

# Visual Interfaces to Digital Libraries

Katy Börner

School of Library and Information Science  
Indiana University  
Bloomington, IN 47405, USA  
+1 (812) 855-3256  
katy@indiana.edu

Chaomei Chen

College of Information Science and Technology  
Drexel University  
Philadelphia, PA 19104-2875  
+1 (215) 895-6627  
Chaomei.Chen@cis.drexel.edu

## ABSTRACT

Today's digital libraries (DLs) are content rich, multimedia, multilingual collections that are distributed and accessed worldwide. Designing useful interfaces to access, understand, and manage this knowledge has become an active and challenging field of study. Visual interfaces to DLs aim to shift the user's mental load from slow reading to faster perceptual processes such as visual pattern recognition. They draw on progress in the new field of Information Visualization.

The workshop in 2002 continues the theme started at JCDL 2001. In addition, the growth of the field warrants new perspectives on some of the issues we have addressed last year.

## Categories & Subject Descriptors

H.3.7 Digital Libraries, H.5 Information Interfaces and Presentation

## General Terms

Theory, Algorithms, Design, Human Factors

## 1. AIMS AND OBJECTIVES

This workshop aims to raise the awareness of several interconnected fields of research related to the design and use of visual interfaces to digital libraries, especially in information visualization, human-computer interaction, and cognitive psychology. Drawing on the success of the first workshop of this kind at JCDL 2001 [1,2], this year's topics of interest include, but are not limited to:

- Web-based Visual Interfaces
- Mobile Access to Information
- Collaborative Document Spaces
- Usability and Formal Methods (see also JCDL-WS on Usability for Digital Libraries)
- Real World Needs, Products & Applications

In addition, the workshop will stimulate participants to reflect on the state of the art in their own fields by identifying challenging issues concerning visual interfaces and thereby fostering a multidisciplinary research agenda for future research and development.

For details check out the workshop's web page at <http://vw.indiana.edu/visual02/>.

## 2. WORKSHOP ORGANIZERS

Katy Börner is an Assistant Professor in Information Science at Indiana University. Her research area is information visualization

with special focus on knowledge domain visualizations and visual interfaces to digital libraries. She utilizes three-dimensional (3-D) virtual environments to build collaborative interfaces that provide intuitive and efficient access to text document and image digital libraries. Spatio-temporally referenced visualizations of user activity are generated to assist users in making sense of the world, its information resources, and collaboration possibilities, to aid designers with the organization and layout of world content and the selection of interaction possibilities, and to enable researchers to study the communities evolving in 3-D virtual worlds. She is a symposium co-chair on Collaborative Information Visualization Environments at IV2002. Information about her projects can be found at <http://ella.slis.indiana.edu/~katy>.

Chaomei Chen is an associate professor in the College of Information Science and Technology at Drexel University. His research interests include information visualization, digital libraries, visualization of knowledge structures, and social dynamics in multi-user virtual environments. He is the author of *Information Visualisation and Virtual Environments* (Springer, 1999) and a guest editor of several special topic issues. He is a member of the organizing committee of IEEE International Conference on Information Visualization (IV2000 and IV2001). He is also a member of ACM, IEEE Computer Society, ASIST, and Information Visualization Society. He is the symposium chair on Information Visualization in Digital Libraries at IV2000 and IV2001, and the chair on Knowledge Domain Visualization in IV2002. Further information about his work can be found at <http://www.pages.drexel.edu/~cc345/>.

## 3. REFERENCES

- [1] Katy Börner & Chaomei Chen (2001) Visual Interfaces to Digital Libraries - The First International Workshop at the First ACM+IEEE Joint Conference on Digital Libraries, SIGIR Forum, 35(1), Spring 2001.
- [2] Katy Börner & Chaomei Chen (2001) Visual Interfaces to Digital Libraries - The First International Workshop at the First CM+IEEE Joint Conference on Digital Libraries (In Brief), D-Lib Magazine, Volume 7 Number 7/8 July/August 2001.
- [3] Katy Börner & Chaomei Chen (2001) Visual Interfaces to Digital Libraries - Its Past, Present, and Future. JCDL Workshop, First ACM+IEEE Joint Conference on Digital Libraries, Roanoke, VA, USA, June 28, p. 482.