Visual Analytics: The Agenda in Response to DHS Mission Needs

Jim Thomas
U.S. Department of Homeland Security
National Visualization and Analytics Center

Abstract

The scientific field of study now called Visual Analytics was created to fill a critical gap in capability and talents for many DHS mission needs. These needs include identifying terrorist’s activities, understanding vulnerability of our critical infrastructures, and preparing and responding to natural and man made disasters. A team of about 40 people including end users, multiple government agencies, went through training, workshops, and listened to end users to clearly understand these needs, articulate the current state of practice, and develop a plan forward now published as Illuminating the Path: The Research and Development Agenda for Visual Analytics. This agenda defines many opportunities for academia, industry, and government to work together to develop critical technologies that have applications well beyond homeland security. This agenda will be described along with the 6 Research Centers established to start the work of the agenda to develop the next generation capabilities and talents. In addition several other government agencies are now using this agenda to form related investment programs providing opportunities for faculty, students, and researchers in industry and the National Laboratories.