

# Visualization and Visual Aesthetics

*Professor Klaus Mueller*

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Room 2736, Science Building No. 2, Peking University

## Abstract

Visualization plays a major role in science, medicine, engineering, and also business. It allows humans to comprehend data and to communicate information at rapid speeds, facilitated by the visual system's massively parallel circuitry in the brain. In this talk, I will present a number of visualization techniques and methodologies we have developed in recent years, aimed to take better advantage of this powerful system. These contributions deal with the fusion of visual information, the importance and perception-guided highlighting and enhancement via color and lenses, colorization, visual aesthetics, and the assessment via user studies.

## Biography



Klaus Mueller (<http://www.cs.sunysb.edu/~mueller>) received the BS degree in electrical engineering (University of Ulm, Germany, 1987), the MS degree in biomedical engineering (Ohio State University, 1990), and the PhD degree in computer science (Ohio State University 1998). He is currently an associate professor in the Computer Science Department at Stony Brook University, where he also holds co-appointments in the Biomedical Engineering and Radiology Departments, as well as a position as an adjunct scientist at Brookhaven National Lab. His current research interests are computer graphics, visualization, volume rendering, visual data mining, medical imaging, GPU-accelerated computed tomography, and facial recognition. He is a recipient of the US National Science Foundation CAREER award (2001) and has authored or coauthored in excess of 90 scientific papers. He has served as a program cochair at various conferences and symposia, such as the Volume Graphics Workshop (2001, 2003, 2005), the Symposium on Volume Visualization and Graphics (2002), and the applications track at the IEEE Visualization conference (2003, 2004), and he served as the tutorials cochair at the IEEE Visualization Conference 2005 and conference chair of VisWeek 2009. He has also acted as a reviewer for numerous conferences in his areas of interest. He is a member of the IEEE Computer Society and the ACM.