

URL: <http://www.teco.edu/chi2001ws/>

Workshop: Distributed and Disappearing User Interfaces in Ubiquitous Computing

OVERVIEW/THEME

As computer interfaces merge with our environments and virtually become invisible, new concepts for human-computer interaction have to be developed. Instead of a single screen-based user interface (UI), humans will interact with a multitude of devices that are distributed and interconnected, and thus the design space for these UIs becomes much larger than with conventional computers. We aim to develop an understanding of how distributed and disappearing UIs in ubiquitous computing can be designed and created, and also to consider the impact they will have on people's everyday life.

The workshop will focus on how to:

- reliably gather, model, and take advantage of situational context
- appropriately choose among available output options
- attract someone's attention without disturbing others
- address conflicting user goals in multi-user scenarios
- describe and model widgets in such systems
- handle system breakdowns

We will also address privacy, design, aesthetics and expressions, trying to grasp the possible social impact of such systems.

We hope to bring together researchers and practitioners who are concerned with design, development, and implementation of novel interfaces for mobile devices and environment-based appliances, as well as social issues emerging from their use.

Participants will be selected based on their submissions, either a position paper (2 pages) describing their interest and experience in the field, or an extended abstract (5 pages) describing ongoing research. We expect participants to search for a common understanding of user interfaces in ubiquitous computing and we aim to define a research agenda in this field.

WORKSHOP CHAIRS

Anind K. Dey, College of Computing, Georgia Institute of Technology, USA

Peter Ljungstrand, PLAY Research Studio, Interactive Institute, Sweden

Albrecht Schmidt, Telecooperation Office (TecO), University of Karlsruhe, Germany

IMPORTANT DATES

26. January 2001: Deadline for submission of extended abstracts and position papers.

02. February 2001: Notification of authors

31. March - 5. April: CHI2001 Conference in Seattle, USA.

Send submissions to disUI@teco.edu

More Information at: <http://www.teco.edu/chi2001ws/>

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TOPICS OF INTEREST INCLUDE:

- What ways of distributing the output from a system are meaningful? How should one choose from different output devices available, such as embedded screens and audio output, personal mobile displays and notification systems, ambient pixel or non-pixel displays?
- How does the situational context (e.g. the whereabouts of the user, social situation, relation between people) influence the distribution and allocation of input and output resources?
- What useful ways exist to describe and model input and output widgets in such systems?
- How will upcoming technologies that offer short-range inter-device communication (e.g. Bluetooth) influence the development of distributed interfaces?
- What technologies exist to reliably capture situational context? How do we extract information that can be used to make interfaces invisible? And what methods can we use to describe such information?
- Are there methods to model alternative inputs, considering distributed interfaces and also information provided by situational context?
- How do we deal with conflicting user goals?
- How do we deal with shared (public) input and output?
- Who “owns” or controls the local ‘ether’ in shared environments? What about “access rights” to shared resources in public places, trains, buses, etc?
- How do we attract one user’s attention, without disturbing other co-located people?
- Privacy issues – what if the environment records everything we do? Who has access to that?
- How to deal with design, aesthetics and expressions
- Anticipated social impact, major changes in ordinary peoples’ way of life (e.g. mobile phones and the Web)
- The pace of interaction (Slow Technology)

SUBMISSION DETAILS

We encourage submissions from researchers and practitioners in academia, industry, government, and consulting. Students, researchers and practitioners are invited to submit an extended abstract (about 2000 words) describing original work or a position paper (about 600 words). Participants will be selected based on their submissions; a selection of extended abstracts will be presented at the workshop.

For questions and further information, please contact

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Workshop page:
<http://www.teco.edu/chi2001ws/>

CHI2001 page:
<http://www.acm.org/sigchi/chi2001/>