

ADAM PERER, Ph.D.

BIOGRAPHY

Adam Perer is a research scientist in the Healthcare Analytics Research Group at IBM T.J. Watson Research Center in New York. He was previously a research scientist in IBM's Visual Communication Lab in Cambridge and IBM's Social Technologies Group in Haifa.

His research blends **data visualization** and **data mining** techniques to create visual interactive systems to help users make sense out of big data. Lately, his research focuses on extracting insights from clinical data to support **data-driven medicine**.

He received his Ph.D. in Computer Science at the University of Maryland, College Park. His advisor was Dr. Ben Shneiderman and he was a member of the Human-Computer Interaction Lab. His dissertation work focused on improving exploratory data analysis by integrating statistical algorithms and information visualizations. His SocialAction project has been instrumental for scientific discoveries, including medical research at the National Library of Medicine, counter-terrorism research at the Department of Homeland Security's START center, and political analysis at US News & World Report. He has also been a visiting researcher at the Institute for Defense Analyses, Xerox PARC, and Microsoft Research.

EDUCATION

- August 2008 **Ph.D. in Computer Science.** *University of Maryland, College Park, MD*
Thesis: Integrating Statistics and Visualization to Improve Exploratory Social Network Analysis
Advisor: Ben Shneiderman
Committee: Ben Bederson, Lise Getoor, Jen Golbeck, Alan Neustadt
- May 2005 **Master of Science in Computer Science,** *University of Maryland, College Park, MD*
- May 2002 **Bachelor of Science in Computer Science cum laude,** Minor in Artificial Intelligence
Case Western Reserve University, Cleveland, OH

RESEARCH EXPERIENCE

- 11/2011 - **Research Scientist at IBM Research,** *Yorktown Heights, NY*
Present Researcher in the Healthcare Analytics Research group in IBM's T.J. Watson Research Center. Co-chair of the Graphics & Visualization community for all of IBM Research's labs.
- 9/2010 - **Research Scientist at IBM Research,** *Cambridge, MA*
10/2011 Researcher in the Visual Communication Lab in IBM Research's Center for Social Software. Co-chair of the Graphics & Visualization community for all of IBM Research's labs.
- 9/2008 - **Research Scientist at IBM Research,** *Haifa, Israel*
8/2010 Advancing visualization, social media, and crowdsourcing research as a part of the Social Technologies Group at IBM Research Haifa. Co-chair of the Graphics & Visualization community for all IBM Research labs.
- 8/2002 - **Research Assistant at the University of Maryland,** *College Park, MD*

- 8/2008 Designed and implemented *SocialAction*, a novel system for exploratory social network analysis that integrates statistics and visualization. Conducted long-term case studies with real users and real problems to validate the tools success.
- 6-8/2006 & **Research Assistant at Microsoft Research, Redmond, Washington**
6-9/2005 Designed and implemented information visualizations to allow users to navigate and interpret hidden dimensions of their email archives. Evaluations of the system showed evidence of improved experience for users with email overload over traditional text-based interfaces.
- 6-8/2004 **Research Assistant at Xerox PARC, Palo Alto, California**
Designed and implemented an interface to aid analysts working with large corpora of documents. Led ethnographic studies to learn the tasks of in-depth readers and how technologies could assist them.
- 6-8/2003 **Research Assistant at Institute for Defense Analyses, Alexandria, Virginia**
Designed virtual environments to measure the sense of presence in virtual reality systems. Conducted user studies measuring human factors and biometric responses.
- 6-8/2002 **Research Assistant at Zaxel Systems, Inc, Pittsburgh, Pennsylvania**
Assisted in improving several computer vision technologies developed at Zaxel. Designed new interfaces for end users of their multimedia systems.
- 6-8/2001 **Research Assistant at TerraSim Inc., Pittsburgh, Pennsylvania**
Assisted in enhancing a software product that takes satellite images and maps them in three-dimensional virtual worlds, commonly used in simulations.
- 6-8/2000 & **Research Assistant at Carnegie Mellon University, Pittsburgh, Pennsylvania**
6-8/1999 Conducted computer vision research at the Robotics Institute, working closely with Dr. Takeo Kanade on the Virtualized Reality project.
- 6/1997-
2/1998 **Research Assistant at Carnegie Mellon University, Pittsburgh, Pennsylvania**
Developed a computer simulation of DNA processes with the Theoretical Physics department. Experiments assisted the Human Genome Project.

PUBLICATIONS

BOOK CHAPTERS

- B.1 **Adam Perer.** Finding Beautiful Insights in the Chaos of Social Network Visualizations. In *Beautiful Visualization*. O'Reilly Press. June 2010.

JOURNAL PAPERS (REFEREED)

- J.1 David Gotz, Fei Wang, and **Adam Perer.** A Methodology for Interactive Mining and Visual Analysis of Clinical Event Patterns using Electronic Health Records Data. *Journal of Biomedical Informatics (JBI)*. (2014). In press.
- J.2 Zhiyuan Zhang, David Gotz, and **Adam Perer.** Interactive Cohort Analysis and Exploration. *Journal of Information Visualization (IVS)*. (2014). In press.

- J.3 Jimeng Sun, Candace D McNaughton, Ping Zhang, **Adam Perer**, Aris Gkoulalas-Divanis, Joshua C Denny, Jacqueline Kirby, Thomas Lasko, Alexander Saip, Bradley A Malin. Predicting changes in hypertension control using electronic health records from a chronic disease management program. *Journal of the American Medical Informatics Association (JAMIA)*. 21(2): 337-344 (2014)
- J.4 Jeffrey Heer and **Adam Perer**. ORION: A System for Modeling, Transformation and Visualization of Multi-dimensional Heterogeneous Networks. *Information Visualization Journal*. 13(2): 111-133. (2014).
- J.5 **Adam Perer**, Ido Guy, Erel Uziel, Inbal Ronen, Michal Jacovi. The Longitudinal Use of SaNDVis: Visual Social Network Analytics in the Enterprise. *IEEE Transactions in Visualization and Computer Graphics (IEEE TVCG)*. (2013).
- J.6 **Adam Perer** and Ben Shneiderman. Integrating Statistics and Visualization for Exploratory Power: From Long-Term Case Studies to Design Guidelines. *IEEE Computer Graphics and Applications (CG&A): Special Issue on Visual Analytics Evaluation*. 29(3): 39-51 (2009).
- J.7 **Adam Perer**, Ben Shneiderman, Douglas W. Oard: Using rhythms of relationships to understand e-mail archives. *Journal of the American Society for Information Science and Technology (JASIST)* 57(14): 1936-1948 (2006).

CONFERENCE PAPERS (REFEREED)

- C.1 Josua Krause, **Adam Perer**, and Enrico Bertini. INFUSE: Interactive Feature Selection for Predictive Modelling of High Dimensional Data. *IEEE Visual Analytics Science and Technology (VAST)*. Paris, France. (2014).
- C.2 Charles Stolper, **Adam Perer**, and David Gotz. Progressive Visual Analytics: User-Driven Visual Exploration of In-Progress Analytics. *IEEE Visual Analytics Science and Technology (VAST)*. Paris, France. (2014).
- C.3 **Adam Perer** and Fei Wang. Frequence: Interactive Mining and Visualization of Temporal Frequent Event Sequences. *ACM Conference on Intelligent User Interfaces (IUI 2014)*. Haifa, Israel. (2014).
- C.4 **Adam Perer** and David Gotz. Data-Driven Exploration of Care Plans for Patients. *Extended Abstracts of ACM Conference on Human Factors in Computing Systems (CHI 2013)*. Paris, France. (2013).
- C.5 **Adam Perer**, Jimeng Sun. MatrixFlow: Temporal Network Visual Analytics to Track Symptom Evolution during Disease Progression. *American Medical Informatics Association Annual Symposium (AMIA 2012)*. Chicago, Illinois. (2012).
- C.6 Michael Muller, Kate Ehrlich, Ido Guy, Tara Matthews, **Adam Perer**, Inbal Ronen. Diversity among Enterprise Online Communities: Collaborating, Teaming, and Innovating through Social Media. *ACM Conference on Human Factors in Computing Systems (CHI 2012)*. Austin, Texas. (2012).
- C.7 **Adam Perer**, Ido Guy, Erel Uziel, Inbal Ronen, Michal Jacovi: Visual Social Network Analytics for Relationship Discovery in the Enterprise. *IEEE Conference on Visual Analytics Science and Technology (VAST 2011)*. Providence, Rhode Island, USA. (2011). *Best Paper Runner-Up*.
- C.8 Jeffrey Heer, **Adam Perer**: Orion: A System for Modeling, Transformation and Visualization of Multi-dimensional Heterogeneous Networks. *IEEE Conference on Visual Analytics Science and Technology (VAST 2011)*. Providence, Rhode Island, USA. (2011).
- C.9 Michal Jacovi, Ido Guy, **Adam Perer**, Inbal Ronen, Erel Uziel and Michael Maslenko. Digital Traces of Interest: Deriving Interest Relationships from Social Media Interactions. *European Conference on Computer-Supported Cooperative Work (ECSCW 2011)*. Aarhus, Denmark. (2011).

- C.10 Ido Guy, **Adam Perer**, Tal Daniel, Ohad Greenshpan, Itai Turbahn: Guess Who? Enriching the Social Graph through a Crowdsourcing Game. ACM Conference on Human Factors in Computing Systems (CHI 2011). Vancouver, Canada. (2011).
- C.11 Ido Guy, Sigalit Ur, Inbal Ronen, **Adam Perer**, Michal Jacovi: Do You Want to Know? Recommending Strangers in the Enterprise. ACM Conference of Computer Supported Cooperative Work (CSCW 2011). Hangzhou, China. (2011).
- C.12 Ido Guy, Michal Jacovi, **Adam Perer**, Inbal Ronen and Erel Uziel: Same Places, Same Things, Same People? Mining User Similarity on Social Media. ACM Conference of Computer Supported Cooperative Work (CSCW 2010). Savannah, Georgia, USA. (2010).
- C.13 Frank van Ham and **Adam Perer**: "Search, Show Context, Expand on Demand": Supporting Large Graph Exploration with Degree-of-Interest. IEEE Conference on Information Visualization (Infovis 2009). Atlantic City, New Jersey, USA. (2009).
- C.14 Marc A. Smith, Ben Shneiderman, Natasha Milic-Frayling, Eduarda Rodrigues, Vladimir Barash, Cody Dunne, Tony Capone, **Adam Perer** and Eric Gleave: Analyzing (Social Media) Networks with NodeXL. International Conference on Communities and Technologies (C&T 2009). University Park, Pennsylvania, USA. (2009).
- C.15 **Adam Perer** and Ben Shneiderman. Integrating Statistics and Visualization: Case Studies of Gaining Clarity During Exploratory Data Analysis. ACM Conference on Human Factors in Computing Systems (CHI 2008). Florence, Italy. (2008).
- C.16 **Adam Perer** and Ben Shneiderman. Systematic Yet Flexible Discovery: Guiding Domain Experts Through Exploratory Data Analysis. International Conference on Intelligent User Interfaces (IUI 2008). Gran Canaria, Canary Islands, Spain. (2008).
- C.17 **Adam Perer** and Ben Shneiderman: Balancing Systematic and Flexible Exploration of Social Networks. IEEE Transactions on Visualization and Computer Graphics (InfoVis 2006). 12(5): 693-700. Baltimore, Maryland, USA. (2006).
- C.18 **Adam Perer** and Marc A. Smith: Contrasting portraits of email practices: visual approaches to reflection and analysis. International Conference on Advanced Visual Interfaces (AVI 2006): 389-395. Venice, Italy. (2006)
- C.19 **Adam Perer** and Ben Shneiderman. Improving Interactive Exploration of Social Networks. International Sunbelt Social Network Conference (SUNBELT). Vancouver, Canada (2006).
- C.20 **Adam Perer**: Making sense of social networks. Extended Abstracts of ACM conference on Human factors in computing systems (CHI 2006): 1779-1782. Montreal, Canada (2006).
- C.21 Eric Bier and **Adam Perer**. Icon Abacus: positional display of document attributes. Proceedings of the 5th ACM/IEEE Joint Conference on Digital Libraries (JCDL 2005): 289-290. Denver, Colorado, USA (2005).

WORKSHOP PAPERS (REFEREED)

- W.1 **Adam Perer** and David Gotz. Visualizations to Support Patient-Clinician Communication of Care Plans. ACM CHI 2013 Workshop on Patient-Clinician Communication. Paris, France. (2013).
- W.2 Zhiyuan Zhang, David Gotz and **Adam Perer**. "Interactive Visual Patient Cohort Analysis". Workshop on Visual Analytics in Healthcare. IEEE VisWeek 2012. Seattle, Washington (2012).

- W.3 **Adam Perer.** Healthcare Analytics for Clinical and Non-Clinical Settings. Bridging Clinical and Non-clinical Health Practice Workshop at CHI 2012. Austin, Texas, USA. (2012).
- W.4 **Adam Perer.** The Value of Analyzing Behavior on Multiple Social Mediating Technologies. Social Mediating Technologies: Developing the Research Agenda Workshop at CHI 2009. Boston, Massachusetts, USA. (2009).
- W.5 **Adam Perer, Ben Shneiderman.** Supporting Exploration in Social Data Analysis. Social Data Analysis Workshop at CHI 2008. Florence, Italy. (2008).
- W.6 **Adam Perer.** Analyzing the Networked: Visual Techniques for Understanding the Social Structure of Social Software. Public Practices, Social Software: Examining social practices in networked publics. 3rd Annual Communities and Technologies Conference. East Lansing, Michigan, USA. (2007).
- W.7 **Adam Perer, Ben Shneiderman.** Orderly Analysis of Social Visualizations. Social Visualization Workshop at CHI 2006. Montreal, Canada. (2006).

PANELS

- P.1 **Adam Perer, Fei Sha, Klaus Mueller, Srinivasan Parthasarathy, Tamara Munzner.** Exploratory Data Analysis. Workshop on Exploratory Data Analysis. SIAM Conference on Data Mining (SDM 2014). Philadelphia, PA.
- P.2 **Adam Perer, David Gotz, Diana MacLean, Yuval Shahar, Ben Shneiderman.** Visual Analytics in Healthcare. American Medical Informatics Association Annual Symposium (AMIA 2012). Chicago, Illinois. (2012).

DEMOS, POSTERS, AND CHALLENGES (REFEREED)

- D.1 **Adam Perer, Ido Guy.** SaNDVis: Visual Social Network Analytics for the Enterprise. ACM Conference of Computer Supported Cooperative Work (CSCW 2012). Seattle, Washington. (2012).
- D.2 **Adam Perer, Ido Guy, Erel Uziel, Inbal Ronen, Michal Jacovi.** Unearthing People from the SaND: Relationship Discovery with Social Media in the Enterprise. AAAI Conference on Weblogs and Social Media (ICWSM 2011). Barcelona, Spain. (2011).
- D.3 **Adam Perer.** Using SocialAction to uncover structure in social networks over time. IEEE Symposium on Visual Analytics Science and Technology (VAST 2008): 213-214. Columbus, Ohio, USA. (2008).
- D.4 **Adam Perer, Ben Shneiderman.** The Global Network of Terrorism: Dynamic Trends from 1969-1997. Competition on Visualizing Network Dynamics: International Workshop and Conference on Network Science. New York Hall of Science, New York, USA. (2007).
- D.5 **Adam Perer, Ben Shneiderman.** Beyond Threads: Identifying Discussions in Email Archives. IEEE Symposium on Information Visualization (InfoVis 2005). Minneapolis, Minnesota, USA. (2005).
- D.6 Eric Bier, **Adam Perer.** Icon Abacus and Ghost Icons. Proceedings of the 5th ACM/IEEE Joint Conference on Digital Libraries (JCDL). Denver, Colorado, USA. (2005).

OTHER PUBLICATIONS

- O.1 **Adam Perer** and Chris Wilson. The Steroids Social Network: An interactive feature on the Mitchell report. Slate Magazine. Dec. 21, 2007. <http://www.slate.com/id/2180392/>

- O.2 Eric Bier and **Adam Perer**. Icon Abacus and Ghost Icons. IEEE Technical Committee on Digital Libraries Bulletin, 2(1). (2005)

PATENTS

- PAT.1 David Gotz, **Adam Perer**, and Zhiyuan Zhang. Iterative Refinement of Cohorts using Visual Exploration and Data Analytics. Patent Pending.
- PAT.2 Eric A. Bier and **Adam Perer**. Systems and Methods for displaying Linked Information in a Sorted Context. Patent 20041652-US-NP-311307.

INVITED TALKS TO ACADEMIA & INDUSTRY

- I.1 April 25, 2014: Visual Analytics for Data-Driven Medicine. Mid-Atlantic Healthcare Informatics Symposium. Philadelphia, PA.
- I.2 October 2, 2013: CareFlow: Data-Driven Exploration of Care Plans for Patients. Health 2.0. Santa Clara, CA.
- I.3 October 1, 2013: Visual Analytics: Machine Learning + Visualization for Data-Driven Medicine. Health 2.0. Santa Clara, CA.
- I.4 August 17, 2013: Visual Analytics for Data-Driven Medicine. Meaningful Use of Complex Medical Data Symposium. Los Angeles, CA.
- I.5 April 2013: Visual Analytics for Healthcare. BioIT World Conference. Boston, MA.
- I.6 May 23, 2012: Visual Analytics for Tracking Disease Progression in Electronic Health Records. Electronic Health Record Informatics Workshop. University of Maryland. College Park, Maryland.
- I.7 June 24, 2011: Making Sense of Social Networks. Stanford University. Stanford, California.
- I.8 June 23, 2011: Data Visualization and Storytelling. IBM Almaden Research Center. San Jose, California.
- I.9 March 18, 2011: Making Sense of Social Networks. Massachusetts Institute of Technology. Cambridge, Massachusetts.
- I.10 June 7, 2010: Making Sense of (Social) Networks. IBM Research. Cambridge, Massachusetts.
- I.11 March 4, 2010: Making Sense of (Social) Networks. University of Pittsburgh. Pittsburgh, Pennsylvania.
- I.12 May 18, 2009: Improving Exploration of Networks by Integrating Statistics and Visualization. Dagstuhl Seminar on Visualization and Monitoring of Network Traffic. Dagstuhl, Germany.
- I.13 June 27, 2008: Integrating Statistics and Visualizations to Improve Exploratory Data Analysis of Social Networks. Statistical Graphics: Data and Information Visualization in Today's Multimedia Society (DataViz VI). Jacobs University, Bremen, Germany.
- I.14 February 14, 2008: Integrating Statistics and Visualization: Gaining Clarity during Exploratory Data Analysis of Social Networks. Dynamic Network Analysis Seminar Series. University of Maryland, College Park, Maryland.

- I.15 November 12, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Ben-Gurion University of the Negev, Beer Sheva, Israel.
- I.16 November 8, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. IBM Research, Haifa, Israel.
- I.17 November 6, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Technion, Haifa, Israel.
- I.18 November 5, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Weizmann Institute of Science, Rehovot, Israel.
- I.19 November 1, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Google, Haifa, Israel.
- I.20 October 10, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Johns Hopkins University Applied Physics Lab, Columbia, Maryland.
- I.21 July 25, 2007: Social Network Analysis for Counter-Terrorism. Tools and Practices of Terrorism Analysis. Booz Allen Hamilton, McLean, Virginia
- I.22 June 1, 2007: Systematic Yet Flexible Visualizations of Social Networks. Helping Users Make Sense of Social Networks Workshop. University of Maryland, College Park, Maryland.
- I.23 May 31, 2007: Systematic Yet Flexible Visualizations of Social Networks. HCIL's 24th Annual Symposium. University of Maryland, College Park, Maryland.
- I.24 May 23, 2007: Social Network Analysis for Counter-Terrorism. 2007 Homeland Security Science & Technology Stakeholders Conference. Washington, DC.
- I.25 May 20, 2007: Balancing Systematic and Flexible Exploration of Social Networks. International Workshop and Conference on Network Science. New York Hall of Science, New York City, New York.
- I.26 April 18, 2007: Improving Interactive Exploration of Social Networks. The USMA/ARI Network Science Workshop, United States Military Academy, West Point, New York.
- I.27 March 2, 2007: Exploratory and Systematic Social Network Analysis Using Novel Visualizations and Interactions. APA Annual Symposium on Applied Experimental Research, George Mason University, Virginia.
- I.28 August 2006: Uses and Values of Email Visualizations: A Case Study with SNARFViews. Microsoft Research. Redmond, Washington.
- I.29 June 1, 2006: Balancing Systematic and Flexible Exploration of Social Networks. HCIL's 23rd Annual Symposium. University of Maryland, College Park, Maryland.
- I.30 June 2, 2005: Using Rhythms of Relationships to Understand Email Archives. Email Archive Visualization Workshop. University of Maryland, College Park, Maryland.
- I.31 June 3, 2005: Understanding the Rhythms of Relationship in Email Archives. HCIL's 22nd Annual Symposium. University of Maryland, College Park, Maryland.
- I.32 August 31, 2004: Approaches for Visualizing Email Archives. USC's Institute for Creative Technologies. Marina del Ray, California.

I.33 August 2004: Supporting Reading Groups with Instant Bookplex. Palo Alto Research Center (PARC). Palo Alto, California.

INVITED PARTICIPANT

IP.1 March 2012: National Science Foundation Workshop on the Science of Interaction. Austin, Texas.

IP.2 June 2010: Dagstuhl Seminar on Information Visualization. Schloss Dagstuhl, Germany.

IP.3 May 2009: Dagstuhl Seminar on Visualization and Monitoring of Network Traffic. Schloss Dagstuhl, Germany.

IP.4 July 2008: Microsoft Research Faculty Summit. Redmond, Washington.

TEACHING EXPERIENCE

COURSES

Spring 2004 Teaching Assistant for Introduction to Human-Computer Interaction (CMSC 434) with Dr. Ben Shneiderman at the University of Maryland

Fall 2003 Teaching Assistant for Organization of Programming Languages (CMSC 330) with Larry Herman at the University of Maryland

Spring 2003 Teaching Assistant for Introduction to Artificial Intelligence (CMSC 421) with Dr. James Hendler at the University of Maryland

Fall 2002 Teaching Assistant for Computer Science I (CMSC 131) with Nelson Padua-Perez at the University of Maryland

Spring 2002 Teaching Assistant for Elementary Computer Programming (ENGR 131) with Dr. Wyatt Newman at Case Western Reserve University

Fall 2001 Teaching Assistant for Elementary Computer Programming (ENGR 131) with Dr. Marc Buchner at Case Western Reserve University

Spring 2001 Teaching Assistant for Elementary Computer Programming (ENGR 131) with Dr. Marc Buchner at Case Western Reserve University

Fall 2000 Teaching Assistant for Elementary Computer Programming (ENGR 131) with Dr. Marc Buchner at Case Western Reserve University

MENTORING

2014 Mentored Josua Krause of NYU as an intern at IBM Research.

2013 Mentored Chad Stolper of Georgia Tech as an intern at IBM Research.

2012 Co-mentored Zhiyuan Zhang of Stony Brook University as an intern at IBM Research on designing a visual interface for Interactive Visual Patient Cohort Analysis.

2011 Mentored Jessica Hullman of the University of Michigan as an intern at IBM Research on examining cultural differences of visual representations of complex data.

- 2008 Mentored Joonghoon Lee at the University of Maryland on creating GTD Data Rivers, a temporal visualization of terrorist activities in the Global Terrorism Database (GTD).
- 2009 Mentored Tal Herscovitz and Oded Schumacher at the Technion (Israel Institute of Technology) on creating visualizations of online social media.

COMMITTEES & REVIEWING

PANEL MEMBER

- PM.1 National Science Foundation (NSF). Information & Intelligent Systems Division. 2014.
- PM.2 National Science Foundation (NSF). Information & Intelligent Systems Division. 2013.
- PM.3 National Science Foundation (NSF). Information & Intelligent Systems Division. 2012.

JOURNAL EDITOR

- JE.1 Guest Editor. Information Visualization Journal, Special Issue on Information Visualization Evaluation, 2013.
- JE.2 Guest Editor. Information Visualization Journal, Special Issue on Information Visualization Evaluation, July 2011.

ORGANIZING COMMITTEE MEMBER

- CC.1 Publicity Chair. IEEE VIS 2014, November 9-14, Paris, France.
- CC.2 Exhibits Chair. IEEE VIS 2013, October 13-18, Atlanta, Georgia.
- CC.3 Exhibits Chair. IEEE VisWeek 2012, October 14-19, Seattle, Washington.
- CC.4 Webmaster. C&C2007, Creativity and Cognition Conference, June 13-15, 2007, Washington, DC.

PROGRAM COMMITTEE MEMBER

- PC.1 InfoVis 2014: IEEE Information Visualization Conference, November 2014, Paris, France.
- PC.2 InfoVis 2013: IEEE Information Visualization Conference, October 2013, Atlanta, Georgia.
- PC.3 EuroVis 2013: EuroGraphics/IEEE Symposium on Visualization, June 2013, Leipzig, Germany.
- PC.4 EuroVis 2012: EuroGraphics/IEEE Symposium on Visualization, June 2012, Vienna, Austria.
- PC.5 InfoVis 2011: IEEE Information Visualization Conference, October 2011, Providence, Rhode Island.
- PC.6 EuroVis 2011: EuroGraphics/IEEE Symposium on Visualization, May 2011, Bergen, Norway.
- PC.7 InfoVis 2010: IEEE Information Visualization Conference, October 2010, Salt Lake City, Utah.
- PC.8 InfoVis 2009: IEEE Information Visualization Conference, October 2009, Atlantic City, New Jersey.
- PC.9 ISWC 2009: International Semantic Web Conference, October 2009, Washington, DC.
- PC.10 WWW 2009: International World Wide Web Conference, August 20-24 2009, Madrid, Spain.

WORKSHOP COMMITTEE MEMBER

- WC.1 **Organizer.** Visualization for Predictive Analytics. IEEE VIS 2014. November 9, 2014. Paris, France. predictive-workshop.github.io
- WC.2 **Organizer.** Visual Analytics in Healthcare. AMIA 2014. November 15, 2014. Washington, DC, USA. www.visualanalyticshealthcare.org
- WC.3 Program Committee. IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2014. August. New York City, New York, USA. poloclub.gatech.edu/idea2014/
- WC.4 Program Committee. BGM: International Workshop on Big Graph Mining. WWW 2014. April 7, 2014. Seoul, South Korea. poloclub.gatech.edu/bgm2014/
- WC.5 Program Committee. Visual Analytics in Healthcare. AMIA 2013. November 16, 2013. Washington, DC, USA. www.visualanalyticshealthcare.org
- WC.6 Program Committee. IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2013. August 11. Chicago, Illinois, USA. poloclub.gatech.edu/idea2013/
- WC.7 **Organizer.** BELIV'12: Novel Evaluation Methods for Visualization. IEEE VisWeek 2012. October 14-15, 2012. Seattle, Washington, USA. www.beliv.org
- WC.8 Program Committee. Visual Analytics in Healthcare: Open Health Data. IEEE VisWeek 2012. October 17, 2012. Seattle, Washington, USA. www.visualanalyticshealthcare.org
- WC.9 Program Committee. SocMedVis: Workshop on Social Media Visualization. ICWSM 2011. Dublin, Ireland.
- WC.10 **Organizer.** Telling Stories with Data. VisWeek 2011. October 2011. Providence, Rhode Island, USA. data-stories.com
- WC.11 Program Committee. NextMail'11: International Workshop on Next Trends in Email, Lyon, France.
- WC.12 Program Committee. VISSW 2011: International Workshop on Visual interfaces to the Social and Semantic Web, Palo Alto, California.
- WC.13 **Organizer.** BELIV'10: BEyond time and errors: novel evaluation methods for Information Visualization. CHI 2010. April 10-11, 2010. Atlanta, Georgia, USA. www.beliv.org/beliv2010/
- WC.14 Program Committee. VISSW 2010: International Workshop on Visual interfaces to the Social and Semantic Web, Hong Kong, China.
- WC.15 **Organizer.** BELIV'08: BEyond time and errors: novel evaluation methods for Information Visualization. CHI 2008. April 5, 2008. Florence, Italy. www.dis.uniroma1.it/~beliv08/
- WC.16 **Organizer.** Helping Users Make Sense of Social Networks. University of Maryland. June 2007, College Park, Maryland. www.cs.umd.edu/hcil/sna-workshop/
- WC.17 **Organizer.** Email Archive Visualization Workshop. University of Maryland, June 2005, College Park, Maryland. www.cs.umd.edu/hcil/emailviz/workshop/
- WC.18 Webmaster. Workshop on Creativity Support Tools, National Science Foundation. June 13-14, 2005, Washington, DC. www.cs.umd.edu/hcil/CST/

JOURNAL REVIEWER

- JR.1 2013-2011 IEEE Transactions on Visualization and Computer Graphics (TVCG)
- JR.2 2013-2010 Information Visualization Journal (IVS)

- JR.3 2010 ACM Transactions on Intelligent Systems and Technology (TIST)
- JR.4 2009-2007 International Journal of Human-Computer Studies (IJHCS)
- JR.5 2009 IEEE Computer Graphics and Applications (CG&A)
- JR.6 2008 New Review of Hypermedia and Multimedia (NRHM)
- JR.7 2007 International Journal of Human-Computer Interaction (IJHCI)
- JR.8 2005 Journal of Computer-Mediated Communication (JCMC)

CONFERENCE REVIEWER

- CR.1 2014-2008 Conference on Human Factors in Computing Systems (CHI).
- CR.2 2013-2010 Eurographics/IEEE Symposium on Visualization (EuroVis).
- CR.3 2014-2012 IEEE Pacific Visualization Symposium (PacificVis).
- CR.4 2012-2010 International Conference on Intelligent User Interfaces. (IUI)
- CR.5 2012 ACM Advanced Visual Interfaces Conference (AVI).
- CR.6 2012 International Conference on Information Visualization Theory and Applications (IVAPP).
- CR.7 2012-2005 IEEE Information Visualization Conference (InfoVis).
- CR.8 2012-2008 IEEE Symposium on Visual Analytics Science and Technology (VAST).
- CR.9 2011 ACM Conference on Computer Supported Cooperative Work (CSCW)
- CR.10 2009 International Semantic Web Conference (ISWC).
- CR.11 2009 International World Wide Web Conference (WWW).
- CR.12 2007 ACM Creativity and Cognition Conference (C&C).

STUDENT VOLUNTEER

- SV.1 UIST 2006, Symposium on User Interface Software & Technology, October 2006, Montreux, Switzerland.
- SV.2 CHI 2005: Conference on Human Factors in Computing Systems, April 2-7, Portland, Oregon.
- SV.3 CHI 2004: Conference on Human Factors in Computing Systems, April 24-29, Vienna, Austria.

MEMBERSHIPS

- Co-chair of IBM Research's Graphics & Visualization Community. (2010-2013).
- Lead Visualization Member of IBM's CS/Math Research Ph.D. Fellowship Selection Committee. (2010-2013)
- ACM (Association for Computing Machinery)
- Computer Science Department Executive Council, University of Maryland (2004-2008)
- IBM Professional Interest Communities (HCI, Graphics & Visualization)

AWARDS

- Research Accomplishment. Research Division Award for 'Intelligent Care Delivery and Analytics'. IBM (2013).
- VAST Mini-Challenge Award, IEEE Visual Analytics Science and Technology Challenge (2008)
- Jacob K. Goldhaber Grant, University of Maryland (2008)
- Doctoral Consortium Selection, SIGCHI (2006)
- University of Maryland Graduate Fellowship (Fall 2002 – Spring 2008)
- Case Alumni Scholarship (Fall 1999 – Spring 2002)
- Case Western Reserve Provost Scholarship (Fall 1998 – Spring 2002)
- Sara Goldstein Academic Scholarship (Fall 1998 – Spring 2002)

LANGUAGES

- Native English

CITIZENSHIP

- USA