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

PUBLICATIONS

Journal Publications

- ► S. McKenna, M. Meyer, C. Gregg, S. Gerber. s-CorrPlot: An Interactive Scatterplot for Exploring Correlation, Journal of Computational and Graphical Statistics, 2015.
- ► 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.

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 - 2015

PROFESSIONAL EXPERIENCE

Research Assistant: MIT Lincoln Laboratory, 6/14 - 8/14 & 2/15 - present

- designed a new cyber dashboard for visualizing network activity
- evaluated the design of the dashboard with network analysts and managers

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

- created a process framework for incorporating visualization design decisions
- designed 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