

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

- ▶ S. McKenna, D. Staheli, M. Meyer. **Unlocking User-Centered Design Methods for Building Cyber Security Visualizations**, Proceedings of the Twelfth International Symposium on Visualization for Cyber Security (VizSec), 2015.
- ▶ 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. **Unlocking User-Centered Design Methods for Building Cyber Security Visualizations**, VizSec Symposium, co-located with IEEE VIS. Chicago, IL. Oct 2015.
- ▶ 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: 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: MIT Lincoln Laboratory, 6/14 - 8/14 & 2/15 - 4/15

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

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