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1995 Human-Computer Interaction Laboratory Video Reports

Edited by Catherine Plaisant

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Abstract:
49 minute video of the labs work over the past year.
Topics are:
•Introduction and table of contents - Ben Shneiderman
•Using Dynamic Queries for Youth Services Information -
Anne Rose, Ajit Vanniamparampil
•Life-Lines: Visualizing Personal Histories - Brett Milash, Catherine Plaisant, Anne Rose
•Dynamic Queries and Pruning for Large Tree Structures - Harsha Kumar
•Browsing Anatomical Image Databases : the Visible Human - Flip Korn, Chris North
•Spinning Your Web: WWW Interface Design Issues - Vince Boisselle
•BizView : Managing Business and Network Alarms - Catherine Plaisant, Wei Zhao and Rina Levy
•Animated Specifications Using Interaction Object Graphs - David Carr
•WinSurfer™: Treemaps for Replacing the Windows File Manager - Marko Teittinen

Human-Computer Interaction Laboratory
University of Maryland
http://www.cs.umd.edu/projects/hcil/

HCIL Video Reports
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1995 Video Reports

•Introduction and table of contents - *Ben Shneiderman*
An introduction to the Human-Computer Interaction Laboratory, also demonstrating a revised version of the FilmFinder, a visual information seeking environment for browsing films.

•Using Dynamic Queries for Youth Services Information - *Anne Rose, Ajit Vanniamparampil*
IVEE (Information Visualization & Exploration Environment) is a generic tool for the automatic creation of dynamic query applications. In our work for the Maryland Department of Juvenile Services, we use IVEE to explore a dataset of approximately 5000 juvenile case referrals. We demonstrate how IVEE can be used to find errors, compare workloads, and reason about display patterns.

•Life-Lines: Visualizing Personal Histories - *Brett Milash, Catherine Plaisant, Anne Rose*
In our project for the Maryland Department of Juvenile Services we are developing new techniques to visualize youth records. By showing multiple time lines with selectable markers to retrieve detailed information, overviews are always available even for complex records. Zooming and filtering are possible and linked events can be highlighted. We show how this technique can be used to visualize medical patient record and personal histories.

•Dynamic Queries and Pruning for Large Tree Structures - *Harsha Kumar*
The Tree-browser presents a tree in two coupled views: a detailed view and an overview. Users can use dynamic queries to filter nodes at each level of the hierarchy. The dynamic query panels are user customizable. Subtrees of unselected nodes are pruned out, leading to compact views of relevant nodes after a series of iterative refinements.

•Browsing Anatomical Image Databases : the Visible Human - *Flip Korn, Chris North*
The National Library of Medicine is preparing an archive consisting of anatomical images of a male and a female subject, including MRI, CT and cryosection images. This collection of images will be available to a large community of users with varying backgrounds and expertise. We are exploring visual metaphors for browsing and querying anatomy databases. Our first prototypes include novel overview techniques for rapid exploration of volumetric data, and for browsing medical concepts and anatomical terms.

•Spinning Your Web: WWW Interface Design Issues - *Vince Boisselle*
Careful design of the hypermedia documents used on the World Wide Web (WWW) is necessary for building an effective WWW site. Using the mixed media holdings of a small library as an example, several design guidelines, aimed at making a site more efficient for the user in the navigation / retrieval process, are presented.

•BizView : Managing Business and Network Alarms - *Catherine Plaisant, Wei Zhao and Rina Levy*
We demonstrate a network monitoring prototype dealing with both physical network alarms (e.g. a node is down) and alarms generated by sensors installed in the business applications running on the network (inventory too low or too high, excessive number of orders, etc.). Our Enterprise Monitoring prototype provides tightly coupled filtered views of the network's current status and past history, timelines of alarm overviews and traditional textual details. Filtering attributes are modified interactively to deal with temporary needs or alarm overflows.

•Animated Specifications Using Interaction Object Graphs - *David Carr*
Interpretation of specifications is a difficult and error prone task. If a specification method is executable and graphical, the specification can be animated while the system is executed. Interaction Object Graphs (IOGs) are an executable, graphical specification method. IOGs are designed to specify user-interface widgets. This video explains IOGs and demonstrates their animation while the user operates the specified widget. Animation of graphical specifications has the potential to enhance specification utility by enhancing both debugging and communication.

•WinSurfer™: Treemaps for Replacing the Windows File Manager - *Marko Teittinen*
WinSurfer ™ is a directory maintenance tool running in MS Windows and using treemaps. Treemaps are a novel method for displaying hierarchical information using a 2-D space filling algorithm that partitions a rectangular region. WinSurfer™ lets you gracefully and rapidly examine your directory and invoke file actions.

Ordering Information

Video Year ☐1991 ☐1992 ☐1993 ☐1994 ☐1995

Tape requests
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