Workshop on *Shared Environments to Support Face-to-Face Collaboration*. ACM 2000 Conference on Computer Supported Cooperative Work, Dec. 2-6, 2000, Philadelphia, PA, USA.

Shared Environments to Support Face-to-Face Collaboration

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Abstract

As computer technology continues to move off-the desktop and into the many facets of our lives, the need to support collaboration is growing rapidly. In particular, better technological solutions are needed to support users' face-to-face collaborative interactions in a variety of domains. Today's desktop computers are limited in the support they provide for small group interactions. We need to develop shared environments that support users' natural face-to-face collaborative interactions but also provide new opportunities for collaboration that are not possible in the physical world. Advances in the areas of large screen displays, tabletop environments, support for multiple input devices, coordination of distributed room displays, and collaborative tangible interfaces will provide better physical support for small-group interactions. Research surrounding issues of privacy and awareness, collaborative interfaces, social artifacts, and better ways to transition between our individual and collaborative sessions will help facilitate the collaborative process.

This workshop will provide interested researchers a forum to discuss and brainstorm issues surrounding shared environments for face-to-face collaboration. The workshop aims to bring together individuals with common research goals to identify emergent directions. This will be accomplished through group presentations, brainstorming sessions, and small-group breakout sessions.

Theme and Goals

There is an increasing demand to utilize technology in our collaborative activities. However, the existing single user model of traditional computers does not afford effective group interaction. It is important to explore novel environments that support users' natural collaborative behaviour. Potential research directions include:
enhancing existing environments with multi-user support (e.g. multiple-input devices, augmenting shared displays with private information)
exploring innovative user interfaces (e.g. new collaborative metaphors, user awareness and collaborative feedback)
developing alternative technologies for face-to-face collaboration (e.g. tabletop and wall displays, smart collaborative rooms)

The goal of this workshop is to bring together individuals who are actively pursing research directions related to the support of face-to-face collaborative activities. This workshop will allow individuals with complementary research experiences to build a collective understanding of the issues surrounding user interactions in shared environments. This workshop is timely given the existence of diverse research in the area, and will help to bring together existing work and define emergent directions.

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

tabletop displays	wall-style displays
large screen displays	awareness and privacy
smart collaborative rooms	multiple input devices
collaborative desktop systems	collaborative handheld applications
distributed room displays	social artifacts
single display groupware	collaborative interfaces
alternative collaborative input devices	wearable computers for collaboration

Activities

The workshop will begin with a brief presentation by each participant, reviewing his or her research area. Following this, a brainstorming session will identify key research directions and themes for the remainder of the workshop. Participants will then break into small groups to further define these ideas. In a plenary session at the end of the day, the group will reconvene to report and discuss the issues identified.

Accepted submissions will be invited to submit an extended version of their workshop submission for consideration in an upcoming special issue in the journal of Computer Supported Cooperative Work. Note however that acceptance in the workshop does not guarantee acceptance for the special issue.

Participation

A group of eight to twelve participants will be invited to participate on the basis of proposals submitted prior to the workshop. Proposals can either include a short paper (max. 2500 words) describing ongoing work related to shared environments for face-to-face collaboration, or a position paper (max. 1500 words) articulating views in this area. A short paragraph describing a participant's background and motivation for taking part in this workshop must also be provided. Members of the program committee will review all submitted papers and select participants.

Submissions must be in electronic form, preferably in PDF format. Submission should be emailed to inkpen@cs.sfu.ca and must include the name, contact, and full address of the author participant. Typically, only one author per submission will be invited to attend the workshop. If additional authors would like to be considered, separate applications should be submitted. Prior

to the workshop, participants will have access to all accepted proposals. Accepted submissions will be included in an informal workshop proceedings. A submission template is available at: http://www.edgelab.sfu.ca/CSCW/cscw_workshop_template.html.

Student Participation

Three to five students will also be invited to take part in the workshop (in addition to the student organizers). This will provide graduate students pursing research in the area of shared environments for face-to-face collaboration a unique opportunity to interact with key researchers in the field and help define future directions. Students will not be required to present research directions however, if a student wishes to present their work in this forum, they can prepare a submission as outlined above for participants. Students are required to submit a one-page paper describing their interest in the area of shared environments and their motivation for wanting to take part in the workshop. Submissions must be in electronic form, preferably in PDF format. Student submissions should be emailed to inkpen@cs.sfu.ca and must include the name, contact, and full address of the student.

Organizers

Dr. Kori Inkpen, Simon Fraser University

Kori Inkpen is an Assistant Professor in the School of Computing Science at Simon Fraser University. Her main research interests are in the area support for face-to-face collaboration. In particular, she has pursued research related to multiple input devices in Single Display Groupware, and the exploration of support for users' natural face-to-face collaborative interactions. Dr. Inkpen is a member of the editorial board for Personal Technologies and was a guest-editor for a special issue on Personal Technologies for Children. Dr. Inkpen is also active in the research community, participating on several conference committees (CHI 96, CHI 99, CHI 2001, CUU 2000), program committees (GI '99, GI 2000, UIST '99) and frequently reviews for conferences in the area of HCI (CHI, SIGGRAPH, WWW8, UIST, CSCW).

Dr. Saul Greenberg, University of Calgary

Saul Greenberg, a Professor in the Department of Computer Science at the University of Calgary, is an active researcher in Human Computer Interaction and Groupware. He is the author and co-editor of several books, including "The Computer User as Toolsmith" (Cambridge University Press, 1993), "Computer Supported Cooperative Work and Groupware" (Academic Press, 1992), "Groupware for Real Time Drawing" (McGraw Hill, Europe), and "Readings in Human Computer Interaction: Towards the Year 2000" (Morgan-Kauffman, 1995). He has served on many academic reviews committees, and is on the editorial board of the "International Journal of Human Computer Studies" and "Computer Supported Cooperative Work".

Student Organizers

Regan Mandryk, Simon Fraser University

Regan Mandryk is a Ph.D. student in the School of Computing Science at Simon Fraser University. She has a B.Sc. in Math and Physics from the University of Winnipeg and a M.Sc. in Kinesiology from Simon Fraser University. Regan's current research interests include CSCW, CSCL, Single Display Groupware, educational games, and virtual environments.

Stacey Scott, Simon Fraser University

Stacey Scott is a Ph.D. student in the School of Computing Science at Simon Fraser University. She has a B.Sc. in Computing Science and Mathematics from Dalhousie University. Stacey's current research interests include CSCW, Single Display Groupware, and alternative display technologies for co-located collaboration (e.g. tabletop displays).

Ana Zanella, University of Calgary

Ana Zanella is a Ph.D. student in the Department of Computer Science at the University of Calgary. She has a B.Sc. in Computer Science from Pontificia Universidade Catolica do RS, Brazil, and a M.Sc. in Computer Science from Pontificia Universidade Catolica do RS, Brazil. Ana's current research interests include CSCW, Co-located Groupware, Single Display Groupware, Multiple Input Devices.

Program Committee

Dr. Ben Bederson, University of Maryland

Dr. Saul Greenberg, University of Calgary

Dr. Kori Inkpen, Simon Fraser University

Dr. Brad Myers, Carnegie Mellon University

Dr. Terry Winograd, Stanford University