Sean P. McKenna

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EDUCATION

Ph.D. in Computing: Graphics and Visualization, expected 2017

University of Utah: Salt Lake City, UT

Advisor: Dr. Miriah Meyer

B.A. in Computer Science & Physics: Summa Cum Laude, 2012

Cornell College: Mount Vernon, IA

Minor: Chemistry

RESEARCH INTERESTS

Information visualization, human-computer interaction, set visualization, cybersecurity visualization, visual analytics, citizen science, design methodology

PUBLICATIONS

Journal Publications

► S. McKenna, D. Mazur, J. Agutter, M. Meyer. **Design Activity Framework for Visualization Design**, IEEE Transactions on Visualization and Computer Graphics (Proceedings of InfoVis), 20(12):2191-2200, 2014.

Refereed Conference Publications

▶ D. Staheli, T. Yu, J. Crouser, S. Damodaran, K. Nam, D. O'Gwynn, S. McKenna, L. Harrison. Visualization Evaluation for Cyber Security: Trends and Future Directions, Proceedings of the Eleventh International Symposium on Visualization for Cyber Security (VizSec), 2014.

Under Review

► S. McKenna, M. Meyer, C. Gregg, S. Gerber. s-CorrPlot: A New Scatterplot for Exploring Correlation.

PRESENTATIONS

Paper Presentations

 S. McKenna. Design Activity Framework for Visualization Design, IEEE VIS: InfoVis. Paris, France. Nov 2014.

Posters

- ► S. McKenna, M. Meyer, C. Gregg, S. Gerber. s-CorrPlot: Encoding and Exploring Correlation, IEEE VIS: InfoVis, 2014.
- S. McKenna. Designing STAR: A Cyber Dashboard Prototype, International Symposium on Visualization for Cyber Security (VizSec), 2014.
- S. McKenna, P. Quinan, A. Bigelow. compariSeq: Rethinking Sequence Logos, BioVis Redesign Contest, 2013.

Tutorials

► S. McKenna, A. Bigelow, S. Quinan, E. Kerzner. **Git Tutorial**, SCI Institute Visualization Seminar, 2014.

AWARDS AND FELLOWSHIPS

Winner of Teapot Rendering Competition: University of Utah, 2013

Winner of the second challenge at the Human Brain Mapping Hackathon: Allen Institute for Brain Science & Amazon Web Services, 2013

Wayne Brown Fellowship (\$30,000): University of Utah, 2012 - 2014

Phi Beta Kappa: Cornell College, 2011

TEACHING EXPERIENCE

Introduction to Visualization (CS 6630): University of Utah, Fall 2013 teaching assistant for a graduate-level course (60 students) created and presented five lectures; wrote several new assignments

SERVICE

C.S. Graduate Student Advisory Committee: University of Utah, 2013 - present

PROFESSIONAL EXPERIENCE

Research Assistant: Scientific Computing and Imaging Institute, 8/12 - present

- created a process framework for incorporating visualization design decisions
- redesigned a cybersecurity visualization tool for predictive network analysis
- ► aided in the formation of a new scatterplot for exploring correlation

Research Assistant: NASA's Space Telescope Science Institute, 6/11 - 8/11

- ► contributed to a Hubble Space Telescope archival research project
- ► aided development of a citizen science project
- collaborated in a team of nine individuals across the country

Research Assistant: University of Wisconsin-Oshkosh, 6/10 - 8/10

- developed a system within a group on Drupal, a CMS
- designed a website to facilitate teaching algorithms visually

Chair of Appropriations: Cornell College Student Senate, 2/11 - 2/12

- ► managed and coordinated a budget over \$250,000 for 1,200 students
- coordinated a substantial rewrite of the financial by-laws
- optimized old workflows using new technologies

PROFESSIONAL AFFILIATIONS

IEEE Member, 2013 - present