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EDUCATION

Ph.D. in Computer Science. University of Maryland, College Park, MD   August 2008
Dissertation: "Integrating Statistics and Visualization to Improve Exploratory Social Network Analysis"
Advisor: Ben Shneiderman, Committee: Ben Bederson, Lise Getoor, Jen Golbeck, Alan Neustadtl

M.S. in Computer Science, University of Maryland, College Park, MD   May 2005

B.S. in Computer Science, Case Western Reserve University, Cleveland, OH   May 2002

POSITIONS

Assistant Professor at Carnegie Mellon University, *Pittsburgh, PA*   2023-Present
Assistant Research Professor at Carnegie Mellon University, *Pittsburgh, PA*   2018-2023
Research Scientist at IBM Research, *Yorktown Heights, NY*   2011-2018
Adjunct Professor at Carnegie Mellon University, *Pittsburgh, PA*   2016-2018
Lecturer at University of Pennsylvania, *Philadelphia, PA*   2017
Research Scientist at IBM Research, *Cambridge, MA*   2010-2011
Research Scientist at IBM Research, *Haifa, Israel*   2008-2010
Research Intern at Microsoft Research, *Redmond, Washington*   2005,2006
Research Intern at Xerox PARC, *Palo Alto, California*   2004
Research Intern at Institute for Defense Analyses, *Alexandria, Virginia*   2003
Research Intern at Zaxel Systems, Inc, *Pittsburgh, Pennsylvania*   2002
Research Intern at TerraSim Inc., *Pittsburgh, Pennsylvania*   2001
Research Intern at Carnegie Mellon University's Robotics Institute, *Pittsburgh, Pennsylvania*   1999-2000
Research Intern at Carnegie Mellon University's Department of Physics, *Pittsburgh, Pennsylvania*   1997-1998

PUBLICATIONS

BOOK CHAPTERS

B.1   Jianying Hu, **Adam Perer**, and Fei Wang. Data Driven Analytics for Personalized Healthcare. In *Healthcare Informatics Management Systems: 4th Edition.* Springer. September 2015.

B.2   **Adam Perer**. Finding Beautiful Insights in the Chaos of Social Network Visualizations. In *Beautiful Visualization.* O'Reilly Press. June 2010.

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J.2   🏅 Will Epperson, Vaishnavi Gorantla, Dominik Moritz, **Adam Perer**. Dead or Alive: Continuous Data Profiling for Interactive Data Science. IEEE Transactions in Visualization and Computer Graphics (IEEE TVCG). Presented at IEEE Visualization (VIS). (2023). ***Best Paper Honorable Mention.***

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J.4	Katelyn Morrison, Donghoon Shin, Kenneth Holstein, and **Adam Perer**. Evaluating the Impact of Human Explanation Strategies on Human-AI Visual Decision-Making. ACM on Human-Computer Interaction. Presented at ACM CSCW (2023).
J.5	Ángel Alexander Cabrera, **Adam Perer**, and Jason I. Hong. Improving Human-AI Collaboration with Descriptions of AI Behavior. ACM on Human-Computer Interaction. Presented at ACM CSCW (2023).
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J.7	Leeann Chen, Christianna Bartel, Xinlu Cai, Yang Cheng, **Adam Perer,** Sean McClaine, Elizabeth Kairis, Krina Durica, Weiyu Huang, Carissa A Low. Patient and Provider Perspectives on Symptom Monitoring during Outpatient Chemotherapy: Interview Study. JMIR Formative Research (2023).
J.8	Ángel Alexander Cabrera, Abraham Druck, Jason Hong, and **Adam Perer**. Discovering and Validating AI Errors with Crowd Auditing. ACM on Human-Computer Interaction. Presented at ACM CSCW. (2021).
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J.10	Hong Shen, Haojian Jin, Ángel Alexander Cabrera, **Adam Perer**, Haiyi Zhu, and Jason I. Hong. 2020. Designing Alternative Representations of Confusion Matrices to Support Non-Expert Public Understanding of Algorithm Performance. ACM on Human-Computer Interaction. Presented at ACM CSCW. (2020).
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J.12	Barbara Han, Subhabrata Majumdar, Flavio Calmon, Benjamin Glicksberg, Raya Horesh, Abhishek Kumar, **Adam Perer**, Elisa von Marschall, Dennis Wei, Aleksandra Mojsilović, Kush Varshney. Confronting data sparsity to identify potential sources of Zika virus spillover infection among primates. Epidemics. (2019).
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J.23   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).

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J.25   **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.26   **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).

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C.1   Violet Turri, Katelyn Morrison, Katherine-Marie Robinson, Collin Abidi, Jodi Forlizzi, **Adam Perer**, Rachel Dzombak. Transparency in the Wild: Navigating Transparency in a Deployed AI System to Broaden Need-Finding Approaches. Conditionally accepted to ACM Conference on Fairness, Accountability, and Transparency (FAccT 2024). Rio de Janeiro, Brazil (2024).

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C.3   Marius Hografer, Dominik Moritz, **Adam Perer**, Hans-Jorg Schulz. Combining Degree of Interest Functions and Progressive Visualization. IEEE Visualization and Visual Analytics (VIS 2023). Melbourne, Australia (2023).

C.4   Venkatesh Sivaraman, Leigh A. Bukowsi, Joel Levin, Jeremy M. Kahn, and **Adam Perer**. Ignore, Trust, or Negotiate: Understanding Clinician Acceptance of AI-Based Treatment Recommendations in Health Care. ACM Conference on Human Factors in Computing Systems (CHI 2023). Hamburg, Germany (2023).

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C.7   Anna Kawakami, Venkatesh Sivaraman, Logan Stapleton, Hao-Fei Cheng, **Adam Perer**, Zhiwei Steven Wu, Haiyi Zhu, Kenneth Holstein. "Why Do I Care What's Similar?" Probing Challenges in AI-Assisted Child Welfare Decision-Making through Worker-AI Interface Design Concepts. ACM SIGCHI Conference on Designing Interactive Systems (DIS 2022). Virtual.

C.8   🏅 Anna Kawakami, Venkatesh Sivaraman, Hao-Fei Cheng, Logan Stapleton, Yanghuidi Cheng, Diana Qing, **Adam Perer**, Kenneth Holstein, Zhiwei Steven Wu, Haiyi Zhu. Improving Human-AI Partnerships in Child Welfare: Understanding Worker Practices, Challenges, and Desires for Algorithmic Decision Support. ACM Conference on Human Factors in Computing Systems (CHI 2022). New Orleans, USA (2022). *Best Paper Honorable Mention.*

C.9   Hao-Fei Cheng, Logan Stapleton, Anna Kawakami, Venkatesh Sivaraman, Yanghuidi Cheng, Diana Qing, **Adam Perer**, Kenneth Holstein, Zhiwei Steven Wu, Haiyi Zhu. How Child Welfare Workers Reduce Racial Disparities in Algorithmic Decisions. ACM Conference on Human Factors in Computing Systems (CHI 2022). New Orleans, USA (2022).

C.10   Venkatesh Sivaraman, Yiwei Wu, **Adam Perer**. Emblaze: Illuminating Machine Learning Representations through Interactive Comparison of Embedding Spaces. ACM Conference on Intelligent User Interfaces (IUI 2022). Helsinki, Finland. (2022).

C.11   Gregory Plumb, Maruan Al-Shedivat, Ángel Alexander Cabrera, **Adam Perer**, Eric Xing, Ameet Talwalkar. Regularizing Black-box Models for Improved Interpretability. Advances in Neural Information Processing Systems (NeurIPS 2020). Vancouver, Canada. (2020).

C.12   Laura Beth Fulton, Ja Young Lee, Qian Wang, Zhendong Yuan, Jessica Hammer, **Adam Perer**. Getting Playful with Explainable AI: Games with a Purpose to Improve Human Understanding of AI. Extended Abstracts of ACM Conference on Human Factors in Computing Systems (CHI 2020). Honolulu, HI (2020).

C.13   Joseph Chee Chang, Nathan Hahn, **Adam Perer**, Aniket Kittur. SearchLens: Composing and Capturing Complex User Interests for Exploratory Search. ACM Conference on Intelligent User Interfaces (IUI 2019). Los Angeles, USA. (2019).

C.14   Luana Micallef, Hans-Jorg Schulz, Marco Angelini, Michael Aupetit, Remco Chang, Jorn Kohlhammer, **Adam Perer**, Giuseppe Santucci. The Human User in Progressive Visual Analytics. Eurographics Counference on Visualization (EuroVis 2019). Porto, Portugal. (2019).

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C.23   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.24   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.25   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.26   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.27   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.28   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.29 **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.30 **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.31 **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.32 **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.33 **Adam Perer** and Ben Shneiderman. Improving Interactive Exploration of Social Networks. International Sunbelt Social Network Conference (SUNBELT). Vancouver, Canada (2006).

C.34 **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.35 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).

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CA.1 Priscilla Correa-Jaque, Yeming Lin, Shili Lin, Yongqi Liu, Charles Fauvel, Rebecca Vanderpool, Manreet Kanwar, Jidapa Kraisangka, **Adam Perer**, Allen D Everett, Samer Alabed, Andew Swift, David G Kiely and Raymond L Benza, Improvement of Pulmonary Arterial Hypertension (PAH) Risk Assessment Model Using Cardiac Magnetic Resonance Imaging Variables. Circulation. (2023).

CA.2 Charles Fauvel, Shili Lin, Priscilla Correa-Jaque, Allen D Everett, **Adam Perer**, Yongqi Liu, Manreet Kanwar, Rebecca Vanderpool, Jidapa Kraisangka and Raymond Benza. Comparison of Pulmonary Arterial Hypertension Risk Assessment Tools Using a Harmonized FDA Dataset. Circulation. (2023).

CA.3 Rebecca Vanderpool, A.M. Janowski, Charles Fauvel, Z. Liu, Shili Lin, Priscilla Correa-Jaque, A. Webb, Manreet Kanwar, Jidapa Kraisangka, Puneet Mathur, **Adam Perer**, Allen D Everett, S.H. Visovatti, & Raymond L Benza. Identification of Novel Right Ventricular Function Phenotypes in Pulmonary Arterial Hypertension Using Unbiased K-Means Clustering. *Circulation*. (2022)

CA.4 Charles Fauvel, Zilu Liu, Shili Lin, Priscilla Correa-Jaque, Amy Webb, Rebecca R Vanderpool, Manreet Kanwar, Jidapa Kraisangka, Puneet Mathur, **Adam Perer,** Allen D Everett, and Raymond L Benza. Comparison between pulmonary arterial hypertension (PAH) risk assessment methods, including pulmonary hypertension outcome risks assessment (PHORA). CHEST Annual Meeting. (2022).

CA.5 Raymond Benza, Manreet Kanwar, James Antaki, Aditi Dhabalia, Mia Manavalan, Zhirou Xin, **Adam Perer**. Effective communication of machine learning models in clinical decision support tools for PAH risk prediction. CHEST Annual Meeting. (2021).

CA.6 Jidapa Kraisangka, Jacqueline Scott, Manreet Kanwar, Zilu Liu, Shili Lin, Allen Everett, **Adam Perer**, Faezeh Movahedi, James Antaki, Raymond Benza, EKG Parameters in Predicting Survivals in Pulmonary Arterial Hypertension. CHEST Annual Meeting. (2021).

CA.7 Jidapa Kraisangka, Jacqueline Scott, Manreet Kanwar, Zilu Liu, Shili Lin, Allen Everett, **Adam Perer**, Faezeh Movahedi, James Antaki, Raymond Benza. Lab Parameters in Predicting Survival In Pulmonary Arterial Hypertension. CHEST Annual Meeting. (2021).

CA.8 Manreet Kanwar, Jidapa Krainsangka, Jacqueline Scott, Todd Barrett, Allen Everett, **Adam Perer**, James Antaki, and Raymond Benza. Hemodynamic Parameters in Predicting Survival in Pulmonary Arterial Hypertension. The Journal of Heart and Lung Transplantation, Volume 40 (2021).

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WP.1   Katelyn Morrison, Ankita Mehra and **Adam Perer**. "Shared Interest…Sometimes: Understanding the Alignment between Human Perception, Vision Architectures, and Saliency Map Techniques." IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW) (2023)

WP.2   Donghoon Shin, Sachin Grover, Kenneth Holstein, **Adam Perer**. Characterizing Human Explanation Strategies to Inform the Design of Explainable AI for Building Damage Assessment. NeurIPS Workshop on Artificial Intelligence for Humanitarian Assistance and Disaster Response Workshop. Virtual. (2021).

WP.3   Hong Shen, Ángel Alexander Cabrera, **Adam Perer**, Jason Hong. "Public(s)-in-the-Loop": Facilitating Deliberation of Algorithmic Decisions in Contentious Public Policy Domains. Fair & Responsible AI Workshop at CHI 2020. Honolulu, Hawaii. (2020).

WP.4   Hendrik Strobelt, Sebastian Gehrmann, Michael Behrisch, **Adam Perer**, Hanspeter Pfister, Alexander M. Rush. Debugging Sequence-to-Sequence Models with Seq2Seq-Vis. EMNLP Workshop on the analysis and interpretation of neural networks for Natural Language Processing. Brussels, Belgium. (2018).

WP.5   Josua Krause, **Adam Perer** and Enrico Bertini. A User Study on the Effect of Aggregating Explanations for Interpreting Machine Learning Models. KDD Workshop on Interactive Data Exploration and Analytics (IDEA). London, UK. (2018).

WP.6   **Adam Perer**, Bum Chul Kwon, Janu Verma, Kenney Ng, Ben Eysenbach, Christopher deFilippi, Walter Stewart. Visual Supervision of Unsupervised Clustering of Patients with Clustervision. Machine Learning for Healthcare (MLHC). Boston, MA. (2017)

WP.7   Bum Chul Kwon, Ben Eysenbach, Janu Verma, Kenney Ng, and **Adam Perer**. Interactive Unsupervised Clustering with Clustervision. KDD Workshop on Interactive Data Exploration and Analytics (IDEA). Halifax, Canada. (2017).

WP.8   **Adam Perer**, Bum Chul Kwon, Janu Verma. The Critical Role of Data Mining for Analyzing Real-World Event Sequences. IEEE VIS Workshop on Temporal & Sequential Event Analysis (The Event Event). Baltimore, MD. (2016).

WP.9   Bum Chul Kwon, Janu Verma and **Adam Perer**. Peekquence: Visual Analytics for Event Sequence Data. KDD Workshop on Interactive Data Exploration and Analytics (IDEA). San Francisco, CA. (2016).

WP.10 Josua Krause, **Adam Perer** and Kenney Ng. Interacting with Predictions: Visual Inspection of Black-box Machine Learning Models. KDD Workshop on Interactive Data Exploration and Analytics (IDEA). San Francisco, CA. (2016).

WP.11 Josua Krause, **Adam Perer** and Enrico Bertini. Using Visual Analytics to Interpret Predictive Machine Learning Models. ICML Workshop on Human Interpretability in Machine Learning. New York, NY. (2016).

WP.12 Stein Olav Skrovseth, **Adam Perer**, Conor P. Delaney, Arthur Revhaug, Rolv-Ole Lindsetmo and Knut Magne Augestad. Detecting Novel Associations for Surgical Hospital Readmissions in Large Datasets by Interactive Visual Analytics. AMIA Workshop on Visual Analytics in Healthcare. Washington, DC. (2014).

WP.13 **Adam Perer**. The Value of Integrating Analytics and Visualizations for Understanding Electronic Medical Records: Why, When, and Which?. IEEE VIS Workshop on EHRVis: Visualizing Electronic Health Record Data. Paris, France. (2014).

WP.14 **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).

WP.15 Zhiyuan Zhang, David Gotz and **Adam Perer**. "Interactive Visual Patient Cohort Analysis". Workshop on Visual Analytics in Healthcare. IEEE VisWeek 2012. Seattle, Washington (2012).

WP.16 **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).

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T.1   Steffen Oeltze-Jafra, Uli Niemann, Jurgen Bernard, **Adam Perer**. Visual Analytics of Medical Cohort Study Data: From Individuals to Populations. IEEE Visualization (VIS 2017). Phoenix, Arizona (2017). *https://projects.iccas.de/dpm/tutorials/IEEEVis2017/*

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PATENTS

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PAT.3   Josua Krause, Kenney Ng, **Adam Perer**. Identifying and Ranking Impactful Risk Factors from Trained Predictive Models. US Patent 20170323075. Issued November 9, 2017.

PAT.4   David Gotz, **Adam Perer**, and Zhiyuan Zhang. Iterative Refinement of Cohorts using Visual Exploration and Data Analytics. US Patent 9104786. Issued October, 27, 2015.

PAT.5   David Gotz, **Adam Perer**, and Fei Wang. Interactive Visual Analysis of Clinical Episodes. US 20150106022. Issued April 16, 2015.

PAT.6   Jianying Hu, **Adam Perer**, and Fei Wang. Hierarchical Exploration of Longitudinal Medical Events. US Patent 20140257847. Issued September 11, 2014.

PAT.7   Eric A. Bier and **Adam Perer**. Systems and Methods for displaying Linked Information in a Sorted Context. Patent 20041652-US-NP-311307. Issued July 14, 2009.

GRANTS

G.1	DefenseWerx ($175,000)	2023-Present
G.2	CMU Software Engineering Institute ($120,000)	2023-Present
G.3	Portugal Foundation for Science and Technology ($50,000)	2023-Present
G.4	NIH R01 Award ($657,652)	2022-Present
G.5	Mozilla ($50,000)	2022-2023
G.6	Commonwealth of Pennsylvania / Center for Disease Control & Prevention ($40,000)	2022-2023
G.7	Brookhaven National Lab ($200,000)	2022-2023
G.8	NSF ISS Award ($1,000,000)	2021-2024
G.9	Center for Machine Learning and Health ($113,000)	2020-2022
G.10	Amazon Machine Learning Research Award ($40,000 + $10,000 cloud)	2020
G.11	NIH Subaward ($25,000)	2020
G.12	NIH Subaward ($13,000)	2020
G.13	Google Cloud ($5000 cloud)	2020
G.14	Block Center for Technology and Society ($75,000)	2019-2020
G.15	Google Cloud ($5000 cloud)	2018

INVITED TALKS TO ACADEMIA & INDUSTRY

I.1   April 8, 2024: Aligning Human-AI Decision Making with AI Behaviors. Human-Centered AI Course. UC Berkeley. Virtual.

I.2   April 3, 2024: Aligning Human-AI Decision Making with AI Behaviors. CSIRO (Australia's National Science Agency). Melbourne, Australia. Virtual.

I.3   December 1, 2023: Visualization for Machine Learning. Northeastern University. Virtual.

I.4   February 24, 2023: Intelligent Data Analysis Tools. Brookhaven National Laboratory. Brookhaven, NY.

I.5   December 12, 2019: Human-Centered Data Science: Visual Interfaces for Making Sense of Data and Machine Learning. Google. Pittsburgh, PA.

I.6   August 7, 2019: Visual Interfaces for Making Sense of Machine Learning Algorithms. National Robotics Engineering Center. Pittsburgh, PA.

I.7   April 17, 2019: Data-Driven Healthcare: Visual Analytics for Exploration and Prediction of Clinical Data BioIT World 2019. Boston, MA.

I.8   April 11, 2019: Visual Interfaces for Making Sense of Algorithms. Workshop on the Future of Human-Computer Interaction. Virginia Tech, Blacksburg, VA. ***Keynote.***

I.9   April 19, 2018: Human-Centered Data Science: Visual Interfaces for Making Sense of Data. University of Pittsburgh. Pittsburgh, PA.

I.10   April 11, 2018: Human-Centered Data Science: Visual Interfaces for Making Sense of Data. Carnegie Mellon University. Pittsburgh, PA.

I.11   January 25, 2018: Data-Driven Healthcare: Visual Analytics for Exploration and Prediction of Clinical Data. Bentley University. Waltham, MA.

I.12   November 17, 2017: Visual Analytics for Exploration, Prediction, and Clustering of Clinical Data. Big Data Symposium. University of Pittsburgh. Pittsburgh, PA.

I.13   April 20, 2016: Data-Driven Healthcare: Visual Analytics for Exploration and Prediction of Clinical Data. Big Data Symposium. University of Pittsburgh. Pittsburgh, PA

I.14   December 4, 2015: Data-Driven Healthcare: Visual Analytics for Exploration and Prediction of Clinical Data. University of Pittsburgh's Department of Biomedical Informatics Lecture Series. Pittsburgh, PA.

I.15   September 18, 2015: Data-Driven Healthcare: Visual Analytics for Exploration and Prediction of Clinical Data. Carnegie Mellon University's Human-Computer Interaction Institute Seminar Series. Pittsburgh, PA.

I.16   April 17, 2015: Visual Analytics for Healthcare. EMBL-EBI Workshop on Electronic Medical Records for Drug Discovery. Hinxton, UK.

I.17   April 7, 2015: The Role of Visualization in Prediction. OpenVis Conference. Boston, MA

I.18   March 17, 2015: Visual Analytics for Healthcare. University of Texas Big Data Symposium. San Antonio, TX.

I.19   April 25, 2014: Visual Analytics for Data-Driven Medicine. Mid-Atlantic Healthcare Informatics Symposium. Philadelphia, PA.

I.20   October 2, 2013: CareFlow: Data-Driven Exploration of Care Plans for Patients. Health 2.0. Santa Clara, CA.

I.21   October 1, 2013: Visual Analytics: Machine Learning + Visualization for Data-Driven Medicine. Health 2.0. Santa Clara, CA.

I.22   August 17, 2013: Visual Analytics for Data-Driven Medicine. Meaningful Use of Complex Medical Data Symposium. Los Angeles, CA.

I.23   April 2013: Visual Analytics for Healthcare. BioIT World Conference. Boston, MA.

I.24   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.25   June 24, 2011: Making Sense of Social Networks. Stanford University. Stanford, California.

I.26   June 23, 2011: Data Visualization and Storytelling. IBM Almaden Research Center. San Jose, California.

I.27   March 18, 2011: Making Sense of Social Networks. Massachusetts Institute of Technology. Cambridge, Massachusetts.

I.28   June 7, 2010: Making Sense of (Social) Networks. IBM Research. Cambridge, Massachusetts.

I.29   March 4, 2010: Making Sense of (Social) Networks. University of Pittsburgh. Pittsburgh, Pennsylvania.

I.30   May 18, 2009: Improving Exploration of Networks by Integrating Statistics and Visualization. Dagstuhl Seminar on Visualization and Monitoring of Network Traffic. Dagstuhl, Germany.

I.31   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.32   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.33   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.34   November 8, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. IBM Research, Haifa, Israel.

I.35   November 6, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Technion, Haifa, Israel.

I.36   November 5, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Weizmann Institute of Science, Rehovot, Israel.

I.37   November 1, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Google, Haifa, Israel.

I.38   October 10, 2007: Integrating Statistics and Visualization to Gain Clarity During Exploratory Social Network Analysis. Johns Hopkins University Applied Physics Lab, Columbia, Maryland.

I.39	July 25, 2007: Social Network Analysis for Counter-Terrorism. Tools and Practices of Terrorism Analysis. Booz Allen Hamilton, McLean, Virginia
I.40	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.41	May 31, 2007: Systematic Yet Flexible Visualizations of Social Networks. HCIL's 24th Annual Symposium. University of Maryland, College Park, Maryland.
I.42	May 23, 2007: Social Network Analysis for Counter-Terrorism. 2007 Homeland Security Science & Technology Stakeholders Conference. Washington, DC.
I.43	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.44	April 18, 2007: Improving Interactive Exploration of Social Networks. The USMA/ARI Network Science Workshop, United States Military Academy, West Point, New York.
I.45	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.46	August 2006: Uses and Values of Email Visualizations: A Case Study with SNARFViews. Microsoft Research. Redmond, Washington.
I.47	June 1, 2006: Balancing Systematic and Flexible Exploration of Social Networks. HCIL's 23rd Annual Symposium. University of Maryland, College Park, Maryland.
I.48	June 2, 2005: Using Rhythms of Relationships to Understand Email Archives. Email Archive Visualization Workshop. University of Maryland, College Park, Maryland.
I.49	June 3, 2005: Understanding the Rhythms of Relationship in Email Archives. HCIL's 22nd Annual Symposium. University of Maryland, College Park, Maryland.
I.50	August 31, 2004: Approaches for Visualizing Email Archives. USC's Institute for Creative Technologies. Marina del Ray, California.
I.51	August 2004: Supporting Reading Groups with Instant Bookplex. Palo Alto Research Center (PARC). Palo Alto, California.

INVITED PARTICIPANT

IP.1	August 2022: Dagstuhl Seminar on Interactive Visualization for Fostering Trust in ML. Schloss Dagstuhl, Germany.
IP.2	October 2018: Dagstuhl Seminar on Progressive Visual Analytics. Schloss Dagstuhl, Germany.
IP.3	June 2018: Restructuring IEEE VIS for the Future. Banff International Research Station, Banff, Canada.
IP.4	March 2012: National Science Foundation Workshop on the Science of Interaction. Austin, Texas.
IP.5	June 2010: Dagstuhl Seminar on Information Visualization. Schloss Dagstuhl, Germany.
IP.6	May 2009: Dagstuhl Seminar on Visualization and Monitoring of Network Traffic. Schloss Dagstuhl, Germany.
IP.7	July 2008: Microsoft Research Faculty Summit. Redmond, Washington.

TEACHING EXPERIENCE

COURSES

Data Visualization, HCII, Carnegie Mellon University.   S2017, S2018, F2019, F2021, F2024
Designed and developed the first-ever offering of Data Visualization courses in HCII. In this course, students learned the fundamentals of perception, the theory of visualization, good design practices for visualization, and the development of interactive web-based visualizations. For their final projects, students collected and curated data about which they are passionate, and then designed and deployed interactive visualizations that communicate effective insights. Previously offered as *Visualization in HCI* and *Data Visualization I and II*.

Interactive Data Science, HCII, Carnegie Mellon University.   F2018, F2020, S2021, S2022, F2022, F2023

Revamped this MCDS-required course to focus on human-centered data science by increasing coverage of data visualization, and adding lectures on ethics, uncertainty, fairness, and interpretability. For their final projects, students could choose from 3 different tracks (model, application, or narrative) when building interactive tools with real-world data.

HCI for Product Managers, HCII, Carnegie Mellon University.   Spring 2023
An MSPM-required course to teach the fundamentals of human-computer interaction compressed into a half-semester course.

Data Science for Product Managers, HCII, Carnegie Mellon University.   Spring 2019, Spring 2023
An MSPM-required course to teach the fundamentals of data science and visualization compressed into a half-semester course.

Interpretable Machine Learning, HCII, Carnegie Mellon University.   Spring 2019
Designed a seminar class to discuss recent research on interpretability techniques that are human-centered and aim to help people understand the machine learning models and their implications.

Telling Stories with Data, University of Pennsylvania.   Fall 2017
Designed and taught the first-ever offering of this required capstone course in the School of Social Policy and Practice. The non-technical course provided hands-on experience in the process of data communication, from initial data analysis to identifying appropriate visualization techniques to crafting informative visualizations.

TEACHING ASSISTANT

Introduction to Human-Computer Interaction, University of Maryland	2004
Organization of Programming Languages, University of Maryland	2003
Introduction to Artificial Intelligence, University of Maryland	2003
Computer Science I, University of Maryland	2002
Elementary Computer Programming, Case Western Reserve University	2000-2002

SUPERVISION

SUPERVISION AT CMU

Advisor, Katelyn Morrison	2021-Present
Advisor, William Epperson (with Dominik Moritz)	2020-Present
Advisor, Venkatesh Sivaraman	2020-Present
Advisor, Ángel Alexander Cabrera (with Jason Hong)	2019-Present
Advisor, Sachin Grover	2019-2021
Advisor, Sung-A Jang (with John Zimmerman)	2018-2019
Doctoral Committee Member, Angela Chen (Robotics)	2024-Present
Doctoral Committee Member, Catalina Vajiac (Computer Science)	2023-Present
Doctoral Committee Member, Joon Sik Kim (Machine Learning)	2022-2023
Doctoral Committee Member, Alexandria Vail (HCI)	2022-2023
Doctoral Committee Member, Nathan Hahn (HCI)	2018-2020
Doctoral Committee Member, Joseph Chee Chang (Language Technologies)	2018-2020
Masters Advisor, Umaymah Imran (Computer Science)	2021-2022
Masters Advisor, Mayank Jain (Computer Science)	2021
Masters Advisor, Zhendong Yuan (Computer Science)	2020-2021
Masters Thesis Committee Member, Zhuoni Yang of CMU (Sustainable Design)	2019
Masters Thesis Committee Member, Aprameya Mysore of CMU (Emerging Media)	2017

SUPERVISION AT EXTERNAL INSTITUTIONS

Doctoral Committee Member, Yongsu Ahn of University of Pittsburgh (Computer Science)	2023-Present
Host, Visiting Researcher, Youli Chang, Seoul National University (Computer Science)	2023
Host, Visiting PhD Student, Marius Hogräfer, Aarhus University (Computer Science)	2021
Host, Visiting PhD Student, Youli Chang, Seoul National University (Computer Science)	2020
Doctoral Committee Member, Vincent Raveneau of Universite de Nantes (Computer Science)	2019-2020
Doctoral Committee Member, Josua Krause of New York University (Computer Science)	2016-2018

INDEPENDENT STUDIES (MASTERS)

Tianqi Wu (MSCS) —*Slice-finding for machine-learning evaluation*	2023
Monica Chang (MHCI) – *Remote Caregiver Technologies*	2021
Andy Wilbourn (MHCI) – *Remote Caregiver Technologies*	2021
Nathan Jen (MHCI) – *Human-AI Collaboration in Radiology*	2021
Jiachen Gong (METALS) – *Explaining AI with Games*	2020
Laura Fulton (MHCI) – *Explaining AI with Games*	2019-2020
Shivang Gupta (METALS) – *Interpretable Machine Learning of Neural Networks*	2019
Qian Wang (MHCI) - *A Platform for Measuring Human Interpretability with Data Visualization*	2019
Ja Young Lee (MHCI) - *A Platform for Measuring Human Interpretability with Data Visualization*	2019
Hao Wang (Emerging Media) – *Data Visualization for Yelp Reviews*	2017

INDEPENDENT STUDIES (UNDERGRADUATES)

Yejun Kwak (Information Systems) – *Opioid Risk Prediction*	2023
Emily Guo (Computer Science) – *Prototyping AI Systems*	2022
Kazi Jawad (Statistics and Machine Learning) – *Explaining AI with Games*	2020-2021
Ruhan Prasad (Computer Science) – *COVID-19 Data Visualization*	2020
Justine Cho (Computer Science) – *Explaining AI with Games*	2020
Yeju Ahn (Statistics and Machine Learning) - *Conversational Data Analysis*	2019

NSF RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU)

Donald Bertucci, Oregon State University (Computer Science)	2022
Olivia Zhang, Harvard (Applied Mathematics)	2019

INTERNS AT IBM RESEARCH

Dylan Cashman of Tufts (now faculty at Brandeis)	2018
Helen Sakharova of MIT (now graduate student at Berkeley)	2018
Ben Eysenbach of MIT (now faculty at Princeton)	2017
Benjamin Glicksberg of Mount Sinai (now Assistant Professor at Mount Sinai)	2016
Josua Krause of NYU (now VP of Data Science at Accern)	2014-2015
Chad Stolper of Georgia Tech (now at Google)	2013
Zhiyuan Zhang of Stony Brook University (now at Facebook Research)	2012
Jessica Hullman of University of Michigan (now Associate Professor at Northwestern)	2011
Tal Herscovitz and Oded Schumacher of the Technion Israel Institute of Technology	2009

SERVICE

PANEL MEMBER

PM.1	National Science Foundation (NSF). Information & Intelligent Systems Division. 2022.
PM.2	National Science Foundation (NSF). Information & Intelligent Systems Division. 2018.
PM.3	National Science Foundation (NSF). Information & Intelligent Systems Division. 2016.
PM.4	National Science Foundation (NSF). Information & Intelligent Systems Division. 2014.
PM.5	National Science Foundation (NSF). Information & Intelligent Systems Division. 2013.
PM.6	National Science Foundation (NSF). Information & Intelligent Systems Division. 2012.

JOURNAL EDITOR

JE.1   Guest Editor. IEEE Computer Graphics & Applications, Special Issue on Visualization in Data Science, 2019.

JE.2   Guest Editor. IEEE Transactions on Big Data, Special Issue on Visualization in Data Science, 2018.

JE.3   Guest Editor. Big Data Journal, Special Issue on Visualization in Data Science. January 2016.

JE.4   Guest Editor. Information Visualization Journal, Special Issue on Information Visualization Evaluation, 2013.

JE.5   Guest Editor. Information Visualization Journal, Special Issue on Information Visualization Evaluation, July 2011.

ORGANIZING COMMITTEE MEMBER (CONFERENCES)

CC.1   Area Papers Chair. IEEE VIS 2023, October 2024. Tampa, Florida.

CC.2   Subcommittee Chair (Visualization). ACM CHI 2024. Honolulu, Hawaii.

CC.3   Area Papers Chair. IEEE VIS 2023, October 2023. Melbourne, Australia.

CC.4   Posters Chair. IEEE VIS 2022, October 2022. Oklahoma City, Oklahoma.

CC.5   General Chair. IEEE Symposium on Visualization in Data Science, October 2021, New Orleans, Louisiana.

CC.6   Posters Chair. IEEE VIS 2021, New Orleans, Louisiana.

CC.7   General Chair. IEEE Symposium on Visualization in Data Science, October 2020, Salt Lake City, Utah.

CC.8   Workshops Chair. IEEE VIS 2020, Salt Lake City, Utah.

CC.9   General Chair. IEEE Symposium on Visualization in Data Science, October 21, 2019, Vancouver.

CC.10   Workshops Chair. IEEE VIS 2019, October 20-25, Vancouver, Canada.

CC.11   Papers Chair. IEEE Symposium on Visualization in Data Science, October 21, 2018, Berlin, Germany.

CC.12   Meetups Chair. IEEE VIS 2018, October 21-26, Berlin, Germany.

CC.13   Papers Chair. IEEE Symposium on Visualization in Data Science, October 1, 2017. Phoenix, Arizona.

CC.14   Publicity Chair. IEEE VIS 2017, October 1-6, Phoenix, Arizona.

CC.15   Steering Committee. FDA ADEPT (Advancing the Development of Pediatric Therapeutics) Steering Committee. September 18-19, 2017, Silver Spring, Maryland.

CC.16   Publicity Chair. IEEE VIS 2014, November 9-14, Paris, France.

CC.17   Exhibits Chair. IEEE VIS 2013, October 13-18, Atlanta, Georgia.

CC.18   Exhibits Chair. IEEE VisWeek 2012, October 14-19, Seattle, Washington.

CC.19   Web Chair. C&C2007, Creativity and Cognition Conference, June 13-15, 2007, Washington, DC.

ORGANIZING COMMITTEE MEMBER (WORKSHOPS)

WC.1   Organizer. Visualization for AI Explainability. VIS 2022. October, 2022. Oklahoma City, Oklahoma. *www.visxai.io*

WC.2   Organizer. Visualization for AI Explainability. VIS 2021. October, 2021. New Orleans, Louisiana. *www.visxai.io*

WC.3   Organizer. Visualization for AI Explainability. VIS 2020. October, 2020. Salt Lake City, Utah. *www.visxai.io*

WC.4   Organizer. Visualization for AI Explainability. VIS 2019. October, 2019. Vancouver, Canada. *www.visxai.io*

WC.5   Organizer. Visualization for AI Explainability. VIS 2018. October, 2018. Berlin, Germany. *www.visxai.io*

WC.6   Steering Committee. BELIV'18: Evaluation and Beyond - Methodological Approaches for Visualization. Berlin, Germany. *www.beliv.org*

WC.7   Organizer. Visual Analytics in Healthcare. VIS 2017. October, 2017. Phoenix, Arizona, USA. *www.visualanalyticshealthcare.org*

WC.8   Organizer. Visual Analytics in Healthcare. AMIA 2016. November, 2016. Chicago, IL, USA. *www.visualanalyticshealthcare.org*

WC.9   Organizer. Big Data, Big Picture – Data Visualization of Health. ICPE 2016. August 26, 2016. Dublin, Ireland.

WC.10   Organizer. The Event Event: Workshop on Temporal & Sequential Event Analysis. IEEE VIS 2016. October 2016. Baltimore, MD, USA. *eventevent.github.io*

WC.11   Organizer. Data Mining for Medical Informatics. AMIA 2015. November 14, 2015. San Francisco, CA, USA. *www.dmmh.org/dmmi15*

WC.12   Organizer. Visual Analytics in Healthcare. IEEE Vis 2015. October 25, 2015. Chicago, IL, USA. *www.visualanalyticshealthcare.org*

WC.13   Organizer. Visualization for Predictive Analytics. IEEE VIS 2014. November 9, 2014. Paris, France. *predictive-workshop.github.io*

WC.14   Organizer. Visual Analytics in Healthcare. AMIA 2014. November 15, 2014. Washington, DC, USA. *www.visualanalyticshealthcare.org*

WC.15   Organizer. BELIV'12: Novel Evaluation Methods for Visualization. IEEE VisWeek 2012. October 14-15, 2012. Seattle, Washington, USA. *www.beliv.org*

WC.16   Organizer. Telling Stories with Data. VisWeek 2011. October 2011. Providence, Rhode Island, USA.

WC.17   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*

WC.18   Organizer. BELIV'08: BEyond time and errors: novel evaLuation methods for Information Visualization. CHI 2008. April 5, 2008. Florence, Italy. *www.beliv.org*

WC.19   Organizer. Helping Users Make Sense of Social Networks. University of Maryland. June 2007, College Park, Maryland. *www.cs.umd.edu/hcil/sna-workshop/*

WC.20   Organizer. Email Archive Visualization Workshop. University of Maryland, June 2005, College Park, Maryland. *www.cs.umd.edu/hcil/emailviz/workshop/*

WC.21   Webmaster. Workshop on Creativity Support Tools, National Science Foundation. June 13-14, 2005, Washington, DC. *www.cs.umd.edu/hcil/CST/*

PROGRAM COMMITTEE MEMBER

PC.1   *Associate Chair.* CHI 2023: ACM CHI Conference on Human Factors in Computing Systems, April 2023, Hamburg, Germany.

PC.2   *Associate Chair.* CHI 2022: ACM CHI Conference on Human Factors in Computing Systems, May 2022, New Orleans, USA.

PC.3   *Associate Chair.* CHI 2021: ACM CHI Conference on Human Factors in Computing Systems, May 2021, Toyko, Japan.

PC.4   InfoVis 2019: IEEE Information Visualization Conference, October 2019, Vancouver, Canada.

PC.5   *Senior Program Committee.* ACM Intelligent User Interfaces Conference, March 2019, Los Angeles, California.

PC.6   VAST 2018: IEEE Visual Analytics Science and Technology, October 2018, Berlin, Germany.

PC.7   EuroVis 2018: EuroGraphics/IEEE Symposium on Visualization, June 2018, Brno, Czech Republic.

PC.8   *Associate Chair.* CHI 2017: ACM CHI Conference on Human Factors in Computing Systems, May 2017, Denver, Colorado.

PC.9   VAST 2016: IEEE Visual Analytics Science and Technology, October 2016, Baltimore, Maryland.

PC.10 EuroVis 2016: EuroGraphics/IEEE Symposium on Visualization, June 2016, Groningen, Netherlands.

PC.11 InfoVis 2015: IEEE Information Visualization Conference, October 2015, Chicago, Illinois.

PC.12 InfoVis 2014: IEEE Information Visualization Conference, November 2014, Paris, France.

PC.13 InfoVis 2013: IEEE Information Visualization Conference, October 2013, Atlanta, Georgia.

PC.14 EuroVis 2013: EuroGraphics/IEEE Symposium on Visualization, June 2013, Leipzig, Germany.

PC.15 EuroVis 2012: EuroGraphics/IEEE Symposium on Visualization, June 2012, Vienna, Austria.

PC.16 InfoVis 2011: IEEE Information Visualization Conference, October 2011, Providence, Rhode Island.

PC.17 EuroVis 2011: EuroGraphics/IEEE Symposium on Visualization, May 2011, Bergen, Norway.

PC.18 InfoVis 2010: IEEE Information Visualization Conference, October 2010, Salt Lake City, Utah.

PC.19 InfoVis 2009: IEEE Information Visualization Conference, October 2009, Atlantic City, New Jersey.

PC.20 ISWC 2009: International Semantic Web Conference, October 2009, Washington, DC.

PC.21 WWW 2009: International World Wide Web Conference, August 20-24 2009, Madrid, Spain.

WORKSHOP PROGRAM COMMITTEE MEMBER

WPC.1   AMAI: Workshop on Applications of Medical AI. MICCAI 2022. September. Singapore. *sites.google.com/view/amai2022*

WPC.2   iMIMIC: Workshop on Interpretability of Machine Intelligence in Medical Image Computing. MICCAI 2021. September. Strasbourg, France. *imimic-workshop.com*

WPC.3   IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2018. August. London, UK. *polo-club.gatech.edu/idea2018/*

WPC.4   WHI: Workshop on Human Interpretability in Machine Learning. ICML 2018. July. Stockholm, Sweden. *sites.google.com/view/whi2018*

WPC.5   IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2017. August. Halifax, Canada. *poloclub.gatech.edu/idea2017/*

WPC.6   Leveraging Patient-Generated Data for Collaborative Decision Making in Healthcare. PervasiveHealth 2017. May 2017. Barcelona, Spain. *leveragingpgd.ist.psu.edu*

WPC.7   IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2015. August. Sydney, Australia. *poloclub.gatech.edu/idea2015/*

WPC.8   IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2014. August. New York City, New York, USA. *poloclub.gatech.edu/idea2014/*

WPC.9   BGM: International Workshop on Big Graph Mining. WWW 2014. April 7, 2014. Seoul, South Korea. *poloclub.gatech.edu/bgm2014/*

WPC.10 Visual Analytics in Healthcare. AMIA 2013. November 16, 2013. Washington, DC, USA. *www.visualanalyticshealthcare.org*

WPC.11 IDEA: Interactive Data Exploration and Analytics (IDEA). ACM KDD 2013. August 11. Chicago, Illinois, USA. *poloclub.gatech.edu/idea2013/*

WPC.12 Visual Analytics in Healthcare: Open Health Data. IEEE VisWeek 2012. October 17, 2012. Seattle, Washington, USA. *www.visualanalyticshealthcare.org*

WPC.13 SocMedVis: Workshop on Social Media Visualization. ICWSM 2011. Dublin, Ireland.

WPC.14 NextMail'11: International Workshop on Next Trends in Email, Lyon, France.

WPC.15 VISSW 2011: International Workshop on Visual interfaces to the Social and Semantic Web, Palo Alto, California.

WPC.16 VISSW 2010: International Workshop on Visual interfaces to the Social and Semantic Web, Hong Kong, China.

JOURNAL REVIEWER

ACM Transactions on Computer-Human Interaction (TOCHI), Computer Graphics Forum (CGF), IEEE Transactions on Visualization and Computer Graphics (TVCG), Information Visualization Journal (IVS), ACM Transactions on Intelligent Systems and Technology (TIST), International Journal of Human-Computer Studies (IJHCS), IEEE Computer Graphics and Applications (CG&A), New Review of Hypermedia and Multimedia (NRHM), International Journal of Human-Computer Interaction (IJHCI), Journal of Computer-Mediated Communication (JCMC)

CONFERENCE REVIEWER

ACM Conference on Human Factors in Computing Systems (CHI), IEEE Conference on Information Visualization (InfoVis), IEEE Conference on Visual Analytics (VAST) International Conference on Intelligent User Interfaces. (IUI), Eurographics Symposium on Visualization (EuroVis), IEEE Pacific Visualization Symposium (PacificVis), ACM Advanced Visual Interfaces Conference (AVI), International Conference on Information Visualization Theory and Applications (IVAPP), ACM Conference on Computer Supported Cooperative Work (CSCW), International Semantic Web Conference (ISWC), International World Wide Web Conference (WWW), ACM Creativity and Cognition Conference (C&C).

CMU SERVICE

Admissions Committee, HCI Institute's MHCI Program	2023-2024
Admissions Committee, HCI Institute's REU Program	2022-2024
Admissions Committee, HCI Institute's BHCI Program	2022
Admissions Committee, HCI Institute's PhD Program	2019

CONSULTING

Blue Spark Technologies (Advisory Board)	2020-Present
Janssen Pharmaceutical Companies of Johnson & Johnson	2020-2021

MEMBERSHIPS

- Founding Member and Secretary of AMIA's Visual Analytics Working Group (2015-2018).
- Co-chair of IBM Research's Graphics & Visualization Community. (2010-2013).
- Led Visualization Member of IBM's CS/Math Research Ph.D. Fellowship Selection Committee. (2010-2013)
- Computer Science Department Executive Council, University of Maryland (2004-2008)

AWARDS

- Best Paper Honorable Mention. IEEE VIS 2023. "Dead or Alive: Continuous Data Profiling for Interactive Data Science".
- Best Paper Honorable Mention. ACM CHI 2022. "Improving Human-AI Partnerships in Child Welfare: Understanding Worker Practices, Challenges, and Desires for Algorithmic Decision Support".
- Best Paper Honorable Mention. IEEE VAST 2018. "Seq2Seq-Vis: A Visual Debugging Tool for Sequence-to-Sequence Models".
- Science Accomplishment. IBM Research Division Award for 'Visual Analytics for Clinical Event Sequences' (2017).

- Science Accomplishment. IBM Research Division Award for 'Research Contributions to Watson Health Life Sciences Offerings' (2017).
- Science Accomplishment. IBM Research Division Award for 'Patient Similarity Analytics' (2015).
- Science Accomplishment. IBM Research Division Award for 'Intelligent Care Delivery and Analytics' (2013).
- Best Paper Honorable Mention. IEEE VAST 2011. "Visual Social Network Analytics for Relationship Discovery in the Enterprise"
- 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)