Visual Analytics in Europe

Daniel A. Keim, University of Konstanz, Germany

With significant funding by national governments and the European Union, numerous novel visual analytics research initiatives are underway in Europe. One of these initiatives is the EU Coordination Action, a consortium that unites leading European visual analytics researchers and diverse strategic national research initiatives. Visual analytics groups in Europe specialize in explorative analysis and visualization of large information spaces from diverse data sources, such as multidimensional, textual, multimedia, web, and geographic data. Recently, the research groups have successfully created research partnerships, secured public funding, and established industry partnerships for meeting real-world challenges.

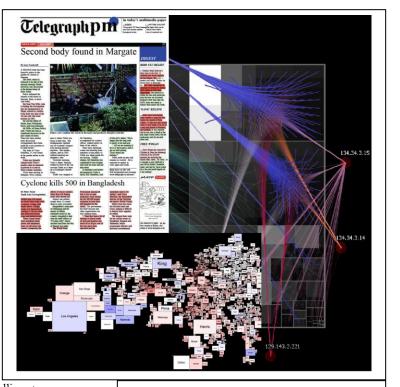
European Research Collaboration Networks

The EU Coordination Action Network, called "VisMaster: Visual Analytics –Mastering the Information Age," joins European academic and industrial R&D excellence from all related disciplines to form an effective visual analytics research community. Researchers from Fraunhofer IGD in Darmstadt and the University of Konstanz lead the Coordination Action consortium, which comprises an array of thematic working groups focusing on advancing the state of the art in visual analytics. The working groups try to combine the strengths of intelligent

automatic data analysis with the visual perception and analysis capabilities of the human user. One of the goals of the Coordination Action is to define a European Visual Analytics Research Roadmap and to expose public and private stakeholders to visual analytics technology, setting the stage for larger follow-up visual analytics research initiatives in Europe.

In addition to VisMaster, a framework for research and training in visual analytics is being developed by a number of European and international partners to provide a complementary research and training mechanism to leverage European Commission funded actions. Its main purpose is to put into place a framework for knowledge and technology transfer within Europe and between the United States, Canada, Australia, and Europe.

Significant national initiatives include the Strategic Research Initiative "Scalable Visual Analytics: Interactive Visual Analysis of Complex Information Spaces" funded by the German Science Foundation (DFG) as well as similar initiatives in the UK and Sweden. In addition, close collaborations with major industrial players combine the research expertise in visual analytics with the in-depth competence of the practitioners in the field to meet real-world challenges. The national and European initiatives to leverage the European and international talents and solve the increasing information overload problems of our societies.



European visual analytics research groups focus on advancements in information visualization, knowledge discovery, and visual analytics. Application areas include network-traffic analysis, opinion analysis, visual geographic analytics, and multimedia analytics.