KEYNOTE TALK
Tuesday, November 30, 2010
8:30AM – 9:30 AM / Ballroom 4-5

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Visual Analytics for Investigative Analysis and Exploration of Documents and Data

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Abstract
Whether investigators are fighting crime, curing diseases, deciding what car to buy, or researching a new field, inevitably they will encounter text documents. Unfortunately, plain (unstructured) text documents are difficult to analyze and understand especially large collections of documents. The new field of visual analytics holds promise for helping investigators with such problems. Visual analytics combines computational data analysis with interactive visualization in the context of understanding how people think and reason. It can be particularly effective in situations when the data is large and unfamiliar, and the analyst must browse and explore to learn about a situation or domain. In this talk I will describe principles from the field, illustrating how visualizations help people make sense of data. Additionally, I will introduce the Jigsaw visual analytics system that helps investigators explore and understand collections of unstructured and semi-structured text documents. In essence, Jigsaw helps investigators "put the pieces together" and gain a deeper understanding of the contents of the documents. The system pairs computational text analysis with a collection of visualizations that each portray different aspects of the documents, including connections between entities.

Speaker Bio-Sketch: John Stasko is a Professor and the Associate Chair of the School of Interactive Computing at the Georgia Institute of Technology, where he has been a faculty member since 1989. He is Director of the Information Interfaces Research Group and his primary research area is human-computer interaction, with a specific focus on information visualization and visual analytics. His research group develops ways to help people and organizations explore, analyze, understand, and make sense of data. Stasko presently is or formerly has been on the editorial board of the journals ACM Transactions on Computer-Human Interaction, IEEE Transactions on Visualization and Computer Graphics, International Journal of Human-Computer Studies, Journal of Visual Languages and Computing, and Information Visualization. He was General Chair in 2007 and Papers Co-Chair in 2005 and 2006 for the IEEE Information Visualization (InfoVis) Conference, and he was Papers Co-Chair for the 2009 IEEE Visual Analytics Science and Technology (VAST) Symposium. Stasko currently serves on the Steering Committee for the IEEE Information Visualization Conference and the ACM Symposium on Software Visualization.