

# Awareness in Activity-Centric Groupware Design

Stacey D. Scott  
Humans & Automation Lab  
Massachusetts Institute of Technology  
Cambridge, MA, USA 02139  
sdscott@mit.edu

Michael Muller  
IBM Research  
One Rogers Street  
Cambridge, MA, USA 02142  
michael\_muller@us.ibm.com

Thomas P. Moran  
IBM Almaden Research Center  
San Jose, CA, USA 95120  
tpmoran@us.ibm.com

Jakob E. Bardram  
Centre for Pervasive Healthcare  
University of Aarhus  
Aabogade 34, 8200 Aarhus N, DK  
bardram@daimi.au.dk

Bonnie Nardi  
Department of Informatics  
University of California, Irvine  
Irvine, CA, USA 92697  
nardi@uci.edu

Michael Wu  
University of Toronto  
40 St. George Street  
Toronto ON Canada M5S 2E4  
mchi@dgp.toronto.edu

## Workshop Overview

While research in CSCW has always been interested in understanding and facilitating collaborative activities, a recent trend in CSCW research has been to adopt an explicit “activity perspective” in the design of groupware systems. Such activity-centric groupware systems include explicit computational representations of work as activities, which can help improve planning, coordination, co-creation, reuse, and activity management during collaborative work. There are, however, many open questions related to the design of effective activity-centric groupware systems. For example, what are effective design techniques for determining what activity-related information the groupware system should provide? How should this information be displayed? What level of detail should be provided? Who should receive this information?

The goal of this workshop is to develop new research agendas for the concept of awareness of shared activities. This workshop will allow individuals with complementary research experiences to build a collective understanding of synchronous and asynchronous awareness issues in activity-centric groupware systems.

Topics of interest include (but are not limited to):

- **Design approaches for synchronous & asynchronous interaction:** Interface and interaction designs to support real-time and asynchronous shared activities.
- **Technologies:** Software architectures, protocols, distribution mechanisms, and user interface technologies for awareness in activity-based groupware design.
- **Supporting different roles:** Working practices and designs to support different roles involved in collaboration.

- **Managing “flood” and “scatter”:** Working practices and designs for managing too much awareness information, focusing awareness services onto appropriate channels, and combining awareness information across diverse sources.
- **Application areas:** Successful design techniques that have been used in specific activity domains.
- **Evaluation techniques:** What are effective ways to evaluate the effectiveness of activity-centric groupware systems?
- **Theories and concepts:** How can we conceptualize human activity?

We invite contributions from researchers, practitioners, and students examining any of the above (or related) research topics. Please refer to the workshop webpage for more details on submitting position papers. The workshop format will include brief presentations from each workshop attendee, brainstorming sessions, and small-group breakout sessions.

Contact and submission: Stacey Scott (sdscott@mit.edu).

Workshop website:

[http://scripts.mit.edu/~sdscott/cscw\\_wiki/pmwiki.php](http://scripts.mit.edu/~sdscott/cscw_wiki/pmwiki.php)

## Workshop Organizers

**Stacey Scott**, Massachusetts Institute of Technology

Stacey Scott is a postdoctoral researcher in the Humans & Automation Lab at the Massachusetts Institute of Technology. Her research interests include co-located and distributed computer-supported collaboration, large-screen displays, interface and interaction design, and information visualization. She is currently developing large-screen, activity awareness displays for assisting team supervision in time-critical, mission-critical environments. Stacey has co-organized workshops on collaboration technologies at UbiComp and at prior CSCW conferences.

**Michael Muller**, IBM Watson Research Center

Michael Muller works as a research scientist in the Collaborative User Experience group of IBM Research in Cambridge, MA, USA. With colleagues, he has published analyses, designs, and evaluations of activity-centric systems, helping to establish activity studies and activity features as important aspects of IBM research and product directions. Michael is also an internationally recognized expert in participatory analysis and design. Michael has co-chaired a number of workshops at CHI and other CSCW-related conferences.

**Thomas Moran**, IBM Almaden Research Center

Tom Moran is one of the pioneers establishing the field of human-computer interaction within computer science with the seminal book, *The Psychology of Human-Computer Interaction*, in 1983. He was a manager of the user interface and collaborative systems group at Xerox PARC and he was the founding director of EuroPARC, in Cambridge. He has led research teams developing innovative systems for informal interaction, exploring techniques in hypertext, media space, multimedia, pen-based and vision-based interaction; and he has also developed several analytic models and design methods for HCI. He is the founding Editor of *Human-Computer Interaction*. He is currently a Distinguished Engineer at IBM and is leading a multi-lab research program on Unified Activity Management, which is exploring how to make activity the central organizing construct in the IBM Workplace platform.

**Jakob Bardram**, University of Aarhus

Jakob Bardram is an associate professor at the department of computer science at the University of Aarhus, Denmark. His current research interests include activity-based computing (ABC) with special focus on the user interface software technology for ABC and support for collaboration. Most of his work takes place within the healthcare domain and ubiquitous computing. Jakob has organized workshops on activity-based computing at previous Pervasive and ECSCW conferences.

**Bonnie Nardi**, University of California

Bonnie Nardi is a member of the faculty of the Department of Informatics in the Donald Bren School of Information and Computer Sciences at UC Irvine. She is a proponent of activity theory, one of the leading theoretical perspectives on activity. She has co-chaired workshops at CSCW and related conferences.

**Michael Wu**, University of Toronto

Michael Wu is a second year doctoral candidate in the Dynamic Graphics Project lab at the University of Toronto, Canada. He is currently studying everyday collaborative activities between individuals with severe memory impairments and their family members. His research interests include cognitive aids, tabletop user interfaces, and educational games for children.