Workshop on

MOBILE SPATIAL INTERACTION

in adjunction with

ACM International Conference on Human Factors in Computing Systems

CHI 2007 “Reach Beyond”

28 April, 2007

San Jose, California, USA

The use of geo-referenced information on the web has recently received increasing interest in the research community and the public. People use interactive maps to share their favourite places with others, and they use geo-browsing services for planning their vacation. Spatial information is even more useful in mobile situations, because it is directly related to the user’s surroundings. This idea of “Mobile spatial interaction” (MSI) is becoming increasingly relevant, feasible and desired. Location and orientation sensing hardware is being integrated into a growing number of handsets and can be expected to be even more widespread in the near future. At the same time, geographic information systems and 3D models are becoming more sophisticated.

The workshop “Mobile Spatial Interaction” will aim to help researchers realize the vision of seamless and intuitive Mobile Spatial Interaction. The goal is to reach beyond the conventional model of location by creating a sense of space and orientation.

- Original research results and concepts on the following topics are encouraged:
- Methods and ideas for the identification of application scenarios
- Modelling concepts for geo-spatial (end-user) content creation
- Conceptual designs and scenarios of spatially-aware interaction techniques
- Outdoor testing methods for spatially aware applications
- Augmented/parallel reality concepts in gaming, arts, tourism, etc
- Location/orientation sensing technologies and migration paths from legacy to state-of-the-art technology
- Mobile social applications and services involving the interaction with information created by other users
- Indoor navigation and spatial awareness
- Practicality and feasibility issues regarding technologies, application design and data modelling.
- Combination of spatial interaction with gesture-based interaction
- Dealing with sensor uncertainty e.g. what happens when GPS shadows occur or there is less accurate wireless transmitter triangulation?
- Multimodal integration, e.g. by adding spatial audio, touch, or scent

Please note that the workshop focuses on interactions with information attachedto the surrounding space. Pure gestural interaction with a device is therefore explicitly excluded from the scope of this workshop.

AUDIENCE

The intention is to bring together researchers and practitioners from areas as diverse as: mobile application design; geographic information systems, geodesy and geoinformatics; pervasive game design; communications theory and social software design; experimental hardware prototyping; commercial device manufacturing; psychology of spatial perception; semantic systems and natural language processing; marketing; multimedia arts; tourism and cultural heritage; information visualization and sonification; spatial audio; and augmented reality.

SUBMISSION INSTRUCTIONS

Interested individuals should submit a 2-4 page position paper in the CHI extendedabstracts format (http://www.chi2007.org/submit/eaformat.php) by 12 January to the following Email address: MSI_submissions@ftw.at

It is planned to publish revised versions of selected papers in a special journal issue such as Personal and Ubiquitous Computing.

IMPORTANT DATES

- 12 January 2007: Submission deadline for position papers
- 1 February 2007: Acceptance notification
- 9 April 2007: Workshop registration deadline.
- 28 April 2007: Workshop Held

More information can be found at: http://msi.ftw.at

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