KEYNOTE TALK

Tuesday, October 5, 2021 at 9am

Guidance-Enriched Visual Analytics: Challenges and Opportunities

Silvia Miksch
TU Wien
Austria

Abstract: On the one hand, we investigate appropriate, expressive, and effective Visual Analytics concepts and solutions for particular users, their data, and their tasks in mind. On the other hand, we explore the usage and potential of guidance. Guidance aims to support the user while working with Visual Analytics solutions. Guidance assists users with the selection of appropriate visual means and interaction techniques, the utilization of analytical methods, as well as the configuration instantiation of these algorithms with suitable parameter settings and the combinations thereof. After a visualization or Visual Analytics method and parameters are selected, guidance is also needed to explore the data, identify interesting data nuggets and findings, collect and group insights to explore high level hypotheses, and gain new insights and knowledge. In this talk, I will contextualize the different aspects of guidance-enriched Visual Analytics. I will present a framework for guidance designers which comprising requirements, a set of specific phases with quality criteria designers should go through when designing guidance-enriched Visual Analytics. Various examples will illustrate what has been achieved so far and show possible future directions and challenges.

Speaker Bio-Sketch: Silvia Miksch is University Professor and head of the Research Division "Visual Analytics" (CVAST), Institute of Visual Computing and Human-Centered Technology, TU Wien. She served as paper co-chair of several conferences including IEEE VAST 2010, 2011 and 2020 and VIS Overall Papers Chair (IEEE VIS 2021) as well as EuroVis 2012 and on the editorial board of several journals including IEEE TVCG and CGF. She acts in various strategic committees, such as the VAST steering committee and the VIS Executive Committee. In 2020 she was inducted into The IEEE Visualization Academy. Her main research interests are Visualization/Visual Analytics (particularly Focus+Context and Interaction) and Time.