew, *Mississippi State University,* USA
Agnieszka Matysiak Szostek, *University of Technology Eindhoven,* the Netherlands
Graham McAllister, *Queen's University Belfast,* UK
Scott McCrickard, *Virginia Polytechnic Institute and State University,* USA

CONTINUES NEXT TAB

	8:30	9:00–10:30	11:30–13:00	14:30–16:00	16:30–18:00
CIVIC AUDITORIUM	CHI MADNESS Page 82	**Interactive Session** Recommendations on Recommendations Page 82	**Social Impact Award Talk** Gregory D. Abowd Using Computing Technologies to Face the Challenges of Autism Page 86		**Closing Plenary** Niti Bhan The Mobile as a Post Industrial Platform for Socio-Economic Development Page 92
Room A1		Papers Augmentation, Automation, & Agents Page 82	Papers Usability Evaluation Page 86	Papers Color/Blind Page 89	
Room A2		Papers Distributed Coordination Page 82	Papers Programming By & With End-Users Page 86	Papers Social Influence Page 89	
Room A3		Papers Usability Page 83	Papers Trust & Engagement Page 87	Papers Learning Page 90	
Room A4 & A5		Papers Kids & Family Page 83	Papers Models of Mobile Interaction Page 87	SIG UXD Business Models Page 90	
Room A8		Experience Reports Management Page 84	Experience Reports Research-ish Page 87	SIG Technologies for Autism Page 90	
Room B1 - B4		Papers Alternative Interaction Page 84	Interactive Session The I in CHI Page 88	Interactive Session Toward a Less WIMPy Web Page 90	
Room C2		SIG Current Issues in Assessing & Improving Information Usability Page 84	Interactive Session User Interface Description Languages: XUL & XAML Page 88	ALT.CHI Ideas Lab: Inspirations, Innovations, and Insights Page 90	
Room C4		SIG Evaluating Experience-Focused HCI Page 85	SIG Education Community SIG Page 88	SIG Usability Community SIG Page 91	
Room A6		Course 39 Advanced Data Collection & Analysis Tools for HCI Research & Usability Testing Page 93		Course 40 Ensuring the Usability of Systems that Adapt to Their Users Page 93	
Room A7		Course 41 Keeping the Web in Web 2.0: An HCI Approach to Designing Web Applications (1/2) Page 93	Course 42 Keeping the Web in Web 2.0: An HCI Approach to Designing Web Applications (2/2) Page 93	Course 38 Usability Testing: Usable Communication Techniques Page 94	
Room C3		Course 37 The Top 5 Universal Design Problems & Ways to Solve Them Page 94			
Almaden Ballroom I		Course 34 The Persona Lifecycle Page 94			
Almaden Ballroom II		Course 35 Principles of Interaction Design Page 94		Course 36 Interaction Design Studio Page 95	

= 15 minutes = 30 minutes = unscheduled time

COMMONS

Exhibits, Interactivity, & Info Booth
10:30–14:30

SPECIAL EVENTS

Spotlight on Work-in-Progress Posters (People's Choice)
10:30–11:30
Concourse

Anniversary Party
18:00–19:00
Concourse

■ CHI MADNESS | CIVIC AUDITORIUM

8:30–9:00

SESSION CHAIRS:
Patrick Baudisch, *Microsoft,* USA
Gonzalo Ramos, *University of Toronto,* Canada

CHI's 30 second Madness, which premiered in Montréal, returns to give everyone a lightning speed overview of the days program.

■ INTERACTIVE SESSION | CIVIC AUDITORIUM

RECOMMENDATIONS ON RECOMMENDATIONS

MODERATORS:
Rolf Molich, *DialogDesign,* Denmark
Kasper Hornbæk, *University of Copenhagen,* Denmark
Josephine Scott, *TechSmith Corporation,* USA

This interactive session discusses the quality of recommendations for improving a user interface resulting from a usability evaluation. Problems with the quality of recommendations include recommendations that are not actionable, ones that developers are likely to misunderstand, and ones that may not improve the overall usability of the application. The session will discuss characteristics for useful and usable recommendations, that is recommendations for solving usability problems that lead to changes that efficiently improve the usability of a product. To make the session as useful as possible we have deliberately left 2–3 seats open for people with demonstrated abilities in writing useful and usable recommendations. We intend to fill these seats through a pre-conference competition.

■ PAPERS | ROOM: A1

AUGMENTATION, AUTOMATION, & AGENTS

SESSION CHAIR: Alan Blackwell, *Cambridge University,* UK

PAPER | Demonstrating the Viability of Automatically Generated User Interfaces

Jeffrey Nichols, *IBM,* USA
Duen Horng Chau, Brad A. Myers, *Carnegie Mellon University,* USA

We present the first usability studies showing that automatically generated user interfaces can be superior to human-designed interfaces and enable additional benefits not practical to provide in human-designed interfaces.

EXPERIENCE REPORT | Exploring Augmented Live Video Streams for Remote Participation

Michael Wittkämper, Irma Lindt, Wolfgang Broll, Jan Ohlenburg, Jan Herling, *Fraunhofer FIT,* Germany
Sabiha Ghellal, *Sony NetServices GmbH,* Germany

Augmented video streams present information in the spatial context of a physical environment. In contrast to Augmented Reality, they do not require special equipment, they are scalable to support many users, and their usage is location-independent. In this paper we are exploring the potentials of augmented video streams for remote participation. We present our design considerations for the remote participation user interfaces, describe briefly the realization, and explain the design of three different application scenarios: spectating a pervasive game, observing the quality of a production process, and exploring interactive science exhibits. The paper also discusses our findings on how a good augmented video stream quality can be achieved and which information and control possibilities are required to achieve a viable remote participation interface.

PAPER | Can Customization Affect User Perception of and Performance with Embodied Conversational Agents?

Jun Xiao, John Stasko, Richard Catrambone, *Georgia Institute of Technology,* USA

Shows that allowing users to customize ECA interfaces leads to significant improvement in subjective impressions of the ECAs and objective task performance, thus enabling more effective and affective ECA applications.

■ PAPERS | ROOM: A2

DISTRIBUTED COORDINATION

SESSION CHAIR: John C. Tang, *IBM,* USA

PAPER | Seconds Matter: Improving Distributed Coordination by Tracking and Visualizing Display Trajectories

Mike Fraser, Michael R. McCarthy, Muneeb Shaukat, Phillip Smith, *University of Bristol,* UK

Describes a system that tracks pen movements around displays. Demonstrates that visualizing these movements improves groupware coordination by significantly reducing turn-taking response time.

PAPER | **FASTDash: A Visual Dashboard for Fostering Awareness in Software Teams**

Jacob T. Biehl, *University of Illinois, Urbana-Champaign & Microsoft,* USA
Mary Czerwinski, Greg Smith, George G. Robertson, *Microsoft,* USA

We present a new visualization designed to improve group activity awareness within software development teams. Field study results show improved awareness, reduced reliance on shared artifacts, and increased project-based communication.

PAPER | **A Study of Emergency Response Work: Patterns of Mobile Phone Interaction**

Jonas Landgren, Urban Nulden, *Viktoria Institute,* Sweden

Ethnographic accounts of the role of mobile phones in time-critical organizing. Inspiration for designers of systems and applications for time-critical settings.

■ PAPERS | ROOM: A3

USABILITY

SESSION CHAIR: Dennis Wixon, *Microsoft,* USA

PAPER | **ExperiScope: An Analysis Tool for Interaction Data**

Francois Guimbretiere, Morgan Dixon, *University of Maryland,* USA
Ken Hinckley, *Microsoft,* USA

Our tool simplifies the analysis of data collected during empirical evaluations. It helps experimenters rapidly identify the most common pattern or use and easily compare them.

NOTE | **Context & Usability Testing: User-Modeled Information Presentation in Easy and Difficult Driving Conditions**

Jiang Hu, *Stanford University,* USA
Andi Winterboer, *University of Edinburgh,* UK
Clifford I. Nass, *Stanford University,* USA
Johanna D. Moore, *University of Edinburgh,* UK
Rebecca Illowsky, *Stanford University,* USA

We demonstrate that user modeling plus search & refine is better than search & refine only for in-car information presentation in easy driving conditions, but worse in difficult conditions.

NOTE | **Tracking the Interaction of Users with AJAX Applications for Usability Testing**

Richard Atterer, *University of Munich,* Germany
Albrecht Schmidt, *Fraunhofer IAIS & University of Bonn,* Germany

Our tool offers detailed user interaction logging for AJAX web applications. As users do not have to install software, they are more likely to participate in remote usability tests.

EXPERIENCE REPORT | **Heuristic Evaluations at Bell Labs: Analyses of Evaluator Overlap and Group Session**

Cheryl Coyle, *Bell Laboratories,* USA
Rebecca Iden, *Clemson University,* USA
Xerxes Kotval, Paulo Santos, Heather Vaughn, *Bell Laboratories,* USA

In this paper we are exploring the potentials of augmented video streams for remote participation. We present our design considerations for the remote participation user interfaces, describe briefly the realization, and explain the design of three different application scenarios: spectating a pervasive game, observing the quality of a production process, and exploring interactive science exhibits.

■ PAPERS | ROOM: A4 & A5

KIDS & FAMILY

SESSION CHAIR: John Zimmerman, *Carnegie Mellon University,* USA

PAPER | **Grow and Know: Understanding Record-Keeping Needs for Tracking the Development of Young Children**

Julie A. Kientz, Rosa I. Arriaga, Marshini Chetty, Gillian R. Hayes, Jahmeilah Richardson, Shwetak N. Patel, Gregory D. Abowd, *Georgia Institute of Technology,* USA

Describes a qualitative study exploring record-keeping for young children to help detect developmental delay. Confirms assumptions about rationales and functions for design. Identifies unique themes, potential prototypes, and design guidelines.

PAPER | **Sharing Motion Information with Close Family and Friends**

Frank Bentley, Crysta Metcalf, *Motorola Labs,* USA

Describes how people in close relationships can infer rich contextual information from an ambiguous source with minimal privacy concerns. Benefits those creating mobile context-aware applications.

NOTE | **Comicboarding: Using Comics as Proxies for Participatory Design with Children**

Neema Moraveji, *Microsoft,* China
Jason Li, *Brown University,* USA
Jiarong Ding, *University of Michigan,* USA
Patrick O'Kelley, Suze Woolf, *Microsoft,* USA

Introduces a participatory design method for use with children that scaffolds the idea generation process by using comics. Describes the theory and utility of applying comics to design.

EXPERIENCE REPORTS | ROOM: A8

MANAGEMENT

SESSION CHAIR: Jeremy Ashley, *Oracle,* USA

The Internal Consultancy Model for Strategic UXD Relevance

James Nieters, Subbarao Ivaturi, *Cisco,* USA
Garett Dworman, *TecEd,* USA

Experts in the field of HCI have spoken at length about how to increase the strategic influence of User Experience Design (UXD) teams in industry. Some have offered courses in HCI management , while others have presented recommendations on how to prove a return on investment for usability-related activities. The Cisco UXD Group evolved through several funding and organizational models (central funding, client-funding, distributed teams), and now follows an internal consultancy model. This paper describes the experiences that led to this model and how it has helped increase the strategic influence of UXD within Cisco.

Fast-Tracking Product Innovation

Daniela Busse, *SAP,* USA

This paper describes the coming-of-age of an analytical application that was built using agile development processes, tightly interlinked with an iterative user experience methodology, but at times at odds with the legacy of more rigid development methods such as prescriptive pattern-based design and strictly separated core disciplines. We pioneered a variety of ways to deal with these challenges, most of which focused on empowering the User Experience discipline in decision-making processes, development impact, and in leading the product definition overall. This ensured that innovative forces were least constrained while fast-tracking this product, while still achieving effectiveness, efficiency, and satisfaction of the application's user experience, as evidenced in a series of usability evaluations.

User-Centered Design Gymkhana

Muriel Garreta-Domingo, Magí Almirall-Hill, Enric Mor, *Open University of Catalonia,* Spain

The user-centered design (UCD) Gymkhana is a tool for human-computer interaction practitioners to demonstrate through a game the key UCD methods and how they interrelate in the design process. The target audiences are other organizational departments unfamiliar with UCD but whose work is related to the definition, creation, and update of a product or service.

PAPERS | ROOM: B1-B4

ALTERNATIVE INTERACTION

SESSION CHAIR: Michel Beaudouin-Lafon, *Université Paris-Sud,* France

PAPER | Pressure Marks

Gonzalo Ramos, Ravin Balakrishnan, *University of Toronto,* Canada

Presents design and evaluation of pressure marks – pen strokes where pressure variation enables simultaneous selection and action specification. Designs can enable more fluid and faster pen-based interaction.

PAPER | Augmenting the Mouse with Pressure Sensitive Input

Jared Cechanowicz, *University of Saskatchewan,* Canada
Pourang Irani, *University of Manitoba,* Canada
Sriram Subramanian, *University of Saskatchewan,* Canada

Systematically investigate the design space of uni-pressure and dual-pressure augmented mouse and recommends effective sensor locations, pressure selection mechanisms and pressure control strategies.

PAPER | earPod: Eyes-Free Menu Selection Using Touch Input and Reactive Audio Feedback

Shengdong Zhao, Pierre Dragicevic, Mark Chignell, Ravin Balakrishnan, *University of Toronto,* Canada
Patrick Baudisch, *Microsoft,* USA

Presents design and evaluation of SonicGlide, an eyes-free menu technique using touch input and auditory feedback. Results indicate that SonicGlide is a promising technique comparable in performance to visual menus.

SPECIAL INTEREST GROUP | ROOM: C2

CURRENT ISSUES IN ASSESSING AND IMPROVING INFORMATION USABILITY

MODERATORS:
Stephanie Rosenbaum, *Tec-Ed, Inc.,* USA
Judith Ramey, *University of Washington,* USA

This SIG is an annual forum on human factors of information design, in which we discuss issues selected by the group from the facilitators' list of topics, augmented by attendees' suggestions.

SPECIAL INTEREST GROUP | ROOM: C4

EVALUATING EXPERIENCE-FOCUSED HCI

MODERATORS:
Joseph 'Jofish' Kaye, Kirsten Boehner, *Cornell University,* USA
Jarmo Laaksolahti, Anna Ståhl, *Swedish Institute of Computer Science,* Sweden

In this SIG, participants who are interested in designing, building or currently evaluating experience-focused projects will discuss ways to do so. This SIG is intended to appeal to a broad cross section of the CHI community, ranging from practitioners and developers to computer and social scientists.

AWARD TALK | CIVIC AUDITORIUM

SOCIAL IMPACT AWARD TALK: GREGORY D. ABOWD

SESSION CHAIR: Julie A. Jacko, *Georgia Institute of Technology,* USA

Using Computing Technologies to Face the Challenges of Autism

Gregory D. Abowd, *Georgia Institute of Technology,* USA

In the Fall of 1999, my wife and I learned that our son, Aidan, age 2, had been diagnosed with autism. In the summer of 2003, our second son, Blaise, was also diagnosed with autism, at the age of 3. The CDC estimates that the incidence of autism in the U.S. is 1 in 166, so my wife and I are not alone in having to come to grips with the everyday struggles of this perplexing neurological developmental disability. Since I prescribe to the research philosophy of "scratching your own itch," it is no surprise that I have looked for ways to have my research in ubiquitous computing address the challenges of those impacted by autism. My goal is not to use technology to "cure" autism, but to have it play a vital role in increasing our understanding of that unique human condition and to have it ease the everyday struggles for those who deal with it. In this talk, I will give an overview of my group's research trajectory, reflecting the efforts of a growing community of researchers who are using this real-world health challenge to drive a human-centered research agenda. I will summarize four years of research and give a glimpse of what I think are the important challenges for the next four years, and why I think technologists are an important part of the solution.

PAPERS | ROOM: A1

USABILITY EVALUATION

SESSION CHAIR: Robin Jeffries, *Google,* USA

PAPER | What Happened to Remote Usability Testing? An Empirical Study of Three Methods

Morten Sieker Andreasen, *Systematic A/S,* Denmark
Henrik Villemann Nielsen, *Aalborg University,* Denmark
Simon Ormholt Schroder, *Danske Bank Group,* Denmark
Jan Stage, *Aalborg University,* Denmark

The paper presents results from a systematic comparison of synchronous and asynchronous remote usability testing methods. The results show that these methods are a relevant alternative to conventional usability testing.

PAPER | Usability Testing: What Have We Overlooked?

Gitte G. Lindgaard, *Carleton University,* Canada
Jarinee J. Chattratichart, *Kingston University London,* UK

This paper benefits practitioners most. Evidence provided will likely end the debate about sample size and instigate much research into the role of user tasks on improving usability test results.

PAPER | TouchStone: Exploratory Design of Experiments

Wendy E. Mackay, *INRIA,* France
Caroline Appert, Michel Beaudouin-Lafon, *Université Paris-Sud,* France
Olivier Chapuis, *CNRS,* France
Yang Zhou Du, *Université Paris-Sud,* France
Jean-Daniel Fekete, *INRIA,* France
Yves Guiard, *CNRS,* France

Presents and evaluates an on-line, open source platform for designing, running, and analyzing controlled experiments that compare interaction techniques. Encourages replication and extension of previous research.

PAPERS | ROOM: A2

PROGRAMMING BY & WITH END-USERS

SESSION CHAIR: Les Nelson, *PARC,* USA

PAPER | Making Mashups with Marmite: Towards End-User Programming for the Web

Jeffrey Wong, Jason I. Hong, *Carnegie Mellon University,* USA

Describes a design for an end-user programming system that allows users to create mashups out of web services and data found on the web without doing any programming.

PAPER | VIO: A Mixed-Initiative Approach to Learning and Automating Procedural Update Tasks

John Zimmerman, Anthony Tomasic, Isaac Simmons, Ian Hargraves, Ken Mohnkern, Jason Cornwell, Robert McGuire, *Carnegie Mellon University,* USA

This paper contributes a novel human-agent interaction design that allows agents with little training to reduce task completion time. It benefits society by reducing mundane office work.

PAPER | Storytelling Alice Motivates Middle School Girls to Learn Computer Programming

Caitlin Kelleher, Randy Pausch, Sara Kiesler, *Carnegie Mellon University,* USA

In a study comparing middle school girls' experiences using Storytelling Alice and Generic Alice, we found that both systems are equally educational but Storytelling Alice is more motivating.

■ PAPERS | ROOM: A3

TRUST & ENGAGEMENT

SESSION CHAIR: Terry Winograd, *Stanford University,* USA

PAPER | **MultiView: Improving Trust in Group Video Conferencing Through Spatial Faithfulness**

David Nguyen, John Canny, *University of California, Berkeley,* USA

Experimentally compares trust formation in video conferencing systems with face-to-face communication. Offers insight on remote collaboration by expanding understanding of the effect of spatial faithfulness on trust formation.

PAPER | **Presence and Engagement in an Interactive Drama**

Steven Dow, Manish Mehta, Ellie Harmon, Blair MacIntyre, *Georgia Institute of Technology,* USA
Michael Mateas, *University of California, Santa Cruz,* USA

Presents a qualitative study of three different interfaces to the interactive drama, Façade. Shows that immersive technologies may lead to presence, but do not necessarily lead to more engaging play.

PAPER | **Engaging Constable: Revealing Art Through New Technologies**

Dirk vom Lehn, Jon Hindmarsh, Paul Luff, Christian Heath, *King's College London,* UK

Examines the deployment of touch-screen and gesture interfaces in an art exhibition and indicates how detailed ethnographic/video-based studies may inform the design and deployment of novel interfaces in museums.

■ PAPERS | ROOM: A4 & A5

MODELS OF MOBILE INTERACTION

SESSION CHAIR: Robert St. Amant, *North Carolina State University,* USA

PAPER | **Modeling Human Performance of Pen Stroke Gestures**

Xiang Cao, *University of Toronto,* Canada
Shumin Zhai, *IBM,* USA

The paper constructs and tests elemental and total models of pen stroke gesture articulation. The models and empirical findings can support research, design, and evaluation of pen gesture interfaces.

PAPER | **Keystroke-Level Model for Advanced Mobile Phone Interaction**

Paul Holleis, Friederike Otto, Heinrich Hussmann, *University of Munich,* Germany
Albrecht Schmidt, *Fraunhofer IASI, & University of Bonn,* Germany

Extends and updates the Keystroke-Level Model to advanced mobile phone interactions. Gives application designers and implementers a means to estimate user performance of designs and design alternatives before implementing them.

PAPER | **An Extended Keystroke Level Model (KLM) for Predicting the Visual Demand of In-Vehicle Information Systems**

Michael Pettitt, Gary Burnett, *University of Nottingham,* UK
Alan Stevens, *TRL,* UK

Describes an extended keystroke level model (KLM) for evaluating the visual demand of in-vehicle user interfaces. Intends to assist designers of in-car interfaces in early stages of design.

■ EXPERIENCE REPORTS | ROOM: A8

RESEARCH-ISH

SESSION CHAIR: Erik Stolterman, *Indiana University,* USA

Toward Systematic Research of Multimodal Interfaces of Non-Desktop Work Scenarios

Victoria Carlsson, Bernt Schiele, *TU Darmstadt,* Germany

Non-desktop workplaces often generate challenging multitasking situations for a user attempting to interact with supporting technology. Multimodal applications promise great advantages in this type of context. However, current research does not provide enough knowledge for the ergonomic optimization of multimodal interfaces. This paper discusses a possible strategy for advancing towards systematic research, and describes a preliminary experiment attempting to evaluate a real scenario using this strategy.

Thinking But Not Seeing: Think-Aloud for Non-Sighted Users

Philip Strain, *Queens University, Belfast,* UK
A. Dawn Shaikh, *Wichita State University,* USA
Richard Boardman, *Google,* USA

This paper discusses some of the methodological challenges that can be encountered when usability testing with visually impaired users. These include (1) the need for customized test environments, (2) the potential for audio interference between screen reader output and the moderator to participant dialogue, and (3) the difficulty for observers inexperienced in accessibility technology. In this paper we outline several techniques for dealing with these challenges, including some variations on traditional think-aloud techniques that are useful when a usability participant is using a screen reader.

Designing Software for Consumers to Easily Set Up a Secure Home Network

Brenton Elmore, *Cisco-Linksys, LLC,* USA
Subbarao Ivaturi, *Cisco Systems, Inc.,* USA
Stuart Hamilton, *Cisco-Linksys, LLC,* USA

Home networking continues to expand into a collection of computers and networked devices that are becoming more complex to setup and manage. A central design theme influenced the software solution: If a networking expert was advising a user on how to set up, configure, and secure a home network, what would this person tell the user to do? Results indicated animations, good default settings, and a network map increased the user success rate for network setup.

Early Research Strategies in Context: Adobe Photoshop Lightroom

Grace Kim, *Adobe Systems,* USA

In January of 2006, Adobe Systems introduced the public beta of Lightroom, a digital imaging solution designed specifically for professional photographers and serious amateurs that offers a modular, task-based environment that flexibly supports a complete photography workflow. This paper describes two foundation-setting research strategies pursued during the early concept and definition phases of Lightroom To emphasize the context in which specific research approaches were crafted rather than simply executed, the term research strategies is used in favor of research methods.

■ INTERACTIVE SESSION | ROOM: B1-B4

THE I IN CHI

MODERATORS:
Lars Erik Holmquist, *Swedish Institute of Computer Science,* Sweden
Tom Igoe, *ITP, NYU,* USA

PANELISTS:
Patrick Baudisch, *Microsoft,* USA
Elizabeth Goodman, *University of California, Berkeley,* USA
Florian 'Floyd' Mueller, *The University of Melbourne,* Australia
Michael Naimark, *University of Southern California,* USA
Phoebe Sengers, *Cornell University,* USA
Ben Shneiderman, *University of Maryland,* USA

Members of the CHI Interactivity jury and other experts discuss this year's interactive demonstrations. The panel will be an opportunity to reflect on interactivity – in a broad sense – and its role in the field of human-computer interaction.

■ INTERACTIVE SESSION | ROOM: C2

USER INTERFACE DESCRIPTION LANGUAGES: XUL & XAML

MODERATOR:
John 'Scooter' Morris, *University of California, San Francisco,* USA

PANELISTS:
Scott Stanfield, *Vertigo Software,* USA
Mark Finkle, *Mozilla Corporation,* USA

XML-based user interface description languages are now in wide deployment: Adobe's Flex provides an XML-based language (MXML); Microsoft has released WPF, which supports XAML; and Mozilla's Firefox (and other products) supports XUL. These languages (as well as UIML and UsiXML) all share common characteristics: they are XML-based, they can be used to specify a user interface, and they can be "compiled" into a user interface that only requires some form of "glue" code to link elements and provide behaviors that are dependent on other elements. These languages provide HCI professionals with an opportunity to prototype user interfaces and hand those prototypes off to be directly integrated into the functioning system. This provides a cleaner separation of concerns, but also allows the interaction designer/engineer to become a more integral part of the iterations in the development cycle. This invited session will feature presentations by experts on XAML and XUL. Each presenter will outline their language and where that language is used, focusing on the strengths and weaknesses of their environment. Then each presenter will build a "toy" user interface that will be provided to them in advance using their respective languages. The session will end with a brief opportunity for each presenter to extol the virtues of their approach and significant time for audience Q&A.

■ SPECIAL INTEREST GROUP | ROOM: C4

EDUCATION COMMUNITY SIG

MODERATORS:
Charles van der Mast, *Delft University of Technology,* the Netherlands
Scott Berkun, *Scott Berkun Consulting,* USA
Alan Dix, *Lancaster University,* UK
Stefano Levialdi, *University of Rome, Sapienza,* Italy

For a few years several public databases have opened with online material for undergraduate, and graduate education in Human-Centered Computing, Human-Computer Interaction, and related areas. The list of databases will be shared. Who are using these databases? What kind of content is available? How are professors and students using these materials? A survey will be given. We are looking for your experiences. Both positive and negative experiences will be discussed, and new requirements may be generated.

PAPERS | ROOM: A1

COLOR/BLIND

SESSION CHAIR: Steve Feiner, *Columbia University,* USA

PAPER | Towards Developing Assistive Haptic Feedback for Visually Impaired Internet Users

Ravi Kuber, Wai Yu, Graham McAllister, *Queens University Belfast,* UK

A novel approach is proposed for designing assistive haptic feedback for visually-impaired Internet users. Preliminary results are reported which will inform a haptic vocabulary, assisting development of inclusive browsing interfaces.

NOTE | An Interface to Support Color Blind Computer Users

Luke Jefferson, Richard Harvey, *University of East Anglia,* UK

Presents and evaluates an adaptive technique for improving accessibility to color displays by color blind computer users. The technique significantly improves the legibility of color images for color blind viewers.

NOTE | An Adaptive and Adaptable Approach to Enhance Web Graphics Accessibility for Visually Impaired People

Chui Chui Tan, Wai Yu, Graham McAllister, *Queen's University Belfast,* UK

Describes an adaptive and adaptable approach that analyzes user's preferences, graphical content, and assistive technologies. Presents accessible graphics-based Web content to visually impaired people according to their profiles and needs.

EXPERIENCE REPORT | Music Organisation Using Colour Synaesthesia

Michael Voong, Russell Beale, *Birmingham University,* UK

The movement of music from physical discs to digital resources managed on a computer has had an effect on the listening habits of users. We explore using the potential of the innate synaesthesia that some people report feeling between colour and mood in a novel interface that enables a user to explore their music collection and create musical playlists in a more relevant way. We show that there is a reasonable degree of consistency between users' associations of colour and music and show that an indirect descriptor can aid in the recall of music via mood, making playlist generation a simpler and more useful process.

PAPERS | ROOM: A2

SOCIAL INFLUENCE

SESSION CHAIR: Elizabeth F. Churchill, *Yahoo!,* USA

PAPER | Modeling the Impact of Shared Visual Information on Collaborative Reference

Darren Gergle, *Northwestern University,* USA
Carolyn P. Rosé, Robert E. Kraut, *Carnegie Mellon University,* USA

We present a computational description of collaborative reference that can be applied to the development of conversational agents, applications that dynamically track collaboration, and dialogue managers for natural language interfaces.

NOTE | Similarity is More Important than Expertise: Accent Effects in Speech Interfaces

Nils Dahlbäck, *Linköping University,* Sweden
Qianying Wang, Clifford I. Nass, *Stanford University,* USA
Jenny Alwin, *Linköping University,* Sweden

Experimental study of users' voice interface accent preferences, showing that even when participants have an alternative to focus on, i.e. the speakers' presumptive competence, they nonetheless opt for similarity-attraction.

NOTE | Provoking Sociability

Brooke Foucault, *Northwestern University,* USA
Helena M. Mentis, *The Pennsylvania State University,* USA
Phoebe Sengers, *Cornell University,* USA
Devon Welles, *Intel,* USA

This paper demonstrates that deviance can be used as a resource to achieve positive social outcomes by discussing the outcomes of a study where co-workers interacted with a gossiping agent.

PAPER | Social Responses to Virtual Humans: Implications for Future Interface Design

Catherine Zanbaka, Amy Ulinski, Paula Goolkasian, Larry Hodges, *University of North Carolina, Charlotte,* USA

Presents results of an experimental study illustrating virtual humans can affect task performance through social influence. Highlights the importance of understanding human-virtual human social interactions when designing virtual human interfaces.

■ PAPERS | ROOM: A3

LEARNING

SESSION CHAIR: Michael Twidale, *University of Illinois,* USA

PAPER | Hard Lessons: Effort-Inducing Interfaces Benefit Spatial Learning

Andy Cockburn, *University of Canterbury,* New Zealand
Per Ola Kristensson, *Linköpings Universitet,* Sweden
Jason Alexander, *University of Canterbury,* New Zealand
Shumin Zhai, *IBM,* USA

Shows that spatial memory is improved by effortful interfaces. Describes a "frost-brushing" training interface that forces users to either recall items from memory or 'brush the frost' for visual guidance.

PAPER | Multiple Mice for Retention Tasks in Disadvantaged Schools

Udai S. Pawar, *Microsoft,* India
Joyojeet Pal, *University of California, Berkeley,* USA
Rahul Gupta, Kentaro Toyama, *Microsoft,* India

A 238-student study of various single- and multi-mouse configurations for an educational retention-based learning application in rural developing-world schools. Results are complex, but suggest shared use is as effective as one-student-per-PC.

PAPER | Strategies for Accelerating On-Line Learning of Hotkeys

Tovi Grossman, Pierre Dragicevic, Ravin Balakrishnan, *University of Toronto,* Canada

Presents new designs for accelerating the learning of hotkeys, and their experimental evaluation. The new designs can be used to improve hotkey use in any GUI application.

■ SPECIAL INTEREST GROUP | ROOM: A4 & A5

UXD BUSINESS MODELS

MODERATORS:
Garett Dworman, *Tec-Ed, Inc.,* USA
James Nieters, Subbarao Ivaturi, *Cisco,* USA

This SIG will facilitate a systematic exploration by attendees whose organizations follow, or are considering, one or more UXD models. It will result in a broader understanding for managers of UXD teams on how they can optimally structure their internal UXD functions, given their unique corporate environments and cultures.

■ SPECIAL INTEREST GROUP | ROOM: A8

TECHNOLOGIES FOR AUTISM

MODERATORS:
Daniel Gillette, *Greenleaf Medical,* USA
Gillian R. Hayes, Gregory D. Abowd, *Georgia Institute of Technology,* USA
Justine Cassell, *Northwestern University,* USA
Rana el Kaliouby, *MIT,* USA
Dorothy Strickland, *Virtual Reality Aids,* USA
Patrice Weiss, *University of Haifa,* Israel

This SIG aims to bring together those who study the use of technology by and for individuals with autism, those who design and develop new technologies, and those who are curious about getting involved. Areas that this SIG will consider include assistive technologies; tools for data collection and analysis; educational software; virtual reality rehabilitation environments; identifying users; need finding; user-centered collaborative design processes that include individuals who cannot speak or write; and product assessment.

■ INTERACTIVE SESSION | ROOM: B1–B4

TOWARD A LESS WIMPY WEB

MODERATORS:
Tom Foremski, *SiliconValleyWatcher.com,* USA
Bill Lucas, *Maya Design,* USA

PANELISTS:
Aza Raskin, *Humanized, Inc.,* USA
Blake Ross, *Firefox/Parakey,* USA

This interactive session will start with a pair of position statements and end with a facilitated discussion. The participants represent two teams of people with accordant goals. Collectively, they call into question the recent wave of Web offerings that replicate traditional desktop applications. Their presentations will address human cognitive needs and basic usability problems with computers today. In turn, they will advocate the creation of "humane interfaces." Asking, "What does a true Web platform look like and why is it different from anything we've used before?"

■ ALT.CHI | ROOM: C2

IDEAS LAB: INSPIRATIONS, INNOVATIONS, AND INSIGHTS

SESSION CHAIR: Joseph 'Jofish' Kaye, *Cornell University,* USA

Table Tennis for Three – The Video (12 min)

Florian 'Floyd' Mueller, Martin Gibbs, *The University of Melbourne,* Australia

We aim to demonstrate that a networked exerting leisure game for three players is possible and can be enjoyed by players. We believe it can be inspiring for other CHI researchers who design interfaces that aim to support social interactions between geographically distant participants.

Design of an Ecosystem for Ad-Hoc End-User Prototyping (12 min)

Seung Chan Lim, Peter Lucas, *MAYA Design,* USA

Our goal with the Javascript Dataflow Architecture (JDA) is to bring this spirit of end-user innovation back to the Web. We aim to achieve this while fully harnessing the powerful modern day Web technologies. The architecture fosters the growth of a marketplace of components and lends itself nicely to the ad-hoc copy-paste-and-tweak paradigm of end-user rapid prototyping.

Arduino: An Open Electronics Prototyping Platform (12 min)

David Mellis, *Copenhagen Institute of Interaction Design,* Denmark
Massimo Banzi, *Tinker.it!,* Italy
David Cuartielles, *Malmö University,* Sweden
Tom Igoe, *ITP, NYU,* USA

Arduino is a platform for prototyping interactive objects using electronics. It consists of both hardware and software: a circuit board that can be purchased at low cost or assembled from freely-available plans and an open-source development environment and library for writing code to control the board. Arduino comes from a philosophy of learning by doing and strives to make it easy to work directly with the medium of interactivity.

RadioActive: Enabling Persistent Mobile Communications for Groups (12 min)

Aaron Zinman, Judith Donath, *MIT,* USA

RadioActive is a technological and interaction design for persistent mobile audio chat spaces. Our work focuses on strategies to navigate and structure large asynchronous audio discussions. In this paper we examine related work, describe our approach, highlight a conceptual framework for navigation, discuss our evaluations, and provide suggestions for future research.

Tug n' Talk: A Belt Buckle for Tangible Tugging Communication (12 min)

Drew Harry, Matt Adcock, *MIT,* USA
Matthew Boch, *Harvard University,* USA
Vanessa Harden, Raul-David V. Poblano, *MIT,* USA

Tug n' Talk is a prototype of a tuggable communication device, allowing for intimate communication between two individuals using tugging as a metaphor. In this paper we discuss the advantages of tugging over other haptic communication modalities, such as vibration, with a focus on input/output spaces and meaning construction.

Qualities of Perceived Aesthetic in Data Visualization (12 min)

Nick Cawthon, Andrew Vande Moere, *University of Sydney,* Australia

Through results gathered from a large-scale online survey, this paper empirically investigates the assessment of aesthetic in 11 common data visualization techniques. Visualizations represented in this study were generated from an identical hierarchical dataset and visually normalized to avoid unwanted implications of default application parameters or personal preferences.

Using Equations in Concept Maps to Graphically Build Knowledge Bases (12 min)

Aaron Spaulding, Vinay K. Chaudhri, Bonnie. E. John, Gus Prevas, Sunil Mishra, John Pacheco, *SRI International,* USA

In this paper we describe a graph based user interface to connect equations to richly defined concepts within a knowledge base. This makes it possible to support reasoning about the concepts referenced in an equation.

■ SPECIAL INTEREST GROUP | ROOM: C4

USABILITY COMMUNITY SIG

MODERATORS:
Carol Righi, Janice James, *Perficient,* USA

This SIG is sponsored by the CHI 2007 and CHI 2008 Usability Community chairs to collect feedback and discuss how CHI can best serve the Usability Community, both at the annual conference and in other activities.

CLOSING PLENARY | CIVIC AUDITORIUM

THE MOBILE AS A POST INDUSTRIAL PLATFORM FOR SOCIO-ECONOMIC DEVELOPMENT

NITI BHAN, *BHAN LLC*, USA, SINGAPORE, & INDIA

Abstract: The internet is the foundation of the world wide web of humanity online. Today, there is no such facility on the cell phone platform comparable as yet to the great degree of usability and freedom of movement that browsing currently offers those of us in "broadband nations". At the same time there is a great digital divide between the haves and the have nots. Many have tried with different degrees of success to bridge this chasm, because they all see the potential for growth that unleashing the flow of wealth to and from the bottom-most segments of socioeconomic and geopolitical strata, can effect real change in the standard of living for a great majority on our planet rather than just the fortunate few.

The numbers of cell phones sold in the past two years alone in the unexpected markets of the bottom of the pyramid, that includes a surprising numbers of luxury or high end mobiles, far more than any market survey could have predicted even two years ago, is a clear signal of the shift in economic activity. Look at what is already happening now in Bangladesh – microfinance and cell phones; South Africa – banking the unbanked through their cell phones; Uganda – microentreprise using the cell phone and more.

The challenge before us today is to ask "What if...?" in the best traditions of creativity and imagination and visualize a near future, within the constraints of existing or installed technology, that could bridge this digital divide and develop the applications and the foundation to provide connectivity, commerce, and community on the mobile platform. What kind of difference could this make?

Biography: Niti Bhan is an emerging markets strategy consultant with over 15 years of experience in conceiving, developing, and implementing strategies for entering new markets for companies such as Hewlett-Packard, Bank of America, Phillips, Scientific Atlanta, Creative Labs, HCL and the Cybermedia group of publications.

She is the founder of Bhan LLC, a boutique San Francisco based strategy think tank that offers early stage research and development of products and services catering to the overlooked markets in developing nations. She partners with Readymade, a product design and innovation consulting studio based in Pretoria, South Africa, Spire Innovation of Vancouver, Canada, Zago LLC of New York and Rio de Janeiro, and Brazil to offer new product design and development for new businesses, products or messaging.

Her education includes a Bachelor of Engineering from Bangalore University, an MBA in Strategy & Marketing as well as significant education in the graduate program of product design at the National Institute of Ahmedabad and the Institute of Design, IIT, Chicago. Her articles on design, strategy and innovative business practices have been published in BusinessWeek, Core77, New Design magazine, and on her blog.

COURSE 39 | ROOM: A6

ADVANCED DATA COLLECTION AND ANALYSIS TOOLS FOR HCI RESEARCH AND USABILITY TESTING

9:00–13:00

INSTRUCTORS:
Lucas P.J.J. Noldus, *Noldus Information Technology BV,* the Netherlands
Tobias Heffelaar, *Noldus Information Technology BV,* the Netherlands

Benefits: This course offers participants an intensive half-day course in video technology, software tools and integrated solutions for field and lab studies. After this course you will be up to date with the latest proven techniques, tools and best practices for data collection in HCI research or usability testing. If your next project is a field study, a focus group or a usability lab test, attend this course to learn how to select the right tool for the job and how to put it to optimal use.

Intended Audience: HCI researchers and usability practitioners (usability engineers, UI designers, usability testers) working in academia or industry.

COURSE 40 | ROOM: A6

ENSURING THE USABILITY OF SYSTEMS THAT ADAPT TO THEIR USERS

14:30–16:00

INSTRUCTOR:
Anthony Jameson, *DFKI,* Germany

Benefits: You will acquire active, in-depth understanding of the usability issues that arise in the design of systems that adapt to their users – ranging from personalized e-commerce web sites to adaptive user interfaces – and of ways of dealing with these issues.

Intended Audience: Practitioners and researchers who are or will be involved in the design of systems that adapt to their users.

COURSE 41 | ROOM: A7

KEEPING THE WEB IN WEB 2.0: AN HCI APPROACH TO DESIGNING WEB APPLICATIONS

9:00–10:30

INSTRUCTORS:
Steffen Meschkat, *Google,* USA
Josh Mittleman, *Google,* USA

Benefits: We observe a key difference between the interaction paradigms of web applications and traditional, desktop applications: the universal and uniform presence of history and bookmarks. We explain the AJAX architecture for web applications and how it provides the interactive quality of desktop applications, but also how effective use of browser history and bookmarks, which comes (almost) for free in classical web applications, has to be built explicitly into AJAX applications. In part I, we use the user interface of complete web applications such as Google Maps, Spreadsheets, and Gmail, as illustrations for a taxonomy of application state; and discuss the semantics, consequences, and adequate uses of each type of state. The discussion centers on concepts that underlie software design, but includes no actual code.

Intended Audience: Part I requires a general understanding of software applications.

COURSE 42 | ROOM: A7

KEEPING THE WEB IN WEB 2.0: AN HCI APPROACH TO DESIGNING WEB APPLICATIONS (PREREQUISITE COURSE 41)

11:30–13:00

INSTRUCTORS:
Steffen Meschkat, *Google,* USA
Josh Mittleman, *Google,* USA

Benefits: In part II we use simple coding examples to further illustrate the principles derived in part I, introducing and discussing javascript and DHTML language and library features as we encounter them. Participants will be equipped with conceptual tools to effectively and systematically design modern web applications combining the usability advantages of desktop applications with those of web applications; and with technical understanding of the building blocks and capabilities of AJAX applications to guide learning to apply these technologies.

Intended Audience: Part II is more technical: participants should have a working knowledge of at least one modern programming language, and should be familiar with the concepts of HTML, HTTP, and CGI programming. We recommend against attending part II without part I.

COURSE 38 | ROOM: A7

USABILITY TESTING: USABLE COMMUNICATION TECHNIQUES

14:30–16:00

INSTRUCTOR:
Rolf Molich, *DialogDesign,* Denmark

Benefits: Even a perfectly executed usability test is worthless if test results are poorly communicated to the people who are responsible for making beneficial changes to the product. This course looks at the pitfalls in this seemingly simple process. It describes the KJ-method for effectively communicating usability findings. Participants also evaluate a sample usability test report containing frequently occurring communication problems.

Intended Audience: Usability professionals at all levels who want to improve their usability problem communication abilities.

COURSE 37 | ROOM: C3

THE TOP 5 UNIVERSAL DESIGN PROBLEMS AND WAYS TO SOLVE THEM

9:00–13:00

INSTRUCTORS:
Ann Chadwick-Dias, *Fidelity Investments,* USA
Marguerite Bergel, *Fidelity Investments,* USA
Tom Tullis, *Fidelity Investments,* USA

Benefits: Applying existing accessibility standards (WCAG, Section 508) to the design and development of Web sites can be challenging. Many of the standards leave ample room for interpretation. This course will examine the top 5 universal design problems we have encountered in our work along with potential solutions. We will review each design problem using assistive technologies to understand what challenges exist and will then examine solutions to understand how they improve accessibility. This is an applied course that will allow you to return to your organization with practical knowledge of what universal design means and how to achieve it.

Intended Audience: Web Designers, Developers, & Usability Practitioners

COURSE 34 | ALMADEN BALLROOM I

THE PERSONA LIFECYCLE

9:00–16:00

INSTRUCTORS:
Tamara Adlin, *Adlin Inc.,* USA
John Pruitt, *Microsoft,* USA
Jonathan Grudin, *Microsoft,* USA

Benefits Learn why personas can be an effective technique for design, development, and testing, when they are likely to be useful, and how to use them effectively. Get hands-on experience with practical persona creation and use methods.

Intended Audience: The course is intended for those who are or might be engaged in team-based design and development, those who teach design methods, and those interested in the psychology of design.

COURSE 35 | ALMADEN BALLROOM II

PRINCIPLES OF INTERACTION DESIGN

9:00–13:00

INSTRUCTOR:
Shane Morris, *Echo Interaction Design,* Australia

Benefits: This course introduces and explores many of the fundamental principles that underlie the practice of interaction design and user interface design. It is by consciously or unconsciously drawing on these principles that practicing designers are able to efficiently produce excellent designs, and minimize redesign. Nevertheless, apart from some 'heuristics', many practitioners have not been formally introduced to these principles.

This course gives participants a 'kick start' towards master status by exploring the underlying principles of interaction design through examples.

Intended Audience: This course is for designers and evaluators of all forms of user interfaces, including graphical user interfaces, internet applications and physical devices. The course material is aimed at an intermediate level audience. No specific prior knowledge is assumed.

COURSE 36 | ALMADEN BALLROOM II

INTERACTION DESIGN STUDIO

14:30–16:00

INSTRUCTOR:
Shane Morris, *Echo Interaction Design,* Australia

Benefits: The 'design studio' plays an important role in the education of designers from many disciplines. Acknowledging that design theory and formal techniques are only half of the equation, design studios provide students with an environment where they are able to experiment, explore, access and defend their own work. In doing so they build their own design 'intuition' – the part that can't be learnt from books.

Acknowledging that many people who have come to the field of interaction design have not come from a design background, this course aims to reproduce, for a very short time, the environment of the design studio.

Interaction Design Studio provides a dynamic, fun and most importantly safe environment for practicing user interface designers, interaction designers and information architects to explore and build their design intuition, hone their ability to generate design solutions and critique and defend their own work, and the work of others – away from the demands of clients, colleagues and production deadlines. There are no formal lectures, no formal content – just the chance to develop new and existing skills through fun, fast-paced design exercises, active dialogue and the sharing of ideas in a safe environment. This is place where experienced designers can take risks and make mistakes all in the name of building their skills, knowing that no project deadlines will be harmed in the creation of their designs.

WARNING: This course contains crayons.

Intended Audience: This course is for experienced interaction designers, user interface designers and information architects. Beginners may find it difficult due to be productive and gain the most benefit from this course, given the fast pace and lack of formal materials.

Notes

WORK IN PROGRESS REVIEWERS – CONTINUED

David McGookin, *University of Glasgow,* UK
Sean McNee, *Attenex Corporation,* USA
Yevgeniy Medynskiy, *Georgia Institute of Technology,* USA
M. Milano, USA
Allen Milewski, *Monmouth University,* USA
Andrew Miller, *Schematic,* USA
Rob Miller, *MIT,* USA
Barbara Millet, *University of Miami,* USA
Karyn Moffatt, *University of British Columbia,* Canada
Andrew Monk, *University of York,* UK
Scooter Morris, *University of California, San Francisco,* USA
Ingrid Mulder, *Telematica Instituut,* the Netherlands
Guadalupe Muñoz, *University Rey Juan Carlos,* Spain
Cosmin Munteanu, *University of Toronto,* Canada
Elizabeth (Betty) Murphy, *United States Census Bureau,* USA
Adity Mutsuddi, *Indiana University,* USA
Brad Myers, *Carnegie Mellon University,* USA
Miguel Nacenta, *University of Saskatchewan,* Canada
Kristine Nagel, *Clayton State University,* USA
Les Nelson, *PARC,* USA
Tao Ni, *Virginia Polytechnic Institute and State University,* USA
Jeffrey Nichols, *Carnegie Mellon University,* USA
Lorraine Normore, USA
Ian Oakley, *Electronics and Telecommunications Research Institute,* Republic of Republic of Korea
Christoph Obermair, *University of Salzburg,* Austria
Masao Ohira, *Nara Institute of Science and Technology,* Japan
Jacki O'Neill, *XRCE,* UK
Robert Orr, *Northrop Grumman IT,* USA
Amit Pande, *Oracle,* India
Erin Panttaja, USA
Chris Parnin, *Georgia Institute of Technology,* USA
Timo Partala, *University of Oulu,* Finland
Fabio Paternò, *ISTI-CNR,* Italy
Celeste Paul, *User-Centered Design, Inc.,* USA
Monica Perrero, *Telecom Italia,* Italy
Mårten Pettersson, *Malmö University,* Sweden
Emmanuel Pietriga, *Institut National de Recherche en Informatique et en Automatique,* France
Niels Pinkwart, *TU Clausthal,* Germany
Bernd Ploderer, *University of Salzburg,* Austria
Barry Po, *Cogneto Development Inc.,* Canada
Christopher Power, *University of York,* Canada
Venkatesha Prasad, *Indian Institute of Science,* India
Scott Preece, *Motorola Inc,* USA
Pardha Pyla, *Virginia Polytechnic Institute and State University,* USA
Wen Qi, *University of Technology Eindhoven,* the Netherlands
Chris Quintana, *University of Michigan,* USA
Kari-Jouko Räihä, *University of Tampere,* Finland
Jukka Raisamo, *University of Tampere,* Finland
Devina Ramduny-Ellis, *Lancaster University,* UK
Rebecca Randell, *City University,* UK
Janet Read, *University of Central Lancashire,* UK
Stuart Reeves, *University of Nottingham,* UK
Michael Richmond, *IBM,* USA
Claudia Roda, *American University of Paris,* France
Andres Rodriguez, *LIFIA Universidad Nacional de La Plata,* Argentina
Michael Rohs, *TU Berlin,* Germany
John Rooksby, *Lancaster University,* UK
Patrick Roth, *University of Geneva,* Switzerland
Elisa Rubegni, *University of Siena,* Italy
Nithya Sambasivan, *Georgia Institute of Technology,* USA
Fred Sampson, *IBM,* USA
Jaime Sánchez, *University of Chile,* Chile
Carmen Santoro, *ISTI-CNR,* Italy
Aleksandra Sarcevic, *Rutgers University,* USA
Dmitry Satin, *UsabilityLab (IT-Online),* Russia
Leonie Schaefer, *Fraunhofer Institute FIT,* Germany
Claudia Schremmer, *CSIRO,* Australia
Karen Schrier, *MIT,* USA
Staffan Schroder, *Boss Media AB,* Sweden
Peter Scupelli, *Carnegie Mellon University,* USA
Carl Seglem, *Wily Technology,* USA
N. Sadat Shami, *Cornell University,* USA
Dr. Udai Shanker, *M. M. M. Engineering College,* India
Erika Shehan, *Georgia Institute of Technology,* USA
Hal Shubin, *Interaction Design, Inc.,* USA
Vikash Singh, *Mississippi State University,* USA
Gurminder Singh, *Naval Postgraduate School,* USA
Grant Skousen, *7i design,* USA
David Smith, *College of Technology, CUNY,* USA
John Smith, *Queen's University,* Canada
Suzanne Soroczak, *University of Washington,* USA
William Soukoreff, *York University,* Canada
Rick Spencer, *Microsoft,* USA
Amanda Spink, *Queensland University of Technology,* Australia
Robert St. Amant, *North Carolina State University,* USA
William Stevenson, *The Pennsylvania State University,* USA
Osamuyimen Stewart, *IBM,* USA
Hank Strub, *Siemens,* USA
Wolfgang Stuerzlinger, *York University,* Canada
Christian Sturm, *Universidad Tecnológica de la Mixteca,* Mexico
Daniel Su, *The University of Nottingham, Malaysia,* Malaysia
Sriram Subramanian, *University of Saskatchewan,* Canada
Bongwon Suh, *PARC,* USA
S. Shyam Sundar, *The Pennsylvania State University,* USA
Gerd Szwillus, *Universität Paderborn,* Germany
Atau Tanaka, *Sony,* France
Arthur Tang, *University of Central Florida,* USA
Karen Tang, *Carnegie Mellon University,* USA
Charlotte Tang, *University of Calgary,* Canada
Anthony Tang, *University of British Columbia,* Canada
Monica Tentori, *CICESE,* Mexico
Patrice Terrier, *Université Toulouse,* France
Jakob Tholander, *Södertörn University College,* Sweden
John Thomas, *IBM,* USA
Ramayah Thurasamy, *Universiti Sains Malaysia,* Malaysia
Martin Tomitsch, *Vienna University of Technology,* Austria
Michael Toomim, *University of Washington,* USA
Quan Tran, *Georgia Institute of Technology,* USA
Erin Treacy, *Tufts University,* USA
Jennifer Trich Kremer, *The Pennsylvania State University Erie, The Behrend College,* USA
Priyamvada Tripathi, *Arizona State University,* USA
Philippe Truillet, *IRIT-CNRS,* France
Manfred Tscheligi, *University of Salzburg,* Austria
Joe Tullio, *Carnegie Mellon University,* USA
Susan Turner, *Napier University,* UK
Charles VanderMast, *Delft University of Technology,* the Netherlands
Agnese Vellar, *Telecom Italia,* Italy
Gina Venolia, *Microsoft,* USA
Colin Venters, *University of Manchester,* UK
Gualtiero Volpe, *University of Genova,* Italy
Shahtab Wahid, *Virginia Polytechnic Institute and State University,* USA
Jingtao Wang, *University of California, Berkeley,* USA
Carolyn Wei, *University of Washington,* USA
Karl-Heinz Weidmann, *Fachhochschule Vorarlberg,* Austria
Janet Wesson, *University of Port Elizabeth,* South Africa
Sean White, *Columbia University,* USA
Marcin Wichary, *Google,* USA
Peter Wild, *University of Bath,* UK
Rob Willems, *Hanze University Groningen,* the Netherlands
John Williamson, *University of Glasgow,* UK
Terry Winograd, *Stanford University,* USA
Bowden Wise, *General Electric,* USA
Hendrik Witt, *University of Bremen,* Germany
Steven Wolfman, *University of British Columbia,* Canada
Jeffrey Wong, *Carnegie Mellon University,* USA
Susan Wyche, *Georgia Institute of Technology,* USA
Peta Wyeth, *University of Queensland,* Australia
Xing Xie, *Microsoft,* China
Guangxin Yang, *Lucent Technologies,* USA
Hiroaki Yano, *University of Tsukuba,* Japan
Beth Yost, *Virginia Polytechnic Institute and State University,* USA
Jamie Zigelbaum, *Tufts University,* USA
Alexander Zotov, *Microsoft,* USA

INTERACTIVITY JURY MEMBERS

Durrell Bishop, *Luckybite*, UK
Karmen Franinovic, *Zero-Th Association*, Canada
Elizabeth Goodman, *University of California, Berkeley*, USA
Florian 'Floyd' Müller, *Georgia Institute of Technology*, USA
Naohito Okude, *Keio University*, Japan
Katie Salen, *Parsons The New School for Design*, USA
Atau Tanaka, *Sony CSL Paris*, France
Nina Wakeford, *University of Surrey*, UK

DOCTORAL CONSORTIUM REVIEWERS

Refer to the General Information section for a list of this year's Doctoral Consortium Faculty

STUDENT DESIGN COMPETITION REVIEWERS

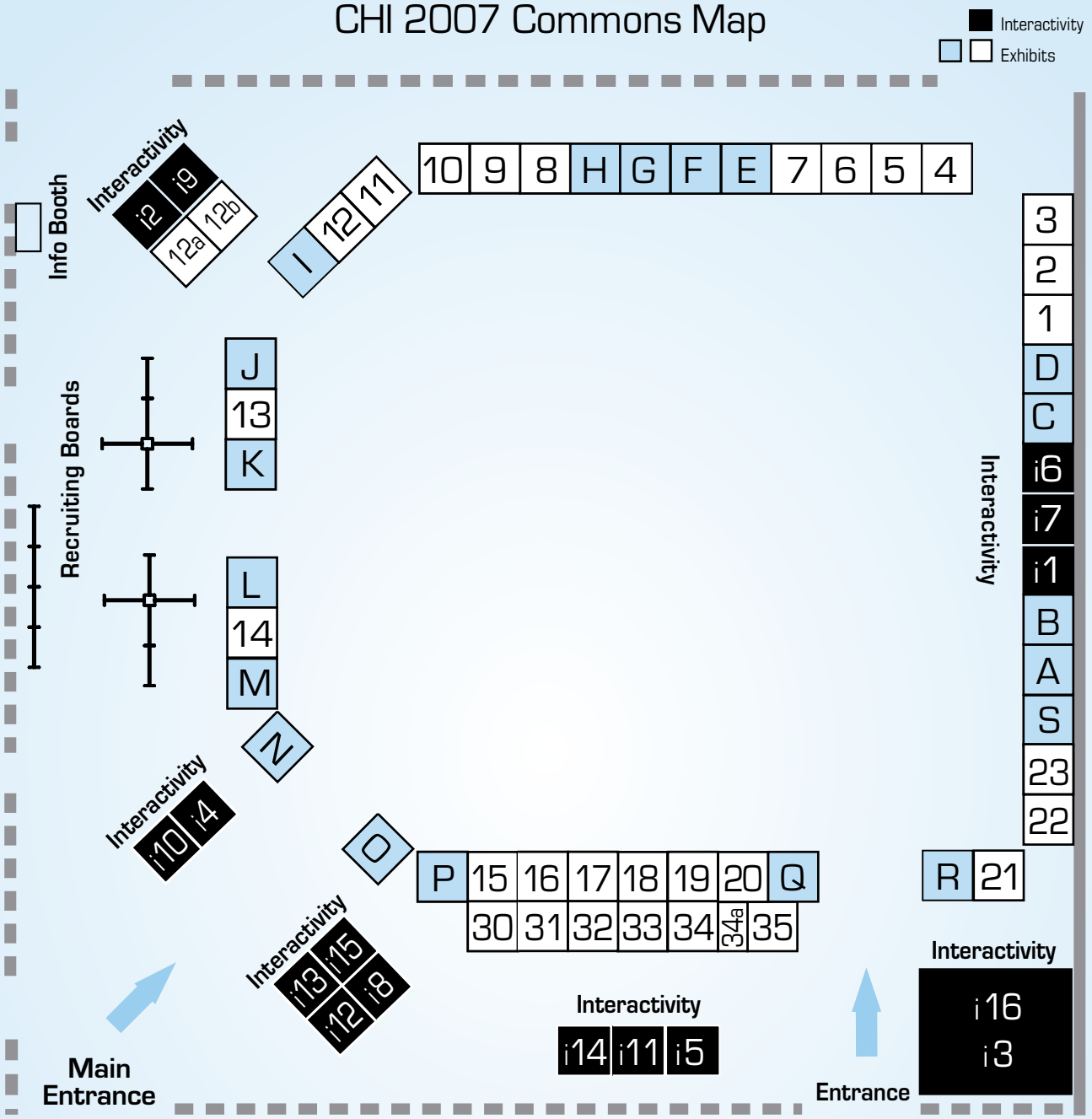
Mary Alton, *Graphic Designer*, Canada
Anastasia Bezerianos, *University of Toronto*, Canada
Jamie Blustein, *Dalhousie University*, Canada
Chris Collins, *University of Toronto*, Canada
Tira Cohene, *Microsoft*, USA
Steven Easterbrook, *University of Toronto*, Canada
Matt Jones, *University of Swansea*, UK
Ana Klasnja, *OSC*, Canada
Martha Ladly, *OCAD*, Canada
Gitte Lindgaard, *Carlton University*, Canada
Gary Marsden, *University of Cape Town*, South Africa
Mike Massimi, *University of Toronto*, Canada
Joy Mountford, *Yahoo!*, USA
Petra Neumann, *University of Calgary*, Canada
Angela Ricci, *CIBC*, Canada
Eric Schaffer, *Human Factors International*, India
John Schrag, *Autodesk*, Canada
Abigail Sellen, *Microsoft*, UK
Paul Smith, *Consultant*, Canada
Rami Tabbah, *Ergonaute*, Canada
Harumi Takeshita, *CIBC*, Canada
Dan Vogel, *University of Toronto*, Canada
Daniel Wigdor, *University of Toronto*, Canada

STUDENT RESEARCH COMPETITION REVIEWERS

Robert St Amant, *North Carolina State University*, USA
Elizabeth Churchill, *Yahoo!*, USA
Geraldine Fitzpatrick, *University of Sussex*, UK
Carl Gutwin, *University of Saskatchewan*, Canada
Takeo Igarashi, *University of Tokyo*, Japan
Robin Jeffries, *Google*, USA
Andrew Monk, *University of York*, UK
Michael Muller, *IBM*, USA
Fabio Paterno, *ISTI-CNR*, Italy
Terry Winograd, *Stanford University*, USA

CONTINUES NEXT TAB

CHI 2007 Commons Map



Map ID	Interactivity Booths
i1	Soap: How to Make a Mouse Work in Mid-Air
i2	GUIDe: Gaze-Enhanced User Interface Design
i3	Building Upon Everyday Play
i4	Shoogle: Excitatory Multimodal Interaction on Mobile Devices
i5	Dreaming of Adaptive Interface Agents
i6	Tangible Programming in the Classroom with Tern
i7	I/O Brush: Beyond Static Collages
i8	REXplorer: A Mobile, Pervasive Spell-Casting Game for Tourists

Map ID	Interactivity Booths
i9	BodySpace: Inferring Body Pose for Natural Control of a Music Player
i10	Dynamics of Tilt-Based Browsing on Mobile Devices
i11	imPulse
i12	Interactive Exploration of City Maps with Auditory Torches
i13	Jogging Over a Distance
i14	Learning Shape Writing by Game Playing
i15	BluetunA: Let Your Neighbor Know What Music You Like
i16	The Mixed Reality Book: A New Multimedia Reading Experience

See pages 105—108 for descriptions of the CHI exhibits.

Posters will be spotlighted in the Concourse according to the groupings listed below. Poster authors are scheduled to stand by their posters during the coffee breaks each day.

Doctoral Consortium, Student Design Competition, Student Research Competition, and Workshops posters will be on display throughout the conference. Work-in-Progress posters will only be on display according to their respective groupings on Tuesday and Wednesday (see page 94-98). Thursday is reserved to spotlight the People's Choice Work-in-Progress posters: vote for your top choices during the spotlight sessions from 10:30–11:30 on Tuesday and Wednesday!

Monday (9:00–18:00)

- Doctoral Consortium: posters 1-15
- Student Design Competition: posters 16-27
- Student Research Competition: posters 28-42
- Workshops: posters 43-60

Tuesday (9:00–18:00)

- Work-In-Progress 1: posters 61-104

Wednesday (9:00–18:00)

- Work-In-Progress 2: posters 105-156

Thursday (9:00–16:30)

- People's Choice Work-In-Progress

DOCTORAL CONSORTIUM

01 Decision-Making Strategies in Design Meetings
Erin Friess, *Carnegie Mellon University,* USA

02 Authorable Virtual Peers for Children with Autism
Andrea Tartaro, *Northwestern University,* USA

03 Incentive Design for Home Computer Security
Rick Wash, *University of Michigan,* USA

04 Observation-Based Design Methods for Gestural User Interfaces
David Akers, *Stanford University,* USA

05 Bridging the Social-Technical Gap in Location-Aware Computing
Fabien Girardin, *Pompeu Fabra University,* Spain

06 Design and Evaluation of Reduced-Functionality Interfaces
Leah Findlater, *University of British Columbia,* Canada

07 GazeTop: Interaction Techniques for Gaze-Aware Tabletops
David Holman, *RWTH Aachen University,* Germany

08 Connectedness: Support to Communities in Diaspora via ICT
Luis A. Castro, *The University of Manchester,* UK

09 ears))) – A Methodological Framework for Auditory Display Design
Christopher Frauenberger, *Queen Mary College, University of London,* UK

10 Scaffolding Cooperative Multi-Device Activities in an Informal Learning Environment
Leilah Lyons, *University of Michigan,* USA

11 Playing with Fire: Participatory Design of Wearable Computing for Fire Fighters
Markus Klann, *Fraunhofer Institute for Applied Information Technology,* Germany

12 Interaction with User-Adaptive Information Filters. Trust, Transparency, and Acceptance.
Henriette Cramer, *University of Amsterdam,* the Netherlands

13 Evaluating Experience-Focused HCI
Joseph 'Jofish' Kaye, *Cornell University,* USA

14 Supporting Proactive Planning of Multiple Activities
Leonardo Galicia, *CICESE Research Center,* Mexico

15 Sensemaking Handoff: Theory and Recommendations
Nikhil Sharma, *University of Michigan,* USA

STUDENT DESIGN COMPETITION

16 THE VVIP SYSTEM – Created to Encourage and Promote the Use of Public Transport in Edinburgh
Darren Thomson, Marius Gylseth, Robert McGarry, Carmen Garcia, *Heriot-Watt University,* UK

17 altVerto: Using Intervention and Community to Promote Alternative Transportation
Martha Gukeisen, David Hutchful, Pieter Kleymeer, Sean Munson, *University of Michigan,* USA

18 Senior Travel Buddies: Sustainable Ride-Sharing & Socialization
William Odom, Meng Li, Scott Jensen, *Indiana University,* USA

19 Facebook Ride Connect
John Booher, Balakrishna Chennupati, Nina Onesti, David Royer, *Indiana University,* USA

20 txt bus: Wait Time Information On Demand
Robert Thompson, Amy Grude, Matthew Scholl, Carl Collins, *University of Michigan,* USA

21 Carpool.UMD – Community Carpooling
John Dobrosielski, Tiffany Gray, Anna Nhan, Martin Stolen, *University of Maryland, College Park,* USA

22 EventStream: Integrated Transit Information System
Aaron Houssian, Pin Sym Foong, Vincent Diaz, Adam Huse, Pornsuree Jamsri, *Indiana University,* USA

23 CarLoop: Leveraging Common Ground to Develop Long-Term Carpools
Joshua Morse, Joshua Palay, Yarun Luon, Satyendra Nainwal, *University of Michigan,* USA

24 EMI: A System to Improve and Promote the Use of Public Transportation
Tonatzin Y. Baños Castellanos, Emmanuel Aquino Pérez, Fernando David Sernas Mora, Yazmín R. López Hernández, Roberto Mendoza Manuel, *Universidad Tecnológica de la Mixteca,* Mexico

25 Ri-Ri: Assisting Bus Conductors in Madras (Chennai)
Arvind Ashok, Christian Beck, Nick Quagliara, *Indiana University,* USA

26 Celerometer and Idling Reminder: Persuasive Technology for School Bus Eco-Driving
Tyler Pace, Shruti Ramalingam, David Roedl, *Indiana University,* USA

27 Journey Planning Based on User Needs
Paul André, Max Wilson, Alisdair Owens, Daniel Smith, *University of Southampton,* UK

STUDENT RESEARCH COMPETITION

28 Speed Sonic Across the Span: Building a Platform Audio Game
Michael Oren, *Iowa State University & DePauw University,* USA
Chris Harding, *Iowa State University, University of Houston, & Free University, Berlin,* USA & Germany
Terri Bonebright, *DePauw University & University of Nebraska,* USA

29 The Role of Paralinguistic Voice-Control of Interactive Media in Augmenting Awareness of Voice Characteristics in the Hearing-Impaired
Sama'a Al Hashimi, *Middlesex University,* UK

30 Social Impacts of a Video Blogging System for Clinical Instruction
Amaya Becvar, *University of California, San Diego,* USA

31 An Interface to Aid Rural Health Workers in the Preliminary Diagnosis of Cataract at the Slit Lamp Using LOCS III
Satyendra Nainwal, *University of Michigan,* USA
Pradeep Yammiyavar, *Indian Institute of Technology, Guwahati,* India

32 Visualizing an Enterprise Wiki
Xianghua Ding, *Univercity of California, Irvine,* USA
Catalina Danis, Thomas Erickson, *IBM,* USA

33 Distributed Tabletops: Territoriality and Orientation in Distributed Collaboration
Philip Tuddenham, Peter Robinson, *University of Cambridge,* UK

34 "Let Me Show You What I Want": Engaging Individuals with Cognitive Disabilities and their Families in Design
Melissa Dawe, Gerhard Fischer, *University of Colorado,* USA

35 SciNews Online: Scaffolding the Construction of Scientific Explanations
Sebastian de la Chica, Tamara Sumner, *University of Colorado,* USA

36 Children Distinguish Conventional from Moral Violations in Interactions with a Personified Agent
Nathan Freier, *University of Washington,* USA

37 Towards a New Method of Evaluation for Reality-Based Interaction Styles
Georgios Christou, *Cyprus College,* Cyprus
Frank E. Ritter, *The Pennsylvania State University,* USA
Robert J. K. Jacob, *Tufts University,* USA

38 Providing Affective Information to Family and Friends Based on Social Networks
Wendy Moncur, Ehud Reiter, *University of Aberdeen,* UK

39 Defining High-Throughput Email Users
Joshua Gross, Mary Beth Rosson, *The Pennsylvania State University,* USA

40 The Impact of Digital Iconic Realism on Anonymous Interactants' Mobile Phone Communication
Sin-Hwa Kang, James Watt, Sasi Kanth Ala, *Rensselaer Polytechnic Institute,* USA

41 Towards a Quantitative Analysis of Audio Scrolling Techniques
Eric Lee, Henning Kiel, Jan Borchers, *RWTH Aachen University,* Germany

42 Exploring Tabletop File System Interaction
Trent Apted, Anthony Collins, Judy Kay, *University of Sydney,* Australia

WORKSHOPS

43 Culture and Collaborative Technology
Susan Fussell, *Carnegie Mellon University,* USA
Qiping Zhang, *Long Island University,* USA

44 Exploring Design as a Research Activity
Matthew R. Peters, Helena M. Mentis, Steven R. Haynes, *The Pennsylvania State University,* USA
Abigail Durrant, *University of Surrey,* UK
David J. Saab, *The Pennsylvania State University,* USA

45 Tangible User Interfaces in Context and Theory
Alan Blackwell, *University of Cambridge,* UK
George Fitzmaurice, *University of Toronto,* Canada
Lars Erik Holmquist, *Viktoria Institute,* Sweden
Hiroshi Ishii, *MIT,* USA
Brygg Ullmer, *Louisiana State University,* USA

46 Security User Studies: Methodologies and Best Practices
Serge Egelman, *Carnegie Mellon University,* USA
Jen King, *University of California, Berkeley,* USA
Robert C. Miller, *MIT,* USA
Nick Ragouzis, *Enosis Group LLC,* USA
Erika Shehan, *Georgia Institute of Technology,* USA

47 User Centered Design and International Development
Andy Dearden, *Sheffield Hallam University,* UK
Susan M. Dray, *Dray & Associates, Inc.,* USA
Ann Light, *Queen Mary College, University of London,* UK
John C. Thomas, *IBM,* USA
Michael Best, Celeste Buckhalter, Dan Greenblatt, Gaurishankar Krishnan, Nithya Sambasivan, *Georgia Institute of Technology,* USA

48 HCI and New Media Arts: Methodology and Evaluation
Piotr D. Adamczyk, Michael B. Twidale, Kevin Hamilton, Brian P. Bailey, *University of Illinois, Urbana-Champaign,* USA

49 Imaging The City: Exploring the Practices and Technologies of Representing the Urban Environment in HCI
Carl DiSalvo, *Carnegie Mellon University,* USA
Janet Vertesi, *Cornell University,* USA

50 Supporting Design Studio Culture in HCI
Eli Blevis, *Indiana University,* USA
Tracee Vetting Wolf, *IBM,* USA
Youn-kyung Lim, *Indiana University,* USA
Keichi Sato, *Illinois Institute of Technology,* USA
Erik Stolterman, *Indiana University,* USA

51 Striking a c[h]ord: Vocal Interaction in Assistive Technologies, Games, and More
Adam J. Sporka, *Czech Technical University in Prague,* Czech Republic
Susumu Harada, *University of Washington,* USA
Sri H. Kurniawan, *University of Manchester,* UK

52 Mobile Spatial Interaction
Peter Froëhlich, Rainer Simon, Lynne Baillie, *Telecommunications Research Center Vienna,* Austria
Joi Roberts, *Motorola,* USA
Roderick Murray-Smith, *University of Glasgow,* UK
Matt Jones, *Swansea University,* UK
Rahul Nair, *Yahoo!,* USA

53 Supple Interfaces: Designing and Evaluating for Richer Human Connections and Experiences
Katherine Isbister, *Rensselaer Polytechnic Institute,* USA
Kristina Höök, *Swedish Institue of Computer Science,* Sweden

54 Increasing the Impact of Usability Work in Software Development
Tobias Uldall-Espersen, *University of Copenhagen,* Denmark
Ann Blandford, *University of College London,* UK
Timo Jokela, *University of Oulu,* Finland
Erik Frøkjær, *University of Copenhagen,* Denmark

55 Supporting Non-Professional Users in the New Media Landscape
David Geerts, *CUO–K.U.Leuven, the Netherlands*
Petter Bae Brandtzæg, *SINTEF ICT,* Norway
Marianna Obrist, Manfred Tscheligi, *University of Salzburg,* Germany

56 Exertion Interfaces
Florian 'Floyd' Mueller, *The University of Melbourne,* Australia
Stefan Agamanolis, *Distance Lab,* UK

57 Exploratory Search and HCI
Ryen W. White, *Microsoft,* USA
Marti A. Hearst, *University of California, Berkeley,* USA
Steven M. Drucker, *Microsoft,* USA
m c schraefel, *University of Southampton,* UK
Gary Marchionini, *University of North Carolina,* USA

58 Shared Encounters
Katharine S. Willis, Konstantinos Chorianopoulos, *Bauhaus University of Weimar,* Germany
Mirjam Struppek, *Interactionfield,* Germany
George Roussos, *Birkbeck College, University of London,* UK

59 Beyond Current User Research: Designing Methods for New Users, Technologies, and Design Processes
Judith Ramey, Elisabeth Cuddihy, *University of Washington,* USA
Stephanie Rosenbaum, *Tec-Ed, Inc.,* USA
Emma Rose, *Anthro-tech, Inc.,* USA
Zhiwei Guan, *University of Washington,* USA

60 Converging on a Science of Design through the Synthesis of Design Methodologies
Gerhard Fischer, Elisa Giaccardi, *University of Colorado,* USA
Yunwen Ye, *SRA Key Technology Lab,* Japan
Kumiyo Nakakoji, *University of Tokyo,* Japan
Chris DiGiano, *SRI International,* USA

WORK-IN-PROGRESS (WIPS) Tuesday

HANDHELD AND MOBILE APPLICATIONS

61 A Motion-Based Marking Menu System
Ian Oakley, Junseok Park, *Electronics and Telecommunications Research Institute,* Republic of Korea

62 AwareLESS Authentication: Insensible Input Based Authentication
Hiroyuki Manabe, Masaaki Fukumoto, *NTT DoCoMo, Inc.,* Japan

63 txt 4 l8r: Lowering the Burden for Diary Studies Under Mobile Conditions
Joel Brandt, Noah Weiss, Scott R. Klemmer, *Stanford University,* USA

64 Sounding Board: A Handheld Device for Mutual Assessment in Education
Jun Yamashita, *University of Tsukuba,* Japan
Hiroshi Kato, *National Institute of Media Education,* Japan
Toshiaki Ichimaru, *University of Tsukuba,* Japan
Hideyuki Suzuki, *Ibaraki University,* Japan

65 New Parameters for Tacton Design
Eve Hoggan, Stephen Brewster, *University of Glasgow,* UK

HANDLING INFORMATION

66 Towards a Tool for Predicting User Exploration
Leonghwee Teo, Bonnie E. John, *Carnegie Mellon University,* USA
Peter Pirolli, *PARC,* USA

67 Preliminary Evidence for Top-Down and Bottom-Up Processes in Web Search Navigation
Shu-Chieh Wu, *San Jose State University & NASA,* USA
Craig Miller, *DePaul University,* USA

68 OSI and ET: Originating Source of Information and Evidence Traceability
Robert Ball, Pardha Pyla, Manuel A. Pérez-Quiñones, *Virginia Polytechnic Institute and State University,* USA

69 The Effect of Brand Awareness on the Evaluation of Search Engine Results
Bernard Jansen, Mimi Zhang, Ying Zhang, *The Pennsylvania State University,* USA

70 WillCam: A Digital Camera Visualizing Users' Intention
Keita Watanabe, *Keio University,* Japan,
Koji Tsukada, *National Institute of Advanced Industrial Science and Technology,* Japan
Michiaki Yasumura, *Keio University,* Japan

CONTEXT-AWARE APPLICATIONS

71 Enabling Nutrition-Aware Cooking in a Smart Kitchen
Pei-Yu Chi, Jen-hao Chen, Hao-hua Chu, *National Taiwan University,* Taiwan

72 What You Said About Where Shook Your Head; A Hands-Free Implementation of a Location-Based Notification System
Eric Jones, Ted Selker, Hyemin Chung, *MIT,* USA

73 Galvanic Skin Response (GSR) as an index of Cognitive Load
Fang Chen, Eric Choi, Natalie Ruiz, Yu Shi, Ronnie Taib, *National ICT Australia Ltd,* Australia

74 Content-Aware Layout
Edward Ishak, Steven Feiner, *Columbia University,* USA

75 Finding Your Way with CampusWiki: A Location-Aware Wiki
Richard Schuler, Nathaniel Laws, Sameer Bajaj, Sukeshini Grandhi, Quentin Jones, *New Jersey Institute of Technology,* USA

AUDITORY UI

76 Porta-Person: Telepresence for the Connected Conference Room
Nicole Yankelovich, Nigel Simpson, Jonathan Kaplan, Joe Provino, *Sun Microsystems,* USA

77 Iterative Design of an Audio-Haptic Drawing Application
Kirsten Rassmus-Gröhn, Charlotte Magnusson, Håkan Eftring, *Lund University,* Sweden

78 An Investigation into the Use of Spatialised Sound in Locative Games
Kirsten Cater, *University of Bristol,* UK
Richard Hull, Tom Melamed, *Hewlett-Packard,* UK
Robin Hutchings, *University of Bristol,* UK

79 Longitudinal Study of Continuous Non-Speech Operated Mouse Pointer
Adam J. Sporka, *Czech Technical University in Prague,* Czech Republic
Sri H. Kurniawan, Murni Mahmud, *University of Manchester,* UK
Pavel Slavik, *Czech Technical University in Prague,* Czech Republic

80 Interactive Generation of Overview Information Using Speech
Johan Kildal, Stephen Brewster, *University of Glasgow,* UK

INPUT & INTERACTION

81 Look There or "Are Six Keys Enough?"
Regina Bernhaupt, David Wilfinger, Thomas Mirlacher, Manfred Tscheligi, *Salzburg University,* Germany

82 Game Controller Text Entry with Alphabetic and Multi-Tap Selection Keyboards
Thomas Költringer, Michaela Ngo Van, Thomas Grechenig, *Vienna University of Technology,* Austria

83 Comparing Two Methods for Gesture Based Short Text Input Using Chording
Hendrik Witt, Torben Janssen, *University of Bremen,* Germany

84 Gaze-Enhanced Scrolling Techniques
Manu Kumar, Terry Winograd, Andreas Paepcke, *Stanford University,* USA

85 Improving Disambiguation Accuracy for Dictionary-Based Disambiguation Text Entry Methods by Co-Occurrence Based Semantic Information
Jun Gong, Peter Tarasewich, Carole Hafner, *Northeastern University,* USA
Scott Mackenzie, *York University,* Canada

COMPUTER SUPPORTED COOPERATIVE WORK 1

86 A Study of Co-Worker Awareness in Remote Collaboration over a Shared Application
Julien Epps, *National ICT Australia LTD,* Australia
Benjamin Close, *University of South Australia,* Australia

87 An Initial Investigation into Non-Visual Computer Supported Collaboration
David McGookin, Stephen Brewster, *University of Glasgow,* UK

88 Mapmail: Restructuring an Email Client for Use in Distributed Teams
Les Nelson, *PARC,* USA
Elizabeth F. Churchill, *Yahoo!,* USA

89 Encouraging Contribution to Shared Sketches in Brainstorming Meetings
Marcello Bastéa-Forte, Corina Yen, *Stanford University,* USA

90 Pointer Delegation for Group Collaboration Using Telepointers
Noritaka Osawa, *National Institute of Multimedia Education,* Japan

HOME

91 On Nurturing Strong-Tie Distant Relationships: From Theory to Prototype
Cristina Hoffmann, Sylvie Jumptertz, Bernard Marquet, *France Telecom,* France

92 Analysis of Human Interruptibility in the Home Environment
Yoshinao Takemae, Shuichi Chaki, Takehiko Ohno, Ikuo Yoda, *NTT Corporation,* Japan
Shinji Ozawa, *Keio University,* Japan

93 SyncDecor: Appliances for Sharing Mutual Awareness between Lovers Separated by Distance
Hitomi Tsujita, *Ochanomizu University,* Japan
Koji Tsukada, *National Institute of Advanced Industrial Science and Technology,* Japan
Itiro Siio, *Ochanomizu University,* Japan

94 The Use of Aesthetics in HCI Systems
Jina Huh, Mark Ackerman, Robert Douglas, *University of Michigan,* USA

95 From Virtually Living Together to Actual Living Together
Marianne Graves Petersen, *University of Aarhus,* Germany

COMPUTER SUPPORTED COOPERATIVE WORK 2

96 Studying Activity Patterns in CSCW
Gregorio Convertino, *The Pennsylvania State University,* USA
Thomas P. Moran, Barton A. Smith, *IBM,* USA

97 Using Isovist Views to Study Placement of Large Displays in Natural Settings
Peter Scupelli, Sara Kiesler, Susan R. Fussell, *Carnegie Mellon University,* USA

98 CAWS: A Wiki System to Improve Workspace Awareness to Advance Effectiveness of Co-Authoring Activities
Ilaria Liccardi, Hugh Davis, Su White, *University of Southampton,* UK

99 Malibu Personal Productivity Assistant
Werner Geyer, Beth Brownholtz, Michael J. Muller, Casey Dugan, Eric Wilcox, David R. Millen, *IBM,* USA

100 Extending a Theory of Remote Scientific Collaboration to Corporate Contexts
Sajeev Cherian, Judith S. Olson, *University of Michigan,* USA

CHILDREN

101 Designing Tangibles for Children: What Designers Need to Know
Alissa Antle, *Simon Fraser University,* Canada

102 Designing Mobile Phone Interface with Children
Xiaowei Cao, Sri H. Kurniawan, *University of Manchester,* UK

103 Making Dead History Come Alive through Mobile Game-Play
Rosa Lanzilotti, Maria Francesca Costabile, Carmelo Ardito, Thomas Pederson, *University of Bari,* Italy

104 Vuelta: Creating Animated Characters and Props Using Real-World Objects
Juan Pablo Hourcade, Keith Perry, *University of Iowa,* USA

105 Continuing Motivation for Game Design
Sarah Walter, Karin Forssell, Brigid Barron, Caitlin Martin, *Stanford University,* USA

WORK-IN-PROGRESS (WIPS) Wednesday

PROTOTYPING

106 Integrating User Performance Time Models in the Design of Tangible UIs
Paul Holleis, *Research Group Embedded Interaction & University of Munich,* Germany
Dagmar Kern, Albrecht Schmidt, *Fraunhofer Gesellschaft – IAIS,* Germany

107 WOZ Pro: A Pen-Based Low Fidelity Prototyping Environment to Support Wizard of Oz Studies
Christopher Hundhausen, Anzor Balkar, Mohamed Nuur, *Washington State University,* USA

108 iProCam: A Lens-Sharing Projector-Camera System for Augmented Reality Applications
Seyoung Pyo, Jaewon Shim, Geehyuk Lee, *Information and Communications University,* Republic of Korea

109 Prime III: A User Centered Voting System
Ernest Cross II, Yolanda McMillian, Priyanka Gupta, Philicity Williams, Kathryn Nobles, Juan Gilbert, *Auburn University,* USA

110 Range: Exploring Proxemics in Collaborative Whiteboard Interaction
Wendy Ju, Brian Lee, Scott R. Klemmer, *Stanford University,* USA

UI DESIGN

111 A Gestural Input through Finger Writing on a Textured Pad
Ji-Eun Kim, John Sunwoo, Yong-Ki Son, Dong-Woo Lee, Il-Yeon Cho, *Electronics and Telecommunications Research Institute,* Republic of Korea

112 Design and Comparison of Acceleration Methods for Touchpad
Sumi Yun, Geehyuk Lee, *Information and Communications University,* Republic of Korea

113 K-Menu: A Keyword-Based Dynamic Menu Interface for Small Computers
Seung Eun Lee, Geehyuk Lee, *Information and Communications University,* Republic of Korea

114 Rating, Voting, & Ranking: Designing for Collaboration & Consensus
Don Turnbull, *University of Texas, Austin,* USA

115 Human Guided Evolution of XUL User Interfaces
Juan Quiroz, Sergiu Dascalu, Sushil Louis, *University of Nevada, Reno,* USA

INPUT AND INTERACTION TECHNOLOGIES

116 2D Meets 3D: A Human-Centered Interface for Visual Data Exploration
Sebastian Baumgärtner, Achim Ebert, Matthias Deller, Stefan Agne, *DFKI GmbH,* Germany

117 Design and Evaluation of 3D Models for Electronic Dental Records
Michael Marotta, *Revolution Health & Carnegie Mellon University,* USA
Purin Phanichphant, *Microsoft & Carnegie Mellon University,* USA
Patrick Malatack, *Carnegie Mellon University,* USA
Tej Shah, *Carnegie Mellon University & Lockheed Martin,* USA
Greg Price, *Endeca & Carnegie Mellon University,* USA
Thankam Thyvalikakath, Titus Schleyer, *University of Pittsburgh,* USA
Jason I. Hong, *Carnegie Mellon University,* USA

118 Management of Personal Information Scraps
Michael Bernstein, Max Van Kleek, *MIT,* USA
m c schraefel, *University of Southampton,* UK
David Karger, *MIT,* USA

119 A Grid-Based Extension to an Assistive Multimodal Interface
Philip Strain, Graham McAllister, Emma Murphy, Ravi Kuber, Wai Yu, *Queens University, Belfast,* UK

120 A Research Agenda for Mobile Usability
Constantinos Coursaris, *Michigan State University,* USA
Dan Kim, *University of Houston, Clear Lake,* USA

DESIGN AND EVALUATION METHODS

121 An Extensible Platform for the Interactive Exploration of Fitts' Law and Related Movement Time Models
Martin Schedlbauer, *University of Massachusetts, Lowell,* USA

122 HCI4D: HCI Challenges in the Global South
Marshini Chetty, Rebecca E. Grinter, *Georgia Institute of Technology,* USA

123 aIRPLane: An Information Retrieval Pattern Language
Christine Wania, Michael Atwood, *Drexel University,* USA

124 Mapping Semantic Relevancy of Information Displays
Vladislav Veksler, Wayne Gray, *Rensselaer Polytechnic Institute,* USA

125 Using Activity Theory to Develop a Design Framework for Rural Development
Arvind Ashok, Christian Beck, *Indiana University, Bloomington,* USA

AUGMENTED REALITY AND TANGIBLE UIS

126 I/O Plant: A Tool Kit for Designing Augmented Human-Plant Interactions
Satoshi Kuribayashi, Yusuke Sakamoto, Hiroya Tanaka, *Keio University,* Japan

127 Reality-Based Interaction: Unifying the New Generation of Interaction Styles
Robert J. K. Jacob, Audrey Girouard, Leanne Hirshfield, Michael Horn, Orit Shaer, Erin Solovey, *Tufts University,* USA
Jamie Zigelbaum, *MIT,* USA

128 The Digital Music Box: Using Cultural and Critical Theory to Inform Design
Mark Blythe, *University of York,* UK

129 Jogging over a Distance – Supporting a "Jogging Together" Experience Although Being Apart
Florian 'Floyd' Mueller, *Exertion Interfaces,* Australia
Shannon O'Brien, Alex Thorogood, *Connecting People Group,* Australia

130 Tangible Avatar and Tangible Earth: A Novel Interface for Astronomy Education
Jun Yamashita, Hideaki Kuzuoka, *University of Tsukuba,* Japan
Michitaka Hirose, *The University of Tokyo,* Japan

131 Finding Communication Hot Spots of Location Based Postings
Saija-Maaria Lemmelä, Hannu J. Korhonen, *Nokia,* Finland

132 The Sound of Touch
David Merrill, Hayes Raffle, *MIT,* USA

ROBOTIC AGENTS

133 How do Robotic Agents' Appearances Affect Peoples' Interpretations of the Agents' Attitudes?
Takanori Komatsu, *Future University-Hakodate,* Japan
Seiji Yamada, *National Institute of Informatics,* Japan

134 Practical Approaches to Comforting Users with Relational Agents
Timothy Bickmore, Daniel Schulman, *Northeastern University,* USA

VISUALIZATION AND ANIMATION

135 Comparing Visualizations for Tracking Off-Screen Moving Targets
Sean Gustafson, Pourang Irani, *University of Manitoba,* Canada

136 Conversation Votes: Enabling Anonymous Cues
Tony Bergstrom, Karrie Karahalias, *University of Illinois, Urbana-Champaign,* USA

137 WikiNavMap: A Visualisation to Supplement Team Based Wikis
Adam Ullman, Judy Kay, *The University of Sydney,* Australia

138 The Facial Expression Effect of an Animated Agent on the Decisions Taken in the Negotiation Game
Masahide Yuasa, Naoki Mukawa, *Tokyo Denki University,* Japan

COMPUTER MEDIATED COMMUNICATION

139 On Context of Content: A Comparative Methodology Review of How HCI and Mass Communication Analyze Blogs and Social Media
Lo Ping Wei, Ellen Yi-Luen Do, *Georgia Institute of Technology,* USA

140 Investigating Response Similarities Between Real and Mediated Social Touch: A First Test
Antal Haans, Christiaan De Nood, Wijnand IJsselsteijn, *Technische Universiteit Eindhoven,* the Netherlands

141 Distant Closeness and Photo Galleries: Flickr and Public Image-Sharing
Nancy Van House, *University of California, Berkeley,* USA

142 Exploring Large Display Use in American Megachurches
Susan P. Wyche, Yevgeniy 'Eugene' Medynskiy, Rebecca E. Grinter, *Georgia Institute of Technology,* USA

143 Talking About Stuff: Artifacts and Expectation in Social Communication
Elaine Huang, *RWTH Aachen University,* Germany
Crysta Metcalf, *Motorola Labs,* USA

OFFICE AND WORKPLACE

144 Computer Aided Observations of Complex Mobile Situations
Tobias Klug, *SAP & Darmstadt University of Technology,* Germany

145 Physically Present, Mentally Absent: Technology Use in Face-to-Face Meetings
Lisa Kleinman, *University of Texas, Austin,* USA

146 Addressing Constraints: Multiple Usernames, Task Spillage, and Notions of Identity
Ben Gross, *University of Illinois, Urbana-Champaign,* USA,
Elizabeth F. Churchill, *Yahoo!,* USA

SOCIAL COMPUTING AND SOCIAL NAVIGATION

147 Location, Location, Location: A Study of Bluejacking Practices
Jennifer Thom-Santelli, Alex Ainslie, Geri Gay, *Cornell University,* USA

148 SocialBrowsing: Integrating Social Networks and Web Browsing
Jennifer Golbeck, Michael M. Wasser, *University of Maryland, College Park,* USA

149 Applying a User-Centered Metric to Identify Active Blogs
Adam Kramer, *University of Oregon,* USA
Kerry Rodden, *Google,* USA

150 Value Scenarios: Envisioning Systemic Effects of New Technologies
Lisa Nathan, Predrag Klasnja, Batya Friedman, *University of Washington,* USA

151 BlogCentral: The Role of Internal Blogs at Work
Jina Huh, *University of Michigan,* USA
Lauretta Jones, Thomas Erickson, Wendy A. Kellogg, Rachel Bellamy, John C. Thomas, *IBM,* USA

HEALTH CARE APPLICATIONS

152 Touch · Sensitive Apparel
Cati Vaucelle, *MIT,* USA
Yasmine Abbas, *Harvard University,* USA

153 NEAT-o-Games: Ubiquitous Activity-Based Gaming
Yuichi Fujiki, Kostas Kazakos, Colin Puri, *University of Houston,* USA
Justin Starren, *Marshfield Clinic Research Foundation,* USA
Ioannis Pavlidis, *University of Houston,* USA
James Levine, *Mayo Clinic,* USA

154 UP Health: Ubiquitously Persuasive Health Promotion with an Instant Messaging System
Misook Sohn, Junwoo Lee, *Electronics and Telecommunications Research Institute,* Republic of Korea

155 WalkMSU: An Intervention to Motivate Physical Activity in University Students
Vikash Singh, Anijo Mathew, *Mississippi State University,* USA

156 Posture Monitoring and Improvement for Laptop Use
Sriram Subramanian, Carrie Demmans, Jon Titus, *University of Saskatchewan,* Canada

Addison-Wesley

Booth: 33

Addison-Wesley is the premier publisher of User Interface books. Recent publications include: *The Resonant Interface* by Steven Heim, *Web Usability: A User-Centered Design Approach* by Lazar, *DTUI* by Shneiderman/Plaisant and *Designing Interactive Systems* by Benyon/Turner/Turner.

Adobe

Booth: F
(CHI Contributor, Recruiting)

Adobe Systems Incorporated offers business, creative, and mobile software solutions that revolutionize how the world engages with ideas and information. If you are interested in joining a team of visual and interaction designers, user researchers, and UE Consultants come visit us at our booth.

Alucid Solution, Inc. / Usability Systems

Booth: 11
(Recruiting)

Alucid Solution, Inc., formerly Usability Systems, Inc. (USI), provides a unique blend of research, consultation and leading-edge testing tools and environments through its cross-functional usability software, systems and services. Alucid is celebrating its 20th year.

Aptima, Inc.

Booth: 35

Aptima, Inc. is a leader in the field of human-centered engineering, solving the problems of human performance in today's complex, sociotechnical systems. The company provides products and services focused on the design of organizations, user-centered technology, and training systems.

Autodesk, Inc.

Booth: 8
(CHI Contributor, Recruiting)

Realize your ideas. Autodesk is the world leader in 2D and 3D design software with the broadest portfolio of manufacturing, geospatial, building & construction, and media & entertainment solutions. Stop by to meet our designers, learn about solutions, and hear about our current openings.

Bentley College

Booth: S

The Master of Science in Human Factors in Information Design (MSHFID) at Bentley College prepares graduates for senior-level positions at leading companies by combining product design, usability engineering and human factors with a goal of enhancing the user experience.

Captology Forum (Stanford University Persuasive Technology Lab)

Booth: 16

Captology Forum is a monthly 30-minute voice chat online about how computers (including mobile phone apps) can motivate & persuade people. Dr. BJ Fogg of Stanford leads each Forum using YackPack Live Voice. The short events are free, fun & insightful. Join us.

Cooper

Booth: G
(CHI Champion, Recruiting)

Cooper helps industry-leading clients define, design and deliver inspiring products and services. We have positions in interaction design, visual design, and design communication. Design better products. Work in a better place. www.cooper.com

eBay, Inc.

Booth: 3
(CHI Contributor, Recruiting)

eBay's User Experience & Design group generates user insights, designs global products, and creates a long-term user experience vision to address current and future user needs and opportunities. UED plays an important role in fulfilling eBay's corporate charter of pioneering new communities around the world built on commerce, sustained by trust, and inspired by opportunity.

Ethnio

Booth: 22

Bolt | Peters User Experience presents Ethnio. The first remote usability testing web application that allows you to observe from anywhere, record video and audio, and recruit users live from the web. Moderated remote usability. Simplified.

Eurotech Group

Booth: J

Zypad is a new family of wearable computers designed by Eurotech Group. It provides instant access to computing capabilities, while allowing users to carry out non-computer tasks across a variety of professional work applications, enabling hands-free operation, robust wireless capabilities and standard architecture.

eye square GmbH

Booth: 5

eye square is a leading offerer of usability research in Europe; our software eye square Visualizer is the most advanced tool for eye tracking analysis and visualization. Our clients include: eBay, Yahoo, Deutsche Bank, Ford, P&G, LG Electronics.

FILTER/TALENT

Booth: 6
(Recruiting)

FILTER/TALENT: a recruitment agency connecting UI and visual designers with hiring managers and HR departments, solving resource needs for web, software, and consumer product development. On-site/off-site or direct hire.

Google

Booth: R, 21
(CHI Champion, Recruiting)

Google's ease of use is the result of a continued focus on putting the user first. We have many exciting opportunities in UI, so if you're interested in the challenge of making information easily and freely accessible to a global audience please stop by our booth (R, 21). http://www.google.com/jobs/chi

Human Factors and Ergonomics Society

Booth: 34a

HFES is the largest scientific society for human factors /ergonomics researchers and practitioners, with over 4700 members worldwide, promoting the discovery and exchange of knowledge concerning the characteristics of human beings that are applicable to the design of systems and devices of all kinds.

Human Factors International

Booth: 9
(Recruiting)

HFI's pioneering leadership for improving customer experience includes recent advancements in contextual innovation, analysis of decision-making as it impacts conversion, customized UCD methodology, usability best practices, and Web 2.0 deployments.

Intel

Booth: C
(CHI Hero, Recruiting)

At Intel, we constantly push the boundaries of innovation in order to make people's lives more exciting, more fulfilling, and easier to manage. Our unwavering commitment to moving technology forward has transformed the world by leaps and bounds. Come see Intel's "Kitchen Window" demo – a vision for the central hub of family communications. Intel. Leap ahead.

Intranel.com

Booth: K

Get the insight you need, online and in real time with VisionsLive.com and VideoScribe G2 from Intranel - www.Intranel.com. Watch participants use any website from anywhere on the World Wide Web. See their reactions and hear their first thoughts.

Intuit

Booth: O, P
(CHI Champion, Recruiting)

Intuit's user experience team pushes the boundaries of traditional user centered design. We solve problems that make a difference in the lives of millions. And when one of our courageous ideas stick and customers break out in smiles using a product we invented, we know we're doing our jobs.

John Wiley & Sons

Booth: 23

John Wiley and Sons are proud to announce the publication of the 2nd edition of Interaction Design – the bestseller by Sharp, Rogers and Preece.This title joins our growing stable of new books on HCI subjects. Come take a look at them at our stand!

LC Technologies Eyegaze Systems

Booth: 18

A range of eye tracking technologies: The EyeFollower that provides automatic eye acquisition, binocular tracking, and 0.45-degree gazepoint tracking accuracy throughout 20x12x15 inch volume. Also, an inexpensive plug-and-play system and state-of-the art NYAN analysis software.

Microsoft

Booth: A, B
(CHI Champion, Recruiting)

At Microsoft we enable people and business throughout the world to realize their full potential through our products and services. Find out more about our software, the people who create it, and career opportunities in UX, research, and design.

Mobience

Booth: 13

If you use QWERTY, you will find you're already familiar with MobileQWERTY when you try it. If you don't use QWERTY, MobileQWERTY can surely help you learn or overcome it. MobileQWERTY writes a new history of QWERTY for ubiquitous mobile devices.

Morgan Kaufmann (an imprint of Elsevier)

Booth: 15

Morgan Kaufmann, an imprint of Elsevier, works with leading computer scientists to publish books for researchers, professionals and students in human-computer interaction, computer architecture, databases/networking, graphics/ gaming, and software engineering.

Noldus Information Technology, Inc.

Booth: E

Noldus offers computer software and integrated systems for HCI research and usability testing. The Observer XT is available for live observations, video analysis, eye-tracking, or mobile coding. Please visit Noldus for more detailed information.

Oracle USA

Booth: 1
(Recruiting)

Oracle is the world leader in enterprise-class user experiences. Come and see how our team of interaction design, usability engineering, ethnography, and cognitive engineering research professionals help make our customers more productive, everyday.

Oxford University Press

Booth: 4

Save 20% – Series in Human Technology Interaction: Pirolli: Information Foraging Theory, Parasuraman: Neuroergonomics, Kirlik: Adaptive Perspectives on Human-Technology Interaction; Kramer: Attention; and Kraut: Computers, Phones, and the Internet.

RedWhale Software

Booth: 19

RedWhale is a leading provider of software tools, innovative technologies, and professional services for the design, development and run-time management of user interfaces.

salesforce.com

Booth: L
(Recruiting)

The success of salesforce.com is a testament to the commitment to our solution's ease of use, global adoption, and a loyal community of over 500,000 users. Contribute your talents to the User Experience team and help elevate our products and services to a whole new level.

Samsung Electronics Co., LTD.

Booth: 7

The Future Experience Part of Samsung Electronics presents its recent research results related to user experience and new interaction developments.

SAP

Booth: Q
(CHI Champion, Recruiting)

As the world's third-largest independent software provider, SAP delivers business solutions to more than 36,200 customers worldwide. Today, SAP employs more than 38,400 people in more than 50 countries. Connect with SAP usability professionals at our booth.

Savannah College of Art and Design

Booth: 10
(Recruiting)

The Savannah College of Art and Design exists to prepare talented students for careers in the visual and performing arts, design, the building arts, and the history of art and architecture. The college emphasizes learning through individual attention in a positively oriented environment.

Seeing Machines

Booth: 32

Seeing Machines is an award winning Technology Company focused on designing vision-based human machine interfaces. Our forerunner product called faceLAB™ provides head and face tracking, eye, eyelid and gaze tracking. For more information about faceLAB™ visit www.seeingmachines.com

SirValUse Consulting

Booth: 20

Customary methods for performance measurement and online survey don't provide insights about usage motivation, satisfaction and frequency. The new Remote-Testing-Tool LEOtrace® covers the whole user behaviour, including a freely definable number of competitor's websites.

Springer

Booth: 17

Take your research and skills to the next level with Springer. Stop by our booth to discover an authoritative range of books and journals in CHI. Save 20% on all titles.

Sun Microsystems

Booth: 12a
(CHI Champion, Recruiting)

At Sun "The Network is the Computer." We understand that technology is only part of a community. We connect people enabling them to interact, share, and solve problems. Meet the designers who create the products and online communities that make this happen.

Taylor & Francis Group

Booth: 34

With over 200 years publishing experience, international offices and over 1100 titles in print, Taylor & Francis is a world leading publisher of academic journals. All Taylor & Francis journals have their own web pages with full information – visit www.informaworld.com for a closer look.

TechSmith Corporation

Booth: 14
(Recruiting)

TechSmith Corporation, creator of Morae, UserVue, Camtasia Studio, and SnagIt, lets users capture, record and enhance digital content from their PCs so they can share information and allow others to observe, analyze and learn from their experiences.

The MIT Press, Cambridge, MA

Booth: 2

The MIT Press publishes extensively in computer-human interaction and related titles in technology, new media and gaming. Please visit our booth to browse our newest titles and receive a 20% discount on books and journals purchased.

Tobii Technology

Booth: I, 12
(Recruiting)

Tobii Technology manufactures eye tracking technology. Our hardware and software make usability studies much easier and give a powerful new stream of data. Use your eyes.

University of Washington Press/DUB

Booth: 12b

DUB is a University of Washington alliance exploring Human Computer Interaction and Design--Computer Science and Engineering, Technical Communication, Biomedical and Health Informatics, the School of Art and the Information School. UW Press will publish Personal Information Management in the fall of 2007.

UserZoom

Booth: D

UserZoom is an automated (non-moderated) remote usability testing tool. It can test large volumes of users in their natural context and quantify usability and UX of digital interfaces, both in the local and international marketplace.

UXalliance

Booth: 30
(Recruiting)

The User Experience Alliance (UXa) is a working network of the leading usability companies in Europe, the US and Asia. Together we offer international user experience research services providing clients with one point of contact and a global reach.

VMware, Inc.

Booth: H
(Recruiting)

VMware is the global leader in virtual infrastructure software for industry-standard systems. The world's largest companies use VMware solutions to simplify their IT, fully leverage their existing computing investments and respond faster to changing business demands.

Yahoo!

Booth: M, N
(CHI Champion, Recruiting)

How Big Can You Think? If you're up for creating products that bring half a billion people worldwide together, we're looking for you. Yahoo!'s User Experience and Design team is hiring big. Come discover how you can help change the face of one of the world's most trafficked Internet destinations.

YELLOWPAGES.COM

Booth: 31
(Recruiting)

Consumers have trusted Yellow Pages to deliver information for more than 125 years. Now, YELLOWPAGES.COM, a wholly owned subsidiary of AT&T, provides comprehensive Web advertising solutions for local businesses — Web sites, business listing advertising, search engine solutions and more.

Notes

WORKSHOPS REVIEW COMMITTEE

Jeremy Ashley, *Oracle*, USA
Louise Barkhuus, *University of Glasgow,* UK
Scott Berkun, *Scott Berkun Consulting,* USA
Alan Blackwell, *Cambridge University,* UK
Mark Blythe, *University of York*, UK
Sheryl Brahnam, *Missouri State University,* USA
Johanna Brewer, *University of California, Irvine,* USA
A.J. Brush, *Microsoft*, USA
Scott Counts, *Microsoft*, USA
Edward Cutrell, *Microsoft*, USA
David Geerts, *Drexel University*, USA
Danyel Fisher, *Microsoft*, USA
Robert J. K. Jacob, *Tufts University*, USA
Janice James, *Perficient*, USA
Carlos Jensen, *Oregon State University*, USA
Karrie G. Karahalios, *University of Illinois, Urbana-Champaign*, USA
Joseph Kaye, *Cornell University*, USA
Jon Kolko, *Savannah College of Art and Design*, USA
Scooter Morris, *University of California, San Francisco*, USA
Kumiyo Nakakoji, *University of Tokyo*, Japan
Tony Renshaw, *Innovation North Faculty of Information & Technology*, UK
Kai Richter, *Computer Graphics Center (ZGDV)*, Germany
Carol Righi, *Perficient*, USA
Corina Sas, *University College Dublin*, UK
Simone Stumpf, *Oregon State University*, USA
Desney Tan, *Microsoft*, USA
Lucia Terrenghi, *University of Munich,* Germany
Charles van der Mast, *Technische Universiteit Delft*, the Netherlands
Asimina Vasalou, *Lumina Interactive*, UK
Susan Wiedenbeck, *Drexel University*, USA

MENTORS

Ron Baecker, *University of Toronto,* Canada
Kate Ehrlich, *IBM,* USA
Daniel Fallman, *Umea University*, Sweden
Morten Fjeld, *Chalmers University of Technology,* Sweden
Nancy Frishberg, *Vinq LLC,* USA
Emilie Gould, *Acadia University*, USA
Richard Harper, *Microsoft*, UK
Kristina Höök, *SICS*, Sweden
Jennifer Lai, *IBM*, USA
Tom Moher, *University of Illinois, Chicago,* USA
Andrew Monk, *University of York,* UK
Lisa Neal, *eLearn Magazine*, USA
William Newman, *Interactive Systems Consultant,* UK
Takehiko Ohno, *NTT,* Japan
Gary Olson, *University of Michigan*, USA
Mary Beth Rosson, *The Pennsylvania State University*, USA
Angela Sasse, *University College, London,* USA
Andrew Sears, *University of Maryland, Baltimore County,* USA
John Thomas, *IBM*, USA
Manfred Tscheligi, *University of Salzburg,* Austria
Terry Winograd, *Stanford University,* USA

BEST OF CHI COMMITTEE

Refer to the General Information section for a list of this year's Best of CHI Committee.

April 5-10, 2008

Join us in Florence, Italy for the 26th Annual CHI conference, the premier international forum for all aspects of human computer interaction.

For submission dates, registration, and other information visit:

http://www.chi2008.org

Come experience the magic of Leonardo's Italy!

acm SIGCHI special interest group computer human interaction

A

Abbas, Yasmine 104
Abdulla, Leith 26, 37
Abowd, Gregory D. 2, 17, 24, 81, 83, 86, 90
Ackerman, Mark 33, 101
Acquisti, Alessandro 67
Adamczyk, Piotr D. 71, 99
Adlin, Tamara 94
Agne, Stefan 103
Ahern, Shane 41
Ahmed, Iftikhar 58
Ainslie, Alex 104
Aitken, Mike 26, 34
Akers, David 97
Al Hashimi, Sama'a 98
Ala, Sasi Kanth 98
Alexander, Jason 90
Allen, Rebecca 58
Almirall-Hill, Magí 84
Alpine, Paul Mac 69
Alwin, Jenny 89
Ames, Morgan G. 68
Anderson, Richard 24, 53
Anderson, Taylor J. 68
André, Paul 98
Andreasen, Morten Sieker 86
Aneja, Shweta 34
Antle, Alissa 102
Anttila, Akseli 42
Ao, Xiang 41
Aoki, Paul M. 26, 57
Appert, Caroline 75, 86
Apted, Trent 98
Ardito, Carmelo 102
Arent, Michael 49
Armstrong, Meg 37
Armstrong, Susan 70
Arnott, John L. 40
Arriaga, Rosa I. 83
Arvind, Ashok 98, 103
Ashley, Jeremy 4, 53, 70, 84
Ashok, Arvind 98, 103
Astakhov, Adim 56
Astakhova, Tamara 56
Astbrink, Gunela 67
Atterer, Richard 27, 83
Augustin, Sally 27, 58
Avrahami, Daniel 33

B

Bach, Paula M. 39
Bagnara, Sebastiano 76
Bahrami, Ali 58
Bailenson, Jeremy N. 26, 33
Bailey, Brian P. 57, 75, 99
Baillie, Lynne 34, 99
Bajaj, Sameer 100
Baker, Ryan S.J.D. 26, 71
Balakrishnan, Ravin 34, 50, 55, 58, 74, 84, 90
Balkar, Anzor 102
Ball, Robert 27, 38, 100
Ballagas, Rafael 52, 72
Banks, Richard 68
Banzi, Massimo 91
Baptista, Luciana 75
Bardel, William 30
Bardram, Jakob 41
Barkhuus, Louise 43, 55
Barron, Brigid 102
Barthelmess, Paulo 70
Baskinger, Mark 30
Basnyat, Sandra 52
Bass, Len 23, 77
Bassoli, Arianna 69, 76
Bastéa-Forte, Marcello 101
Batcheller, Archer L. 59
Battle, Lisa 74
Baudisch, Patrick 4, 26, 32, 35, 38, 39, 48, 55, 66, 82, 84, 88
Bauer, Aaron 27, 69
Baumann, Stephan 69
Baumer, Eric 55, 69
Baumgärtner, Sebastian 103
Beale, Russell 89
Beaudouin-Lafon, Michel 25, 58, 75, 84, 86
Beck, Christian 98, 103
Becvar, Amaya 98
Bellamy, Rachel 42, 104
Bellotti, Victoria 49
Belt, Sara 69
Bennett, William E. 70
Bentley, Frank 83
Bergel, Marguerite 94
Bergstrom, Tony 1043
Berkun, Scott 4, 88
Bernhaupt, Regina 52, 101
Bernstein, Michael 103
Best, Michael 99
Betrancourt, Mireille 70
Bevan, Nigel 44
Bhan, Niti 2, 92
Bickmore, Timothy 103
Biehl, Jacob T. 83
Bier, Eric A. 38
Billinghurst, Mark 69
Billman, Dorrit 38
Binsted, Kim 72
Birnholtz, Jeremy P. 34, 74
Blackwell, Alan 4, 69, 82, 99
Blandford, Ann 55, 99
Blevis, Eli 26, 49, 54, 99
Blomberg, Jeanette 42
Bly, Sara 25, 44
Blythe, Mark 103
Boardman, Richard 87
Boch, Matthew 91
Boehner, Kirsten 26, 71, 85
Boll, Susanne 69
Bonebright, Terri 98
Booher, John 97
Booth, Kellogg S. 50, 68
Borchers, Jan 52, 53, 72, 98
Boring, Ronald 52
Borning, Alan 49
Boshernitsan, Marat 51
Bötschi, Kristina 54
Bowers, John 59
Bowman, Doug A. 27, 38
Boyden, Caroline 60
Brandt, Joel 100
Brandtzæg, Petter Bae 99
Brewer, Johanna 76
Brewster, Stephen 37, 55, 100, 101
Brezin, Jonathan 42
Broll, Wolfgang 82
Brown, Barry 4, 43
Brown, Lorna 37
Brownholtz, Beth 101
Brumby, Duncan P. 39
Brush, A. J. Bernheim 50, 68
Buchanan, George 37
Buckhalter, Celeste 99
Bunt, Andrea 33
Burnett, Gary 87
Burnett, Margaret 4, 51, 59
Busse, Daniela 84
Butler, Keith A. 30, 58
Buxton, Bill 37
Byrne, Michael D. 38

C

Cabraal, Anuja 67
Callander, Maria 51
Canales, Lorenzo 69
Canny, John 26, 57, 71, 87
Cao, Xiang 87
Cao, Xiaowei 102
Card, Stuart K. 25, 66
Carlsson, Victoria 87
Carpendale, Sheelagh 27, 38, 74
Carroll, John M. 25, 39, 57
Carson, Tania 72
Carter, Scott 37
Cassell, Justine 90
Castellanos, Tonatzin Y. Baños 98
Castro, Luis A. 97
Cater, Kirsten 100
Catrambone, Richard 82
Cawthon, Nick 91
Cechanowicz, Jared 26, 84
Chadwick-Dias, Ann 94
Chaki, Shuichi 101
Chalecki, Jason 33
Chapuis, Olivier 38, 41, 86
Chattratichart, Jarinee J. 27, 53, 86
Chau, Duen Horng 55, 82
Chaudhri, Vinay K. 91
Chavan, Apala Lahiri 68
Chen, Fang 100
Chen, Jen-hao 100
Cheng, Nikko 55
Chennupati, Balakrishna 97
Cherian, Sajeev 101
Cherubini, Mauro 51
Chetty, Marshini 83, 103
Chi, Ed H. 50, 54, 73
Chi, Pei-Yu 100
Chignell, Mark 84
Chiu, Jane 71
Cho, Il-Yeon 102
Cho, Sung-Jung 35
Chohan, Faraz 37
Choi, Eric 100
Choi, Changkyu 35
Chorianopoulos, Konstantinos 99
Christensen, James 70
Christou, Georgios 98
Chu, Hao-hua 100
Chung, Hyemin 100
Churchill, Elizabeth F. 4, 26, 76, 89, 101
Clarkson, Edward 37
Clawson, James 37
Close, Benjamin 101
Cockburn, Andy 27, 55, 58, 74, 90
Cockton, Gilbert 43
Cohen, Phil 70
Collins, Anthony 98
Convertino, Gregorio 101
Corey, Julihn 75
Cornwell, Jason 86
Correa, Andrew 69
Costabile, Maria Francesca 102
Costanza, Enrico 58
Courage, Catherine 59
Coursaris, Constantinos 103
Coyle, Cheryl 83
Cramer, Henriette 97
Crane, Elizabeth 43
Cranor, Lorrie 67
Croft, Christian 69
Cross, Ernest II 102
Cuartielles, David 91
Cui, Jingyu 41
Cutrell, Edward 27, 39, 49
Cypher, Allen 68
Czerwinski, Mary 34, 49, 68, 83

D

Dahlbäck, Nils 89
Dai, Guozhong 41
Danis, Catalina 4, 27, 51, 74, 98
Dantcheva, Antitza 34
Dascalu, Sergiu 102
Davis, Hugh 101
Dawe, Melissa 98
De Angeli, Antonella 42
de la Chica, Sebastian 98
De Nood, Christiaan 104
Dearden, Andy 99
Degler, Duane 74
DeLine, Rob 51
Deller, Matthias 103
Demmans, Carrie 104
Demosthenous, Catherine 67
Devanathan, Varun 71
Dey, Anind K. 33, 74
Diaz, Vincent 98
Dickinson, Anna 40
DiGiano, Chris 99

Ding, Jiarong 83
Ding, Xianghua 70, 98
DiSalvo, Carl 75, 99
Dix, Alan 88
Dixon, Morgan 83
Do, Ellen Yi-Luen 104
Dobrosielski, John 97
Donath, Judith 91
Dong, Jianming 61
Douglas, Robert 101
Dourish, Paul 26, 71
Dow, Steven 87
Dragicevic, Pierre 84, 90
Dray, Susan M. 39, 62, 99
Drews, Clemens 68, 76
Du, Qixing 54
Du, Yangzhou 41
Duca, Florin 54
Ducheneaut, Nicolas 27, 59
Duesner, Andreas 69
Dugan, Casey 101
Dunne, Lucy E 40
Durrant, Abigail 99
Dworman, Garett 84, 90
Dykstra-Erickson, Elizabeth 76

E

Ebert, Achim 103
Eckles, Dean 41
Edwards, W. Keith 41, 59
Eftring, Håkan 100
Egelman, Serge 99
Ejdestig, Martin 54
el Kaliouby, Rana 90
Ellis, Jason B. 27, 51
Ellison, Nicole 27, 50
Elmore, Brenton 88
Epps, Julien 101
Erdmann, Candice 70
Erickson, Thomas 33, 42, 70, 98, 104
Esposito, Chris 58
Euchner, James 33
Evans, John 76
Evenson, Shelley 54
Everett, Sarah P. 38

F

Feiner, Steven 27, 40, 100
Fekete, Jean-Daniel 86
Finkle, Mark 88
Fischer, Gerhard 23, 98, 99
Fisher, Danyel 76
Fitzmaurice, George 99
Fjeld, Morten 54
Flanagan, Mary 26, 38
Fogarty, James 33, 37
Fogg, Andrew 26, 34
Foley, Jim 17, 65, 66, 2
Foong, Pin Sym 98
Foremski, Tom 90
Forlines, Clifton 38, 50, 55
Forlizzi, Jodi 38, 54
Forssell, Karin 102
Fortin, Nate 45
Foucault, Brooke 27, 58, 89
Frankel, James L. 71
Fraser, Mike 82
Frauenberger, Christopher 97
Fredriksson, Jonas 54
Freier, Nathan 98
Friedman, Batya 15, 49, 104
Friess, Erin 97
Froehlich, Peter 34
Frøkjær, Erik 99
Fuhr, Claudia 52
Fujiki, Yuichi 104
Fukumoto, Masaaki 100
Furlong, Michele 67
Fussell, Susan R. 40, 49, 101

G

Galicia, Leonardo 97
Garcia, Carmen 97
Garcia, Olga 42
Garreta-Domingo, Muriel 84
Gathman, E. Cabell 33
Gaver, William 59
Gay, Geri 104
Geerts, David 99
Gerber, Elizabeth 71
Gergle, Darren 27, 89
Geyer, Werner 101
Ghellal, Sabiha 82
Giaccardi, Elisa 99
Gibbs, Martin 90
Gillette, Daniel 90
Girardin, Fabien 97
Girgensohn, Andreas 74
Girouard, Audrey 103
Glancy, Maxine 75
Gluck, Jennifer 33
Golbeck, Jennifer 104
Golden, Elspeth 77
Gomez, Gloria 53
Gong, Jun 101
Good, Nathaniel S. 41, 54
Goodman, Elizabeth 51, 88
Goodwin, Kim 45
Goolkasian, Paula 27, 89
Graham, Susan L. 51
Grandhi, Sukeshini 100
Grasset, Raphael 69
Gray, Tiffany 97
Gray, Wayne 103
Grechenig, Thomas 101
Greco, Lucy 60
Green, Collin 51
Greenberg, Saul 25, 38, 55
Greenblatt, Dan 69, 99
Greene, Kristen K. 38
Grinter, Rebecca E. 26, 104
Gross, Ben 104
Gross, Joshua 98
Grossklags, Jens 54
Grossman, Tovi 34, 41, 50, 90
Grubb, Jonathan 67
Grude, Amy 97
Grudin, Jonathan 30, 45, 49, 94
Gruen, Daniel M. 27, 69
Guan, Zhiwei 27, 49, 99
Guiard, Yves 41, 86
Guimbretiere, Francois 83
Guitton, Pascal 38
Gukeisen, Martha 97
Gupta, Priyanka 102
Gupta, Rahul 90
Gustafson, Sean 104
Gutwin, Carl 26, 33, 55, 59, 70, 76
Gwizdka, Jacek 45
Gylseth, Marius 97

H

Haans, Antal 104
Haber, Eben 68
Hachet, Martin 38
Haciahmetoglu, Yonca 35
Hafner, Carole 101
Häkkilä, Jonna 69
Häkkinen, Ville 59
Halverson, Tim 49
Hämäläinen, Perttu 59
Hamilton, Kevin 99
Hamilton, Stuart 88
Hamnes, Kari 51
Hancock, Jeffrey T. 50, 68
Hancock, Mark 27, 74
Hansen, Derek 36
Harada, Susumu 99
Harden, Vanessa 91
Harding, Chris 98
Hargraves, Ian 86
Harmon, Ellie 87
Harper, Richard 34, 37
Harrison, Steve 33, 55, 58
Harry, Drew 91
Hartmann, Bjoern 26, 37, 51
Hartmann, Jan 42
Harvey, Richard 89
Hasbrouck, Jay 49
Hayes, Gillian R. 83, 90
Haynes, Steven R. 75, 99
He, Jibo 54
Hearst, Marti A. 51, 78, 99
Heath, Christian 87
Hebron, Ron 58
Heer, Jeffrey 37, 70
Heffelaar, Tobias 93
Henderson, Austin 25, 33
Henninger, Scott 74
Henze, Niels 69
Herbsleb, Jim 30
Herder, Eelco 27, 54
Herling, Jan 82
Hernández, Yazmín R. López 98
Herrmann, Tobias 53
Heuten, Wilko 69
Hill, Robin L. 40
Hilligoss, Brian 59
Hinckley, Ken 39, 83
Hindmarsh, Jon 87
Hirose, Michitaka 103
Hirshfield, Leanne 103
Hockenberry, Matthew 61
Hodges, Larry 27, 89
Hodges, Steve 26, 34
Hoffmann, Cristina 101
Hoggan, Eve 100
Holleis, Paul 87, 102
Holman, David 97
Holmquist, Lars Erik 4, 35, 58, 72, 88, 99
Holtzblatt, Karen 23, 44, 78
Hong, Jason I. 67, 86, 103
Höök, Kristina 99
Horn, Michael 35, 103
Hornbæk, Kasper 26, 55, 82
Hornick, Bryant 69
Hornof, Anthony J. 49
Horvitz, Eric 57
Hourcade, Juan Pablo 42, 102
Houssian, Aaron 98
Hovestadt, Ludger 52
Howes, Andrew 26, 39
Hu, Jiang 83
Huang, Elaine 104
Hudson, Scott E. 33, 37, 40
Hudson, William 77
Hughes, Stephen 35
Huh, Jina 33, 101, 104
Hull, Richard 100
Hundhausen, Christopher 102
Hurst, Amy 40
Huse, Adam 98
Hussmann, Heinrich 87
Hutchful, David 97
Hutchings, Dugald 38
Hutchings, Robin 100

I

Ichimaru, Toshiaki 100
Iden, Rebecca 83
Igoe, Tom 4, 69, 88, 91
IJsselsteijn, Wijnand 104
Illowsky, Rebecca 83
Ilmonen, Tommi 76
Inkpen, Kori M. 4, 26, 35, 37, 42, 76
Inverso, Samuel A. 58
Iqbal, Shamsi T. 57
Irani, Pourang 26, 33, 84, 104
Isbister, Katherine 99
Ishak, Edward 100
Ishii, Hiroshi 25, 35, 53, 54, 57, 99
Ivaturi, Subbarao 58, 84, 88, 90
Izadi, Shahram 74

J

Jacko, Julie A. 86
Jacob, Robert J. K. 24, 26, 30, 35, 41, 98, 103
Jacucci, Giulio 76
James, Janice 4, 61, 91
Jameson, Anthony 93
Jamsri, Pornsuree 98
Jansen, Bernard 100
Janssen, Torben 101
Jefferson, Luke 89
Jeffries, Robin 25, 76, 86
Jensen, Carlos 67
Jensen, Scott 97
Jing, Feng 54

John, Bonnie E. 25, 50,77, 91, 100
Johnsen, Kyle 71
Johnson, Chris 52
Johnson, Peter 52
Johnston, Erik 76
Joinson, Adam 50
Jokela, Timo 99
Jones, Eric 100
Jones, Lauretta 104
Jones, M. Cameron 60
Jones, Matt 25, 37, 79, 99
Jones, Quentin 100
Jones, William 45, 49
Jouhtio, Mikko 59
Juchli, Patrick 54
Jumptertz, Sylvie 101
Ju, Wendy 102
Jung, Björn 69
Jung, Younghee 42

K

Kahana, Gil 75
Kaiser, Edward C 70
Kalnikaite, Vaiva 26, 34
Kam, Matthew 71
Kandogan, Eser 68
Kang, Sin-Hwa 98
Kaplan, Jonathan 100
Karahalias, Karrie 104
Karger, David 103
Karmin, Lynne Brotman 72
Kato, Hiroshi 100
Kattinakere, Ragu 41
Kaufman, David 36
Kawashima, Michie 74
Kay, Judy 98, 104
Kaye, Joseph 'Jofish' 42, 43, 59, 85, 90, 97
Kazakos, Kostas 104
Kellar, Melanie 26, 42
Kelleher, Caitlin 86
Kellogg, Wendy A. 4, 26, 27, 42, 51, 68, 70, 104
Kern, Dagmar 102
Kerne, Andruid 57
Kerridge, Tobie 59
Khalayli, Nina 51
Kheir, Omar 42
Kiel, Henning 98
Kientz, Julie A. 83
Kieras, David 30, 58
Kiesler, Sara 25, 34, 67, 86, 101
Kildal, Johan 100
Kim, Dan 103
Kim, Grace 88
Kim, Ji-Eun 102
Kim, Yeun-Bae 35
Kindberg, Timothy 75
King, Jen 99
King, Simon 41
Kirk, David 34, 70, 74
Kirschner, Bryan 39
Kittur, Aniket 50, 73
Klann, Markus 97
Klasnja, Ana 43
Klasnja, Predrag 104
Klemmer, Scott R. 26, 37, 57, 100, 102
Kleymeer, Pieter 97
Klug, Tobias 104
Knight, Andrea 51
Ko, Andrew J. 51, 59
Koedinger, Kenneth R. 27, 69
Kolko, Jon 4, 54, 67, 76
Kolojejchick, Jake 57
Költringer, Thomas 101
Komatsu, Takanori 103
Kong, Nicholas 50
Konstan, Joseph A. 54, 67
Korhonen, Hannu J. 103
Kotval, Xerxes 83
Kramer, Adam 104
Kratz, Sven 52
Kraut, Robert E. 25, 27, 59, 67, 89
Krishnan, Gaurishankar 99
Kristensson, Per Ola 51, 74, 90
Krum, David M. 40
Kuber, Ravi 89, 103
Kumar, Manu 35, 49, 101
Kumaraguru, Ponnurangam 67
Kuno, Yoshinori 74
Kuribayashi, Satoshi 103
Kurniawan, Sri H. 99, 100, 102
Kuzuoka, Hideaki 74, 103

L

Laaksolahti, Jarmo 85
Laitinen, Toni 59
Lampe, Cliff 4, 50, 76
Landgren, Jonas 83
Landrigan, Chris 68
Lank, Edward 55
Lanzilotti, Rosa 102
LaRosa, Mark 34
Lau, Tessa 68, 76
Law, Effie Lai-Chong 26, 55
Laws, Nathaniel 100
Leah, Maestri 75
Leahu, Lucian 56
LeClerc, Vincent 53
Lee, Brian 102
Lee, Dong-Woo 102
Lee, Eric 53, 98
Lee, Geehyuk 102
Lee, Junwoo 104
Lee, Seung Eun 102
Lee, Wai On 72
Lee, Kwanghyeon 35
Leimeister, Jan Marco 36
Lemmelä, Saija-Maaria 103
Leplatre, Gregory 67
Letondal, Catherine 41
Levialdi, Stefano 88
Levine, James 104
Levy, Stephen 70
Li, Jason 83
Li, Meng 97
Li, Yang 40
Liccardi, Ilaria 101
Lievesley, Matthew A. 76
Light, Ann 99
Like, Liu 53
Lim, Seung Chan 91
Lim, Youn-Kyung 34, 99
Lin, James 68, 76
Lin, Liang-Cheng 72
Lind, D. Scott 71
Lindblad, Aleksi 59
Lindgaard, Gitte G. 27, 86
Lindt, Irma 82
Lisowska, Agnes 70
Little, Greg 68
Liu, Alan L. 40
Liu, Sophia B. 57
Ljungblad, Sara 58
Lok, Benjamin 71
Lotan, Gilad 69
Louis, Sushil 102
Lucas, Bill 4, 57, 76, 90
Lucas, Peter 57, 91
Ludford, Pamela J. 75
Luff, Paul 87
Luon, Yarun 98
Lyons, Kent 37
Lyons, Leilah 97

M

MacIntyre, Blair 87
Mackay, Wendy E. 41, 86
MacKenzie, Scott 78, 101
MacLean, Karon E. 68
Madison, Poon 75
Maes, Pattie 58
Magnusson, Charlotte 100
Mahlke, Sascha S. 67
Mahmud, Murni 100
Mak, Clarissa 34
Mäkelä, Kaj 69
Maki, Jeff 75
Malatack, Patrick 103
Manabe, Hiroyuki 100
Mankoff, Jennifer 37, 40, 49
Manstetten, Dietrich 40
Marchionini, Gary 67, 99
Marino, Dominic 27, 40
Markley, Daniel 39
Marotta, Michael 103
Marquet, Bernard 101
Marsden, Gary 217, 25, 47, 48, 79
Marti, Stefan 35
Martin, Caitlin 102
Martin, Karen 76
Martin, Nathan 75
Mateas, Michael 87
Mathew, Anijo 37, 104
Matsumoto, Takayuki 34
Mayer, Matthias 27, 54
McAllister, Graham 89, 103
McCarthy, Michael R. 82
McCrickard, Scott 4, 40
McDonald, David 38
McGarry, Robert 97
McGinn, Jennifer 50
McGookin, David 101
McGrenere, Joanna 33, 42
McGuire, Robert 86
McMillian, Yolanda 102
Meads, Jon 45
Medhi, Indrani 73
Medynskiy, Yevgeniy 'Eugene' 104
Mehta, Manish 87
Meitner, Michael J. 68
Melamed, Tom 100
Mellis, David 91
Memon, Faraz 72
Manuel, Roberto Mendoza 98
Mentis, Helena M. 4, 89, 99
Merrill, David 103
Meschkat, Steffen 93
Metcalf, Crysta 83, 104
Meyers, Brian R. 68
Michel, Thomas 41
Millen, David R. 27, 69, 101
Miller, Andrew 41
Miller, Craig 100
Miller, Justin 53
Miller, Robert C. 4, 76, 99
Minardo, Katie 34
Mirlacher, Thomas 101
Mishra, Sunil 91
Mittal, Manas 26, 37
Mittleman, Josh 93
Moggridge, Bill 2, 31, 32, 37, 47
Mohnkern, Ken 86
Molich, Rolf 39, 78, 79, 82, 94
Moncur, Wendy 67, 98
Moore, Johanna D. 83
Moore, Robert J. 27, 33, 59
Mor, Enric 84
Mora, Fernando David Sernas 98
Moran, Thomas P. 25, 101
Moraveji, Neema 53, 83
Moroney, William F. 68
Morris, John 'Scooter' 4, 25, 69, 88
Morris, Shane 94, 95
Morse, Joshua 98
Mueller, Florian 'Floyd' 52, 88, 90, 99, 103
Mukawa, Naoki 104
Muller, Michael J. 4, 27, 58, 69, 76, 101
Mulligan, Deirdre K. 54
Munson, Sean 97
Murata, Yusuke 72
Murphy, Emma 103
Murray, Dianne 75
Murray-Smith, Roderick 35, 52, 75, 99
Myers, Brad A. 55, 59, 82
Mytkowicz, Todd 73

N

Naaman, Mor 41, 68
Naimark, Michael 88
Nainwal, Satyendra 98
Nair, Rahul 41, 99
Nakagawa, Takeshi 34
Nakakoji, Kumiyo 4, 72, 99

Nam, Kevin 59
Nass, Clifford I. 40, 83, 89
Nathan, Lisa 104
Neal, Lisa 36
Nelson, Les 86, 101
Nenonen, Ville 59
Newell, Alan F. 40
Nguyen, David 26, 87
Nhan, Anna 97
Nichols, Jeffrey 82
Nickell, Eric 27, 33, 59
Nielsen, Henrik Villemann 86
Nieters, James 53, 58, 84, 90
Nissenbaum, Helen 26, 38
Nobles, Kathryn 102
Noldus, Lucas P.J.J. 93
North, Chris 27, 35, 38, 49
Nulden, Urban 83
Nunge, Elizabeth 67
Nuur, Mohamed 102
Nyhus, Silja 51

O

Oakley, Ian 100
Oakley, Kate 36
Obendorf, Hartmut 27, 54
O'Brien, Shannon 52, 103
Obrist, Marianna 99
Odom, William 97
Oh, Lui Min 40
O'Hara, Kenton 26, 67, 75
Ohlenburg, Jan 82
Ohno, Takehiko 101
O'Kelley, Patrick 83
Olson, Gary M. 25, 30
Olson, Judith 25, 101
O'Modhrain, Sile 52
Onesti, Nina 97
Oren, Michael 98
Osawa, Noritaka 101
Otto, Friederike 87
Ou, Jiazhi 40
Oulasvirta, Antti 72, 76
Ozawa, Shinji 101

P

Pace, Tyler 98
Pacheco, John 91
Paepcke, Andreas 49, 101
Pal, Joyojeet 90
Palanque, Philippe 52
Palay, Joshua 98
Palen, Leysia 57
Parikh, Tapan S. 53
Park, Junseok 100
Parkes, Amanda 53
Patel, Shwetak N. 83
Patten, James 54
Pausch, Randy 86
Pavlidis, Ioannis 104
Pawar, Udai S. 90
Pederson, Claudia 56
Pederson, Thomas 102
Peebles, Ed 72
Pendleton, Bryan A. 50, 73
Pérez-Quiñones, Manuel A. 100
Pérez, Emmanuel Aquino 98
Perry, Keith 42, 102
Perugini, Saverio 68
Peter, Christian 43
Peters, Matthew R. 99
Petrie, Helen 42
Pettitt, Michael 87
Pfeil, Ulrike 68
Phanichphant, Purin 103
Pierce, Jeffrey S. 68
Pietriga, Emmanuel 75
Pinelle, David 26, 33
Pirolli, Peter 25, 60, 100
Pitt, Jeremy 50
Pobiner, Scott 37
Poblano, Raul-David V. 91
Poltrock, Steven 45
Posner, Ilona 4, 68
Pouderoux, Joachim 38
Prasad, K. Venkatesh 40
Prevas, Gus 91
Price, Greg 103
Priedhorsky, Reid 75
Provino, Joe 100
Pruitt, John 94
Pyla, Pardha 100
Pyo, Seyoung 102
Pyrzak, Guy 51

Q

Quagliara, Nick 98
Quiroz, Juan 102

R

Rader, Emilee 59
Raffle, Hayes 103
Ragouzis, Nick 99
Raij, Andrew 71
Rajan, A.R.D. 53
Rajman, Martin 70
Ramachandran, Divya 71
Ramalingam, Shruti 98
Ramey, Judith 84, 99
Ramos, Gonzalo 4, 32, 48, 58, 66, 75, 82, 84
Ranjan, Abhishek 74
Rantanen, Esa 75
Raskin, Aza 90
Rassmus-Gröhn, Kirsten 100
Rattenbury, Tye 57
Redström, Johan 54
Reichl, Peter 34
Reilly, Derek 35
Reily, Ken 75
Reiners, Rene 72
Reiter, Ehud 98
Ren, Yuqing 67
Resnick, Paul 49, 76
Rey-Babarro, Marta 4, 59
Rhee, Yong 67
Richards, John 42
Richardson, Jahmeilah 83
Rickertsen, Kathryn 26, 33
Riegelsberger, Jens 56
Righi, Carol 4, 61, 91
Ritter, Frank E. 98
Rivadeneira, A. W. 69
Roberts, Joi 99
Robertson, George G. 83
Robinson, Peter 98
Rodden, Kerry 104
Rodden, Tom 4, 15, 49, 70
Rode, Jennifer A. 43
Roedl, David 98
Rogers, Yvonne 72
Rose, David 57
Rose, Emma 99
Rosé, Carolyn P. 40, 89
Rosenbaum, Rhonda 42
Rosenbaum, Stephanie 84, 99
Ross, Blake 90
Rosson, Mary Beth 2, 4, 17, 98
Rother, Carsten 26, 34
Roussel, Nicolas 38, 41
Roussos, George 99
Rowbotham, Julie 75
Royer, David 97
Ruiz, Jaime 55
Ruiz, Natalie 100
Ryan, Betts 75
Ryokai, Kimiko 35

S

Saab, David J. 99
Sadazuka, Kazuhisa 74
Sakamoto, Yusuke 103
Salovaara, Antti 72, 76
Salvucci, Dario D. 26, 39
Sambasivan, Nithya 99
Sammon, Mike 72
Sampson Eves, Shauna 53
Sanders, Brian 56
Santos, Paulo 83
Sarin, Raman 39
Sato, Keichi 99
Schatz, Raimund 34
Schedlbauer, Martin 103
Schiano, Diane 67
Schiele, Bernt 87
Schleyer, Titus 102
Schmidt, Albrecht 27, 83, 87, 102
Scholl, Matthew 97
Scholtz, Jean 4, 44
schraefel, m c 75, 99, 103
Schroder, Simon Ormholt 86
Schroeder, Ulrik 41
Schuler, Richard 100
Schulman, Daniel 103
Schusteritsch, Rudy 34
Schwartzman, Yael 53
Scott, Josephine 82
Scupelli, Peter 101
Seager, Will P.J. 58
Seay, A. Fleming 59
Seichter, Hartmut 69
Seligmann, Doree 72
Selker, Ted 36, 100
Sellen, Abigail 26, 34, 74
Sengers, Phoebe 26, 33, 43, 49, 55, 56, 59, 71, 88, 89
Setlur, Vidya 41
Shaer, Orit 103
Shah, Tej 103
Shaikh, A. Dawn 87
Shami, N. Sadat 43
Sharma, Anju 69
Sharma, Nikhil 97
Shaukat, Muneeb 82
Shehan, Erika 59, 99
Shen, Chia 38, 50, 53, 55
Shi, Yu 100
Shilman, Michael 39
Shim, Jaewon 102
Shipman, Frank 74
Shneiderman, Ben 2, 25, 48, 88
Shoemaker, Garth 70
Sicconi, Roberto 40
Siegel, David A. 39, 62, 79
Silver, Courtney 68
Simmons, Isaac 86
Simon, Rainer 99
Simpson, Nigel 100
Sinclair, Mike 35
Singh, Supriya 67
Singh, Vikash 104
Slavik, Pavel 100
Slayden Mitchell, April 26, 67
Smalley, Preston 78
Smith, Barton A. 101
Smith, Daniel 98
Smith, Greg 83
Smith, Mark 76
Smith, Michael J. 40
Smith, Phillip 82
Smyth, Barry 40
Sohn, Misook 104
Solovey, Erin 103
Son, Yong-Ki 102
Song, Yaxiao 67
Spaulding, Aaron 91
Spool, Jared M. 49, 60, 61
Sporka, Adam J. 99, 100
St. Amant, Robert 26, 76, 87
Stach, Tadeusz 26, 33
Stage, Jan 86
Ståhl, Anna 85
Stanfield, Scott 88
Stanton-Fraser, Danae 58, 70
Starner, Thad 37
Starren, Justin 104
Stasko, John 38, 82
Steinfield, Charles 50
Stevens, Alan 87
Stevens, Amy 71
Stolen, Martin 97
Stolterman, Erik 87, 99
Strachan, Steven 52, 75
Strain, Philip 87, 103
Strenk, Judith 41
Strickland, Dorothy 90
Struppek, Mirjam 99
Stubblefield, William 72
Subramanian, Sriram 26, 41, 84, 104
Sue, Alison 76
Suh, Bongwon 50, 73

Sukumaran, Byju 75
Sumari, Lauri 72
Sumner, Tamara 98
Sung, Younghoon 35
Sunwoo, John 102
Sussman, Jeremy 70
Sutcliffe, Alistair 42
Suzuki, Hideyuki 100
Swart, Cal 42
Swindells, Colin 68

T

Tabard, Aurélien 41
Taib, Ronnie 100
Takemae, Yoshinao 101
Tan, Chui Chui 89
Tan, Desney S. 39, 68, 73
Tanaka, Hiroya 72, 103
Tang, Charlotte 38
Tang, John C. 68, 76, 82
Tang, Xiaoou 41
Tann, Martin 52
Tarasewich, Peter 101
Tatar, Deborah 4, 15, 55, 71
Taylor, Alex 42
Teo, Leonghwee 100
Terrenghi, Lucia 74
Terum, Tone 51
Terveen, Loren 75
Tewari, Anuj 71
Thomas, John C. 42, 71, 99, 104
Thompson, Ramona S. 75
Thompson, Robert 97
Thom-Santelli, Jennifer 56, 104
Thomson, Darren 97
Thorogood, Alex 52, 103
Thüring, Manfred M. 67
Thyvalikakath, Thankam 103
Tian, Feng 41
Tian, Yuandong 41
Titus, Jon 104
Toma, Catalina 27, 50
Tomasic, Anthony 86
Tomlinson, Bill 55, 69
Toups, Zachary O. 57
Toyama, Kentaro 73, 90
Travis, Kirton 75
Tsandilas, Theophanis 75
Tscheligi, Manfred 74, 99, 101
Tse, Edward 38
Tsujita, Hitomi 101
Tsukada, Koji 100, 101
Tsunoda, Fuminori 34
Tuddenham, Philip 98
Tullio, Joe 33
Tullis, Tom 94
Turnbull, Don 102
Turner, Thea 74
Twidale, Michael B. 60, 71, 99
Tyndiuk, Florence 38

U

Uldall-Espersen, Tobias 99
Ulinski, Amy 27, 89
Ullman, Adam 104
Ullmer, Brygg 99
Urban, Richard J. 60
Utsunomiya, Mariko 34

V

Vallgårda, Anna 54
Van, Michaela Ngo 101
van der Mast, Charles 4, 53, 88
Van House, Nancy 104
Van Kleek, Max 102
Vande Moere, Andrew 91
Vasalou, Asimina 50, 56
Vaucelle, Cati 104
Vaughn, Heather 83
Vaughn, Misha 59
Veen, Jeff 67
Veksler, Vladislav 103
Venkatacharya, Patañjali S. 33
Venolia, Gina 51, 68
Vertesi, Janet 26, 71, 99
Viégas, Fernanda B. 70
Viemeister, Tucker 70
Voegtli, Benedikt 54
Vogel, Daniel 26, 55
vom Lehn, Dirk 876
Voong, Michael 89
Vorbau, Alex 26, 67

W

Wahid, Shahtab 27, 51
Wakkary, Ron 75
Wall, Steven A. 4, 68
Walter, Sarah 102
Walz, Steffen 52
Wang, Hongan 41
Wang, Qianying 89
Wang, Shuo 54
Wash, Rick 97
Wasser, Michael M. 104
Watanabe, Keita 100
Watson, Secil 53
Watt, James 98
Wattenberg, Martin 70
Watters, Carolyn 26, 42
Wei, Lo Ping 104
Wei, Carolyn Y. 34
Weinreich, Harald 27, 54
Weiss, Noah 100
Weiss, Patrice 90
Weisz, Justin D. 67
Welles, Devon 89
Wen, Fang 41
White, Ryen W. 99
White, Sean 27, 40
White, Su 101
Whittaker, Steve 26, 34, 68
Wiedenbeck, Susan 59
Wigdor, Daniel 50, 55
Wilcox, Eric 101
Wilcox, Lynn 74
Wilfinger, David 101
Williamson, John 35, 75
Willis, Katharine S. 99
Wilson, Andrew 35
Wilson, Max 98
Winograd, Terry 25, 26, 35, 37, 49, 76, 87, 101
Winterboer, Andi 83
Wisniowski, Martin 69
Witt, Hendrik 101
Wittkämper, Michael 82
Wixon, Dennis 4, 83
Wobbrock, Jacob O. 55
Wolf, Marius 53
Wolf, Tracee Vetting 70, 99
Wong, Jeffrey 40, 86
Wood, Ken 26, 34
Wood, Larry 61
Wood, Shelley 61
Wood, Tim 70
Woodruff, Allison 27, 49, 58
Woolf, Suze 83
Wu, Fei 76
Wu, Shu-Chieh 100
Wyche, Susan P. 42, 104

X

Xech, Pierre-Louis 37
Xiao, Jun 82
Xiao, Rong 41

Y

Yamada, Seiji 103
Yamashita, Jun 100, 103
Yamazaki, Akiko 74
Yamazaki, Keiichi 74
Yang, Jie 40
Yankelovich, Nicole 100
Yasumura, Michiaki 100
Yau, Man Lok 69
Ye, Yunwen 99
Yee, Joyce S R 76
Yee, Nicholas 26, 27, 33, 59
Yehuda, Hanna 50
Yen, Corina 101
Yoda, Ikuo 101
Yost, Beth 35
Yu, Eugen 52
Yu, Wai 89, 103
Yuasa, Masahide 104
Yun, Sumi 102
Yurcik, William 75

Z

Zanbaka, Catherine 27, 89
Zaphiris, Panayiotis 68
Zhai, Shumin 51, 58, 74, 87, 90
Zhang, Haiyan 51
Zhang, Hui 67
Zhang, Jiajie 58
Zhang, Lei 54
Zhang, Mimi 100
Zhang, Qiping 99
Zhang, Ying 100
Zhao, Shendong 39
Zhou, Xiaomu 59
Ziefle, Martina 41
Zigelbaum, Jamie 103
Zimmerman, John 54, 83, 86
Zimmerman, Silvia 68
Zinman, Aaron 91
Zorman, Lorna 51
Zuber, Mark 39

Street Level

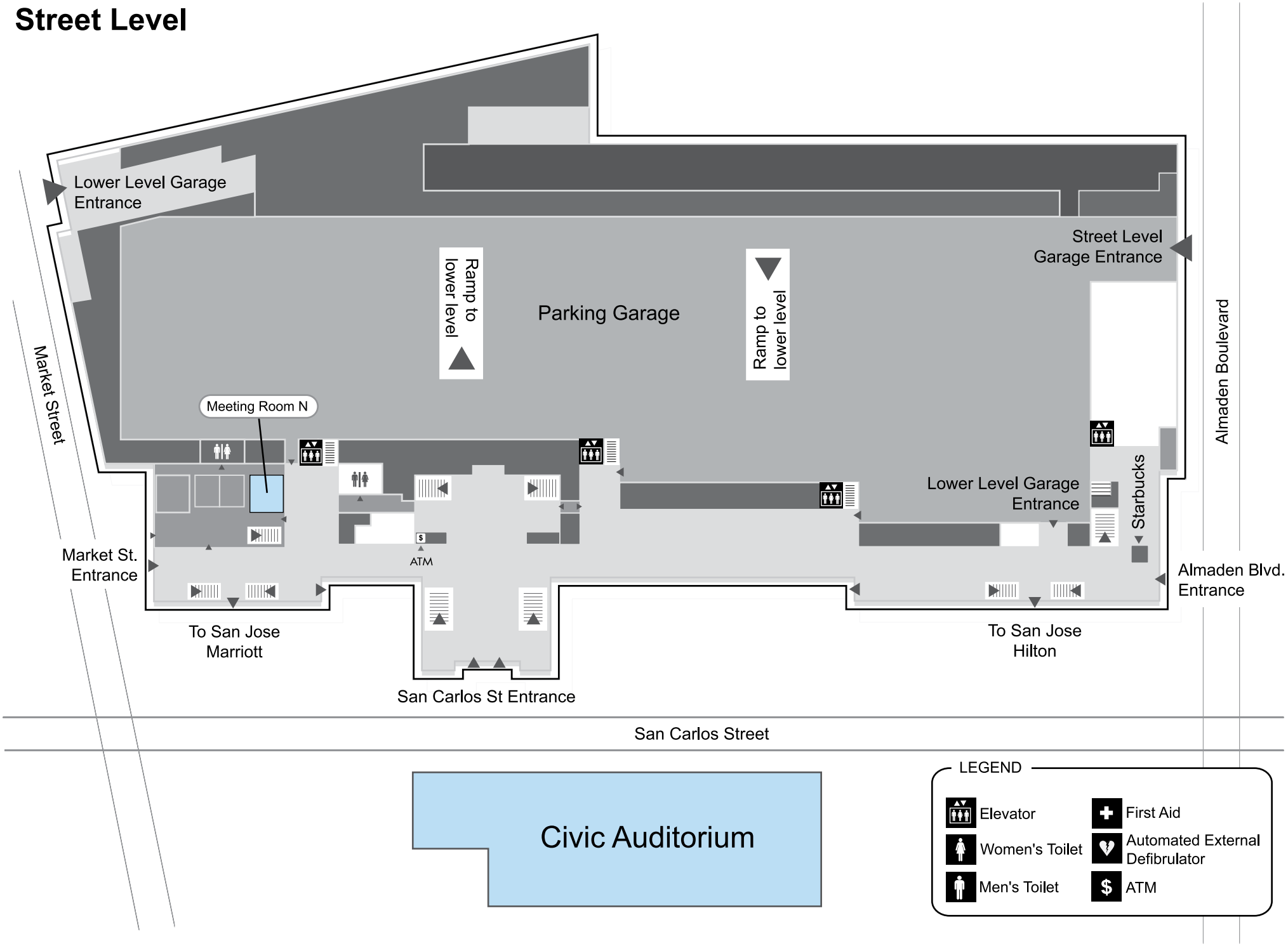
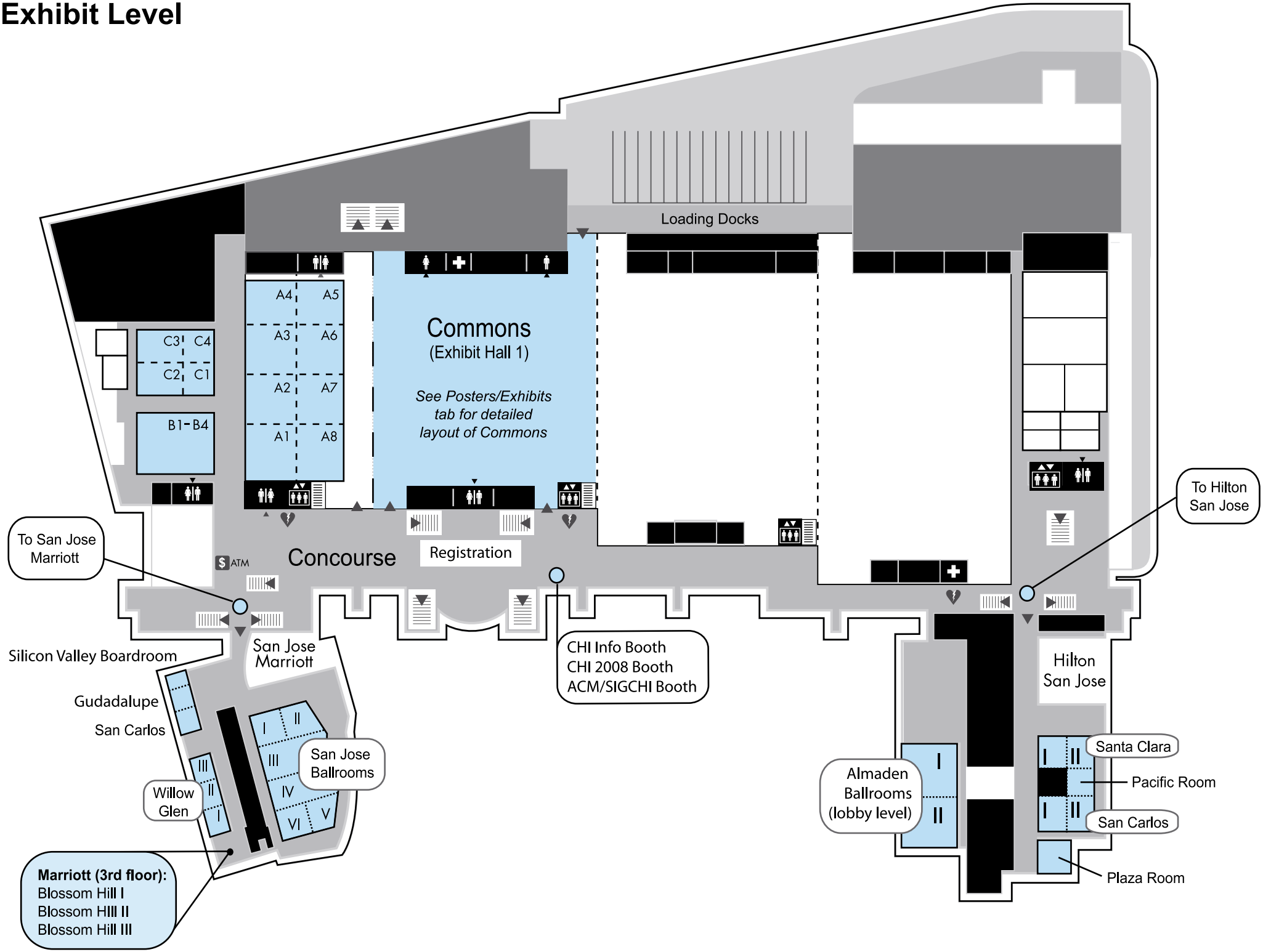
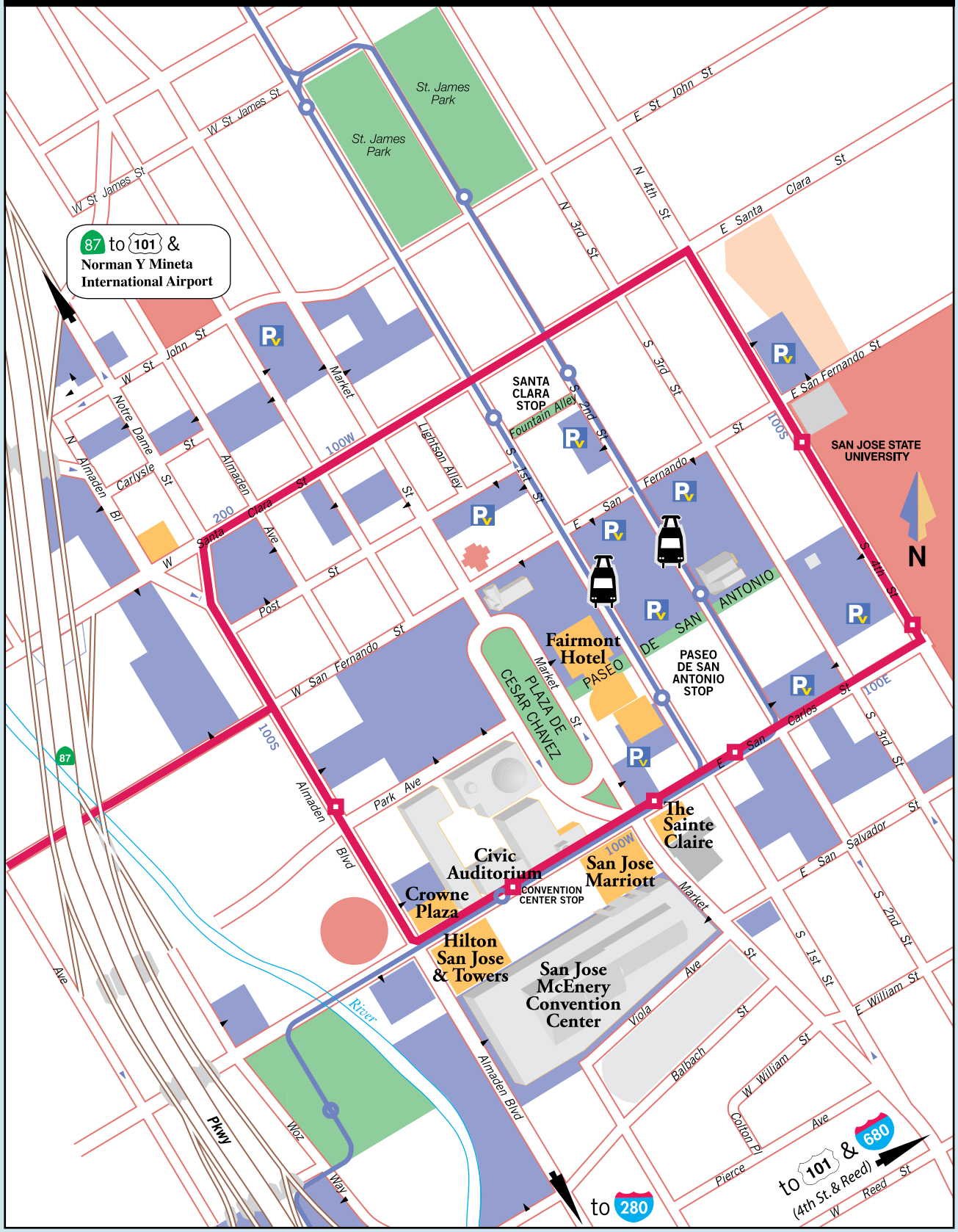


Exhibit Level



DOWNTOWN SAN JOSE MAP

CHI 2007 Conference / April 28 - May 3, 2007



VTA Light Rail

Dash Shuttle Line & Stop (free service)

public parking

validated parking

parking entrance

one way street

Crowne Plaza San Jose
282 Almaden Blvd.
408.998.0400

The Sainte Claire
302 S. Market St.
408.298.1234

Fairmont San Jose
170 S. Market St.
408.998.1900

San Jose Marriott
301 S. Market St.
408.280.1300

Hilton San Jose
300 Almaden Blvd.
408.287.2100