KRISTIN CARRIE POTTER, Ph.D.

Research Computer Scientist

Scientific Computing and Imaging Institute \pm 72 South Central Campus Drive, WEB 3750 \pm Salt Lake City, UT 84112 **email**: kpotter@sci.utah.edu \pm **web**: http://www.sci.utah.edu/ \sim kpotter \pm **phone**:(801)598-8238 \pm **fax**:(801)585-6513

A. EDUCATION

Ph.D., University of Utah, August 2010.

Advisor: Richard Riesenfeld. The Visualization of Uncertainty.

M.S., University of Utah, May 2003.

Advisor: Richard Riesenfeld. 3D Line Textures for NPR Walkthroughs.

B.S., University of Oregon, May 2000.

Computer Science, Fine Arts. Art History (minor)

B. RESEARCH and PROFESSIONAL EXPERIENCE

Research Computer Scientist, Scientific Computing and Imaging Institute,

University of Utah, Apr. 2011-present

Post-Doctoral Fellow, Scientific Computing and Imaging Institute,

University of Utah, Dec. 2009-Apr. 2011

Research Assistant, Scientific Computing and Imaging Institute,

University of Utah, Jan. 2008-Dec. 2009

Graduate Intern, Data Analysis and Visualization Dept., Sandia National Laboratories, NM, Jun. 2008-Sep. 2008

Research Assistant, Geometric Design and Computation Research Group,

University of Utah, Aug. 2000-Dec. 2007

Teaching Assistant, School of Computing,

University of Utah, August 2001 - December 2004, Spring 2006, Fall 2007

Leader, Undergraduate Research Team, Department of Computer Science,

University of Utah, Summer 2001

C. FIVE RELATED PUBLICATIONS

Erik W. Anderson and Kristin Potter and Laura E. Matzen and Jason F. Shepherd and Gilbert A. Preston and Claudio T. Silva. A User Study of Visualization Effectiveness Using EEG and Cognitive Load. Computer Graphics Forum, vol. 30, no. 3, pp. 791–800, 2011. (Best Paper Runner-Up).

Kristin Potter and Robert M. Kirby and Dong Bin Xiu and Chris R. Johnson. Interactive Visualization of Probability and Cumulative Density Functions. International Journal of Uncertainty Quantification, vol. 2, no. 4, pp. 397-412, 2012.

Kristin Potter and Paul Rosen and Chris R. Johnson. From Quantification to Visualization: A Taxonomy of Uncertainty Visualization Approaches. IFIP Advances in Information and Communication Technology Series, pp. (To Appear), 2012. (Invited Paper).

Kristin Potter and Joe Kniss and Richard Riesenfeld and Chris R. Johnson. Visualizing Summary Statistics and Uncertainty. Computer Graphics Forum (Proceedings of EuroVis 2010), vol. 29, no. 3, pp. 823–831, 2010.

Kristin Potter and Andrew Wilson and Peer-Timo Bremer and Dean Williams and Charles Doutriaux and Valerio Pascucci and Chris R. Johhson. *Ensemble-Vis: A Framework for the Statistical Visualization of Ensemble Data.* IEEE Workshop on Knowledge Discovery from Climate Data: Prediction, Extremes, pp. 233–240, 2009.

D. OTHER SELECTED PUBLICATIONS

Samuel Gerber and Kristin Potter. Data Analysis with the Morse-Smale Complex: The msr Package for R. Journal of Statistical Software, vol. 50, no. 2, pp. 1–22, 2012.

E.W. Bethel and C.R. Johnson and S. Ahern and J. Bell and P.-T. Bremer and H. Childs and E. Cormier-Michel and M. Day and E. Deines and P.T. Fogal and C. Garth and C.G.R. Geddes and H. Hagen and B. Hamann and C.D. Hansen and J. Jacobsen and K.I. Joy and J. Krueger and J. Meredith and P. Messmer and G. Ostrouchov and V. Pascucci and K. Potter and Prabhat and D. Pugmire and O. Ruebel and A.R. Sanderson and C.T. Silva and D. Ushizima and G.H. Weber and B. Whitlock and K. Wu. Occam's Razor and Petascale Visual Data Analysis. Proceedings of SciDAC 2009, vol. 180, no. 012084, pp. (published online), 2009.

Kristin Potter and Andrew Wilson and Peer-Timo Bremer and Dean Williams and Charles Doutriaux and Valerio Pascucci and Chris R. Johhson. Visualization of Uncertainty and Ensemble Data: Exploration of Climate Modeling and Weather Forecast Data with Integrated ViSUS-CDAT Systems. Proceedings of SciDAC 2009, vol. 180, no. 012089, pp. (published online), 2009.

Jens Krüger and Kristin Potter and Robert MacLeod and Chris R. Johnson. Unified Volume Format: A General System For Efficient Handling Of Large Volumetric Datasets. Proceedings of IADIS Computer Graphics and Visualization (CGV 2008), pp. 19–26, 2008.

Kristin Potter and Jens Krueger and Chris R. Johnson. *Towards the Visualization of Multi-Dimentional Stochastic Distribution Data.* Proceedings of IADIS Computer Graphics and Visualization (CGV 2008), pp. 191–196, 2008.

Joe Kniss and Warren Hunt and Kristin Potter and Pradeep Sen. IStar: A Raster Representation for Scalable Image and Volume Data. IEEE Transactions on Visualization and Computer Graphics, vol. 13, no. 6, pp. 1424–1431, 2007.

Kristin Potter. Methods for Presenting Statistical Information: The Box Plot. Visualization of Large and Unstructured Data Sets, vol. S-4, pp. 97–106, 2006.

E. Professional Activities

Student Committee

Joshua Anghel, MS Committee, Boise State University, Expected Spring 2012.

Organizer

2012 IAMCS-KAUST Workshop on Computational Biomedicine and Geophysics

Salt Lake City, Utah, April 5th-6th, 2012.

Program Committee

Working with Uncertainty Workshop

IEEE VisWeek 2011, Providence, Rhode Island, October 24, 2012.

Session Chair

Working with Uncertainty Workshop

Co-Located with VisWeek 2011, Providence, RI, October 24, 2011.

USA/South America Symposium on Stochastic Modeling and Uncertanity Quantification

Leblon Beach, Rio de Janeiro, Brazil, August 1-5, 2011.

Participant

USA/South America Symposium on Stochastic Modeling and Uncertanity Quantification

Leblon Beach, Rio de Janeiro, Brazil, August 1-5, 2011.

IAMCS Annual Spring Symposium

KAUST Campus, Jeddah, Saudi Arabia, May 27-29, 2010.

IEEE Visualization Ph.D. Colloquium

Sacramento, CA, October. 29, 2007.

First Annual IRTG Workshop

Schloss Dagstuhl, Germany, June 14, 2006.

Member

Systers Pass-It-On Grants Review Committee

Anita Borg Institure for Women and Technology, Chair: 2011-present, Member: 2008-present.

Women @ CS Group

School of Computing, University of Utah, Dec 2005-2008.

Graduate Student Advisory Committee

School of Computing, University of Utah, Chair, 2002-2003. Member, 2001-2002...

Reviewer

IEEE Visualization, 2007, 2008, 2009, 2010, 2011, 2012, 2013.

IEEE Visualization Posters, 2012.

EuroVis, 2008, 2010, 2011, 2012, 2013.

EuroVis Short Papers, 2012.

IEEE InfoVis, 2007, 2011.

IEEE TVCG, 2011, 2012, 2013.

Intl Journal for Uncertainty Quantification, 2011.

Journal of Zhejiang University Science, 2012.

ACM Siggraph Technical Sketches, 2005, 2006.

IEEE Computer Graphics & Applications, 2013.

American Statistician, 2007.

Computer Graphics Forum, 2008.

IEEE VAST, 2007.