

**Catherine Plaisant**  
**Human Computer Interaction Laboratory, University of Maryland**

Catherine Plaisant is Associate Research Scientist and Associate Director of the Human-Computer Interaction Laboratory of the University of Maryland. She is also a member of the University of Maryland Institute for Advanced Computer Studies. At the Human-Computer Interaction Laboratory she works with Professor Ben Shneiderman and a team of graduate students on the design and evaluation of novel user interfaces with a focus on public access information systems and visualization. Her research contributions range from focused user interaction techniques (e.g. Excentric Labeling) to innovative visualizations (such as LifeLines for personal records or SpaceTree for hierarchical data exploration) and interactive search interface techniques such as Dynamic Queries and Query Previews. Those interaction techniques have been carefully validated with extensive user studies and are finding applications in industry and government information systems and digital libraries.

She received a Doctorat d'Ingénieur (PhD) degree from Université Pierre et Marie Curie (Paris VI) in France in 1982. Her doctoral dissertation dealt with improving speech recognition and home automation for users with severe motor disabilities. Previously she earned an industrial engineering degree (beyond BS level) from the Ecole Nationale Supérieure des Arts et Métiers, Paris, France in 1979. Before joining the Human-Computer Interaction Laboratory in 1987 she was a Research Associate at the Centre Mondial Informatique et Ressources Humaines in Paris, a national research laboratory. She worked with Henri Gouraud and Patrick Baudelaire then joined the team of Rachel Cohen to investigate computer-based educational systems for young children. A series of innovative literacy tools was produced and evaluated in schools, and a book published by the team: *Young children, the discovery of the written language and computers* (in French), Presse Universitaire de France, Paris (1987).

She has written over 90 refereed technical publications on the subjects of information visualization, digital libraries, universal access, image browsing, input devices, online help, home automation, network management, telemedicine etc. She recently co-authored with Ben Shneiderman the 4<sup>th</sup> Edition of *Designing the User Interface*, one of the major books on the topic of Human-Computer Interaction.

She is on the editorial board of *Information Visualization* and *Interacting with Computers*, and a regular reviewer for more than 10 journals and annual conferences. She is also the editor of the HCIL Video Collection, a 13-year series of user interface demonstrations commonly used by faculty teaching Human-Computer Interaction courses, and the organizer of the InfoVis Contest 2003 and 2004, an effort to promote the evaluation of information visualization and the development of benchmarks.

## Sample publications:

The challenge of information visualization evaluation, Plaisant, C., *Proc. of Conference on Advanced Visual Interfaces, AVI 2004*, ACM, New York, 109-116 (2004) (keynote)

Information visualization and the challenge of universal access, Plaisant, C., chapter in *Exploring Geovisualization*, Dykes, J., MacEachren, A. and Kraak, M.-J. (Eds.), Elsevier, Oxford (2005)

Shared Family Calendars: Promoting Symmetry and Accessibility, Plaisant, C., Bederson, B. B., Clamage, A., Hutchinson, H., Druin, A., *ACM Transactions on Computer-Human Interaction* (to appear)

LifeLines: Using visualization to enhance navigation and analysis of patient records, Plaisant, C., Mushlin, R., Snyder, A., Li, J., Heller, D., Shneiderman, B., *American Medical Informatics Association 1998 Annual Fall Symposium* (Orlando, Nov. 9-11, 1998) AMIA, Bethesda MD, 76-80 (1998)

LifeLines: Visualizing personal histories, Plaisant, C., Milash, B., Rose, A., Widoff, S. and Shneiderman, B., *Proceedings of CHI 96*, and also in *Readings in Information Visualization: Using Vision to Think*, Card, S., Mackinlay, J., Shneiderman, B. (Eds.), Morgan Kaufmann Publishers, San Francisco, CA (1999), 287-294

Navigation patterns and usability of zoomable user interfaces with and without overviews, Hornbaek, K., Bederson, B. and Plaisant, C., *ACM Transactions on Computer-Human Interaction*, 9, 4 (2003), 362-389.

SpaceTree: Supporting Exploration in Large Node Link Tree - Design Evolution and Empirical Evaluation, Plaisant, C., Grosjean, J. and Bederson, B., *Proc. of IEEE conference on Information Visualization*, Boston, MA (2002) 57-64.

Interface and data architecture for query preview in networked information systems, Plaisant, C., Shneiderman, B., Doan, K. and Bruns, T., *ACM Transaction on Information Systems*, 17, 3 (1999) 320-341

Excentric labeling: Dynamic neighborhood labeling for data visualization, Fekete, J.-D., Plaisant, C., *Proc. of ACM Conference on Human Factors in Computing Systems, CHI '99*, ACM, New York, NY (1999), 512-519.

*Designing the User Interface* (4<sup>th</sup> Edition), Shneiderman, B. and Plaisant, C., Addison-Wesley, Reading MA (2004)