CSCW'94 Formal Video Program

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Much of the experimental work in CSCW involves highly interactive systems and complex group interactions. While paper can convey the academic details of CSCW work, video is far more appropriate for capturing the true flavor and details of interactions. The CSCW conference has recognized the importance of video by including a refereed formal video program. These are published as videotapes in the SIGGRAPH Video Review series—this year's program is in Issue 106, while the CSCW'92 program was in Issue 87. Tapes can be purchased from:

SIGGRAPH Video Review Order Department
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The sections below give a capsule summary of each video, followed by a list of references to related publications. As you will see, the formal video program is varied. Its contents cover enabling technologies, groupware prototypes, scenarios and applications of real–life groupware use, methodologies and historical retrospectives.

PROTOTYPES AND ENABLING TECHNOLOGIES

MONTAGE: Multimedia Glances for Distributed Groups

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Montage is a research prototype that uses video to help remote collaborators find opportune times to interact with each other. Montage uses momentary, reciprocal *glances* among networked workstations to make it easy to peek into someone's office. From a Montage glance, users can quickly start a full-featured desktop video conference. If the glance shows that the person is not in her office, Montage provides quick access to browse her on-line calendar, send her e-mail, or send her an electronic note that pops up on her screen. In this way, Montage supports the pre-interaction coordination that is often needed to negotiate a time to establish contact. Montage tries to provide lightweight access to group members while also conveying enough visual and aural cues to enable users to protect their privacy [9].

GroupKit — A Groupware Toolkit

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GroupKit is a toolkit for developing real-time groupware for desktop conferencing. GroupKit developers build *groupware applications*, such as shared text and graphics editors, games, and meeting support tools. They also build *registration interfaces* that allow participants to create, join and monitor meetings. The scenes in this video describe GroupKit's design goals, show what an end-user of GroupKit applications may see, step through GroupKit's run-time architecture, illustrate its main programming constructs (multicast remote procedure calls, conference event handling, and groupware widgets), and display different registration interfaces. By presenting a variety of GroupKit applications and discussing their code complexity, we argue that building groupware in GroupKit is only slightly harder than building conventional applications [8].

GroupKit is based upon the Tcl/TK language. It is available via anonymous ftp from:

ftp.cpsc.ucalgary.ca
/pub/projects/grouplab/software/groupkit*

Teleporting - Making Applications Mobile

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Harrison, B. and Greenberg, S., eds (1994). CSCW '94 formal video program. In ACM Conference on Computer Supported Cooperative Work, Chapel Hill, North Carolina, p9-10, ACM Press. (companion introduction to the videotape: ACM SIGGRAPH Video Review (an optional supplement of Computer Graphics). Volume 106, ACM Press. Special Edition of the CSCW '94 Technical Video Program.

The ORL TELEPORTING SYSTEM augments the standard X Window System with a mechanism for migrating an individual's computer environment between X displays. TELEPORTING allows people to be mobile within the workplace yet maintain full access to their complete applications environment. TELEPORTING also provides a simple way in which people can share information and work together. The system makes use of ORL's ACTIVE BADGE, which provides location information about personnel and equipment within a building. TELEPORTING is in daily use both within the organisation and in suitably equipped homes. In this way, teleporting makes the movement of an individual's application environment between work and home a simple process. This is a step towards realising universal "follow-me" applications. [7]

APPLICATIONS AND METHODOLOGIES

Courtyard: Integrating A Shared Large Screen and Individual Screens

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The operation of complex real–world systems requires that multiple users cooperate in monitoring and controlling large amounts of information. The Courtyard system supports such cooperative work by integrating an overview on a shared large display and per–user detail on individual displays. Courtyard allows a user to move a mouse pointer between the shared and individual screens as though they were contiguous, and to access per–user detailed information on the user's individual screen simply by pointing to an object on the shared screen. Courtyard selects the detailed information according to the tasks assigned to the point user [10].

Combining Realtime Multimedia Conferencing with Hypertext Archives in Distance Education.

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The video demonstrates how real-time multimedia conferencing systems are combined with hypertext archives in a course offered at the University of Oslo. Traditional video conferencing systems transfer audio and video information between sties. However, this is only a limited part of the communication that naturally takes place during a course. Handouts, copies of transparencies and high-quality images are examples of data that are not easily transferable over a video link. By adding a networked hypertext system (World Wide Web) to this setup, we are able to render higher quality text and images in the electronic classrooms. Also, presentations are available for review by students at any time. By combining a hypertext system with real-time multimedia communication, we are seeing the contours of a rich, distributed groupware environment where distance education will thrive [4].

CSCW for Government Work: Polikom-Video

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This video is a live performance of a scenario demonstrating telecommunication and telecooperation in a work setting. The scenario shows several geographically distributed members – located in Bonn and Berlin – of a government construction commission working on modifications to the parliament building. The integrated use of a variety of system prototypes supporting both asynchronous and real-time cooperation is illustrated. Access and interaction security are managed by SECUDE using smart-card technology. The ACTIVITY ASSISTANT facilitates asynchronous cooperation through coordination of shared to-do lists. The SEPIA hypertext system allows asynchronous and real-time joint editing of documents. Detailed discussions are supported using the LIVE video-conferencing tool. Orientation assistance is provided by the TOSCA organization information system which handles user queries concerning an organization's regulations and responsible cooperation partners [3].

Multimedia folklore: Capturing Design History and Rationale with Raison d'Etre

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Raison d'Etre is a multimedia design history application. It provides access to a database of video clips containing stories and personal perspectives of design team members, recorded at various times through the course of a project. The system is intended to provide a simple framework for capturing and organizing the informal history and rationale that design teams create and share in the course of their collaboration. Raison d'Etre makes possible a richer and more engaging kind of history and rationale: the personalities and attitudes of the design team members are directly observed and experienced by the user, not merely inferred from the disembodied textual content [1].

HISTORICAL RECORDS AND RETROSPECTIVES

Historic Video: A Research Center for Augmenting Human Intellect

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This invited video is an edited record of Douglas Engelbart's historic presentation of the NLS system at the Fall Joint Computer Conference in San Francisco, December 8, 1968. Many concepts in today's interfaces were first introduced and/or demonstrated in NLS. These include word processing, outlining, hierarchical hypermedia, mouse and one-hand keyboards, shared documents, messaging, electronic mail and filtering, video conferencing, and desktop conferencing through shared displays. The video captures what was projected onto a very large screen at the convention center. On stage was Engelbart at the control of NLS, whose output was displayed onto the public screen. Behind the scenes, Bill English and crew manned cameras and signal switchers connecting the convention center to their Menlo Park laboratory 30 miles away [2].

Engelbart's original 1.5 hour presentation was edited for the CSCW '94 video program by Saul Greenberg.

CAVECAT: Computer Audio Video Enhanced Collaboration at Toronto

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The CAVECAT video contains a retrospective of the media space research conducted by the University of Toronto from 1989 - 1992, The CAVECAT project focused on understanding underlying human communication processes in order to build tools to support these processes at a distance. As such, the tape details the research on meetings and making contact that was done to support conversation, the research on shared work tools that was done to support collaboration, and the research on evaluation tools that were needed to analyze the user communication data we were collecting [6].

FUTURE VISIONS

Seamless Media Design

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This is a vision video that illustrates our dreams of the future of ClearBoard for creative collaborative tasks. Our focus of interest is not on the technology, but on how future collaboration media can empower the dynamic process of collaborative creation by people. This video presents three scenes of collaborative creation: a joint drawing by kids, a design session by engineers, and an artistic session by a musician and a painter. The philosophy of "seamless media design" is also described in this video. The envisionment is based on our design experience of the ClearBoard-1 and ClearBoard-2 systems that were presented at CSCW'92 as a paper and a video [5].

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