==========

CFP: Workshop: Issues in the Design and Evaluation of Ambient Information Systems

To be held at Pervasive 2007: The 5th International Conference on Pervasive Computing

Sunday, May 13, 2007, Toronto, Ontario, Canada

Workshop website:
http://informatics.indiana.edu/subtletech

Conference website:
http://www.dgp.toronto.edu/conferences/pervasive2007/index.phtml/

==========

DEADLINES AND DATES

Submissions due: Jan 26 2007 by 11:59pm PST
Notifications by: Mar 2nd 2007
Final version due: Mar 29th 2007 by 11:59pm PST

MOTIVATION

The current research in pervasive and ubiquitous computing suggests a future in which we are surrounded by innumerable information sources all competing for our attention. These are likely to manifest as both novel devices and as devices embedded in common objects such as refrigerators, automobiles, toys, furniture, clothes, even our bodies. While this vision of the future has prompted great advancements in context-aware computing, wireless connectivity, multi-sensor platforms, smart materials, and location-tracking technologies, there is a concern that this proliferation of technology will cause us to become increasingly overwhelmed by information. This scenario moves us away from Weiser's notion of calm technology, which proposes that information should move seamlessly between the periphery and the center of our attention. Weiser stated that good technology should not be experienced as technology at all, and we believe that ambient information systems could support this claim.

Ambient information systems (which include ambient, peripheral, glance-able, and subtle displays) are non-invasive and provide useful information while blending smoothly into our surroundings. These technologies are meant to be minimally attended and perceivable from outside the range of a person's direct attention, providing pre-attentive processing without being overly distracting. Examples range from large ubiquitous public displays to small bouncing icons on the Macintosh's dock.

There have been many interesting implementations of ambient information systems (e.g., AmbientDevices'Stock Orb, Koert van Mensvoort's Datafountain, Philips Electronics' Ambilight, Jafarinami et al.'s Breakaway, Mynatt et al.'s Audio Aura and Digital Family Portrait, and Mankoff et al.'s Daylight Display and BusMobile). However, ambient information systems research is is suffering from a lack of consensus on terminology, methodology, plausibility, and the general design space of ambient information. We see this workshop as an opportunity for invited participants to explore and discuss such issues.

OBJECTIVE

The purpose of this workshop is to explore topics of ambient information with respect to the various technologies and smart materials with which they might be implemented; identify problems in design, development, and evaluation; and derive new fundamental questions that need to be addressed. Workshop attendees should leave with a better understanding of what ambient is and next steps to further research in this domain.

Questions we would like to address in this workshop include:

· How are ambient information systems distinct from other information technologies? (i.e., what defines technology as being ambient?)
· What are the appropriate methods for evaluating ambient information systems?
· How much ambient information can one perceive and comprehend correctly?
· What sorts of information are best conveyed by an ambient display?
· What are examples of useful heuristics, frameworks, taxonomies, or design principles for implementation of ambient information?
· What, if any, are the appropriate interaction methods for these information devices?
· How can we best make use of existing technologies? (e.g. smart materials, wearable systems, etc.)
· How do we measure the impact of ambient information systems?
· What knowledge from other domains should we apply such systems? (e.g. art, cognitive science, design, psychology, sociology)

WORKSHOP FORMAT

The workshop format will consist of a series of short presentations by each participant, which should conclude with a problem statement relative to the workshop topics. These problem statements will be ordered, and the participants will decide which are most relevant to future research on ambient and subtle information systems. We will then break out into groups and discuss strategies for addressing the selected topics.

SUBMISSIONS

We invite submissions including descriptions of works in progress, research contributions, position statements and demonstrations. Submissions should attempt to address one or more of the aforementioned questions regarding the design and evaluation of ambient information technologies. Submissions should be 4 to 6 pages long in ACM SIGCHI Proceedings format (http://www.acm.org/sigs/pubs/proceed/template.html). Each submission must conclude with a specific question regarding issues faced conducting research in this domain.

Please send you submission in PDF format to: whazlewo@indiana.edu

WORKSHOP ORGANIZERS

William R. Hazlewood (whazlewo@indiana.edu)
School of Informatics, Indiana University @ Bloomington

Lorcan Coyle (lorcan.coyle@ucd.ie)
Systems Research Group, University College Dublin

Sunny Consolvo (sunny.consolvo@intel.com)
Intel Research, Seattle

PROGRAM COMMITTEE (subject to additions)

Liam Bannon, University of Limerick, Ireland
Jodi Forlizzi, Carnegie Mellon University, US
Lars Erik Holmquist, Viktoria Institute, Göteborg, Sweden
Jennifer Mankoff, Carnegie Mellon University, US
Tara Matthews, UC Berkeley, US
Steve Neely, University College Dublin, Ireland
Zach Pousman, Georgia Institute of Technology, US
Aaron Quigley, University College Dublin, Ireland
Yvonne Rogers, Open University, UK

Leslie Sharpe, Indiana University, US
Ian Smith, Intel Research Seattle, US
John T. Stasko, Georgia Institute of Technology, US
Erik Stolterman, Indiana University, US