KEYNOTE TALK

Monday, October 21, 2024 at 1:30pm

Fostering Mixed-Initiative Visual Analytics through Guidance
Alex Endert
Georgia Institute of Technology

Abstract: Visual analytic tools emphasize the importance of combining interactive visualizations with data analytic models to give people insight into data. Through user interactions with these systems, people prepare data, explore and analyze it, and make decisions. Often, various computational or AI models guide users throughout their exploration, and people provide feedback to these models as analysis proceeds. Thus, how can we design and build mixed-initiative visual analytic tools that support users in their tasks via guidance? This talk will discuss the opportunities and challenges of guidance during visual data analysis, and give examples of how the field is moving closer towards the goals and principles of mixed-initiative systems.

Speaker Bio-Sketch: Alex Endert is an Associate Professor and the Associate Chair of Operations and Special Initiatives at the School of Interactive Computing at the Georgia Institute of Technology. He directs the Visual Analytics (VA) Lab and conducts research to help people make sense of data through interactive visualizations and visual analytic systems. His lab's research is also often tested in practice in domains such as intelligence analysis, cybersecurity, manufacturing safety, and others. The lab's work receives support from NSF, DARPA, DOD, DHS, NIJ, and generous industry partners. In 2018, Endert was awarded an NSF CAREER Award for his work on Visual Analytics by Demonstration. In 2013, his work on Semantic Interaction was awarded the IEEE VGTC VPG Pioneers Group Doctoral Dissertation Award and the Virginia Tech Computer Science Best Dissertation Award.