

# Jessica Hullman

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## Current Appointment

2024– **Ginni Rometty Professor of Computer Science**  
Northwestern University, Evanston IL.

2024– **Faculty Fellow, Institute for Policy Research**  
Northwestern University, Evanston IL.

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## Prior Positions

2021–2024 **Ginni Rometty Associate Professor of Computer Science**  
Northwestern University, Evanston IL.

2022 **Law & Society Fellow**  
Simons Institute, Berkeley, CA.

2022 **Visiting Researcher**  
Microsoft Research, New York, NY.

2020–2021 **Associate Professor of Computer Science**  
Northwestern University, Evanston IL.

2018–2020 **Allen K. and Johnnie Cordell Breed Assistant Professor of Computer Science**  
Northwestern University, Evanston IL.

2015–2018 **Assistant Professor of Information Science**  
**Adjunct Assistant Professor of Computer Science & Engineering**  
University of Washington, Seattle, WA.

2014 **Postdoctoral Fellow**  
Computer Science, University of California, Berkeley, CA.  
Mentor: Maneesh Agrawala

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## Education

2014 **Ph.D. in Information Science**  
Committee: E. Adar (Chair), T. Finholt, P. Resnick, P. Shah.  
University of Michigan School of Information, Ann Arbor, MI.

2008 **Master of Science in Information**  
Specialization in Information Analysis & Retrieval.  
University of Michigan School of Information, Ann Arbor, MI.

2003 **Bachelor of Arts**  
Comparative Studies in Religion. Honors with distinction (GPA: 3.73)  
Ohio State University, Columbus, OH.

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## Awards & Honors

2024 **Honorable Mention for Best Paper award.** ACM CHI 2024. Top 4% total submissions.

- 2023 **Best Research Mentor.** Northwestern Computer Science Department.
- 2023 **Best Paper award.** IEEE VIS 2023. Top 6 accepted papers.
- 2023 **Honorable Mention for Best Paper award.** ACM CHI 2023. Top 4% total submissions.
- 2021 **Honorable Mention for Best Paper award.** IEEE InfoVis 2021. Top 5 accepted papers.
- 2020 **Best Paper award.** IEEE InfoVis 2020. Top 1 accepted paper.
- 2020 **Honorable Mention for Best Paper award.** ACM CHI 2020. Top 4% total submissions.
- 2019 **Microsoft Faculty Fellowship.** One of five computer scientists chosen in 2019.
- 2018 **Honorable Mention for Best Paper award.** ACM CHI 2018. Top 4% total submissions.
- 2017 **Honorable Mention for Best Paper award.** IEEE InfoVis 2017. Top 3 accepted papers.
- 2013 **Gary M. Olson Outstanding Ph.D. Student Award.**  
School of Information at the University of Michigan. One chosen by faculty annually.
- 2011 **Honorable Mention for Best Paper award.** IEEE InfoVis 2011. Top 3 accepted papers.

## — Research Funding

- 2025 **Amazon Research Award.** co-PI: Aravindan Vijayraghavan, \$100k.  
Human-Aligned Uncertainty Quantification in High Dimensions.
- 2022 **NSF CISE Medium Award.** #2211939, co-PI: Matt Kay, \$1.2m.  
Improving data visualization and analysis tools to support reasoning about analysis assumptions.
- 2017–2022 **Adobe Software.** ~\$20k annual.  
Unrestricted Research Donations.
- 2021 **U.S. Navy.** #N17A-T004 extension, with Stottler Henke and Associates, \$125k.  
Visual tools and progressive automation for complex knowledge management and decision support.
- 2019 **U.S. Navy.** #N17A-T004, with Stottler Henke and Associates, \$300k.  
Visual tools and progressive automation for complex knowledge management and decision support.
- 2019 **NSF CISE Small Award.** #1907941, co-PI: Jeff Heer (University of Washington), \$523k  
Representing and learning visualization design knowledge
- 2018 **NSF CISE CAREER Award.** #1930642, \$524k, REU Supplement (\$12k).  
Enhancing critical reflection on data by integrating users' expectations in visualization interaction.
- 2017 **U.S. Navy.** With Stottler Henke and Associates, \$70k.  
Visualizing complex scientific knowledge for decision making.
- 2016 **NSF CRII Award.** \$174k  
Facilitating consumption and re-expression of scientific information in a journalism context.
- 2015 **Google Faculty Award.** Co-PI: Sean Munson (University of Washington), \$67k.  
User-centered representations of uncertainty in everyday predictive systems.

## — Journal Papers

- 2025 **Automating the Practice of Science - Opportunities, Challenges, and Implications.**  
Musslick, S., Bartlett, L. K., Chandramouli, S. H., Dubova, M., Gobet, F., Griffiths, T. L., Hullman, J., King, R. D., Kutz, N., Lucas, C. G., Mahesh, S., Pestilli, F., Sloman, S. J., and Holmes, W. R.  
Proceedings of the National Academy of Science (PNAS), 2025.
- 2024 **Improving out-of-population prediction: The complementary effects of model assistance and judgmental bootstrapping.**  
Hardy, M. D., Zhang, S., Hullman, J., Hofman, J. M., and Goldstein, D. G.  
International Journal of Forecasting, 2024.

- 2024 **What to Consider When Considering Differential Privacy for Policy.**  
Nanayakkara, P., and Hullman, J.  
Policy Insights from the Behavioral and Brain Sciences (PIBBS) (*forthcoming*) 2024.
- 2024 **VMC: A Grammar for Visualizing Statistical Model Checks**  
Guo, Z., Kale, A., Kay, M., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of IEEE VIS 2024, 23.2%, 129/557)
- 2024 **REFORMS: Consensus-based Recommendations for Machine-learning-based Science**  
Kapoor, S., Cantrell, E. M., Peng, K., Pham, T. H., Bail, C., Gundersen, O. E., Hofman, J., Hullman, J., A Lones, M., Malik, M., Nanayakkara, P., Poldrack, R., Raji, I. D., Roberts, M., Salganik, M., Serra-Garcia, M., Stewart, B., Vandewiele, G., and Narayanan, A.  
Science Advances, 10 (18), 2024.
- 2023 **Causal Quartets: Different Ways to Attain the Same Average Treatment Effect**  
Gelman, A., Hullman, J., Kennedy, L.  
American Statistician, 78 (3), 2023.
- 2023 **The Rational Agent Benchmark for Data Visualization**  
Wu, Y., Guo, Z., Mamakos, M., Hartline, J., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of IEEE VIS 2023, 24.6%, 133/539)
- 2023 **Are We Closing the Loop Yet? Gaps in the Generalizability of VIS4ML Research**  
Subramonyam, H., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of IEEE VIS 2023, 24.6%, 133/539)
- 2023 **Dupo: A Mixed Initiative System for Responsive Visualization Authoring**  
Kim, H., Rossi, R., Hoffswell, J., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of IEEE VIS 2023, 24.6%, 133/539)
- 2023 **EVM: Incorporating Model Checking into Exploratory Visual Analysis**  
Kale, A., Guo, Z., Qiao, E., Heer, J., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of IEEE VIS 2023, 24.6%, 133/539)
- 2023 **Swaying the Public? Impacts of Election Forecast Visualizations on Emotion, Trust, and Intention in the 2022 U.S. Midterms**  
Yang, F., Cai, M., Mortenson, C., Fakhari, H., Lokmanoglu, A., Hullman, J., Franconeri, S., Diakopoulos, N., Nisbet, E., and Kay, M.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of IEEE VIS 2023, 24.6%, 133/539)  
🟡 Best Paper Award.
- 2021 **The Science of Visual Data Communication: What Works**  
Franconeri, S., Padilla, L., Shah, P., Zacks, J., and Hullman, J.  
Psychological Science in the Public Interest
- 2021 **A Survey of Domain Knowledge Elicitation in Applied Machine Learning**  
Kerrigan, D., Hullman, J., and Bertini, E.  
Multimodal Technologies and Interaction (Special Issue: AI for and by the People)
- 2021 **Causal Support: Modeling Causal Inferences with Visualizations**  
Kale, A., Wu, Y., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2021, 25%, 114/442)  
🟡 Honorable Mention Award.
- 2021 **Visualization Equilibrium**  
Kayongo, P., Sun, G., Hartline, J., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2021, 25%, 114/442)

- 2021 **An Automated Approach to Reasoning About Task-Oriented Insights in Responsive Visualization**  
Kim, H., Rossi, R., Sarma, A., Moritz, D., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2021, 25%, 114/442)
- 2021 **Visualizing Uncertainty in Probabilistic Graphs with Network Hypothetical Outcome Plots (NetHOPs)**  
Zhang, D., Adar, E., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2021, 25%, 114/442)
- 2021 **Designing for Interactive Exploratory Data Analysis Requires Theories of Graphical Inference**  
Hullman, J. and Gelman, A.  
Harvard Data Science Review, Issue 3.3 (Summer 2021)
- 2021 **Design Patterns and Trade-offs in Responsive Visualization for Communication**  
Kim, H., Moritz, D., and Hullman, J.  
Computer Graphics Forum (Proceedings of EuroVis 2021, 26%, 45/173)
- 2020 **Information, incentives, and goals in election forecasts**  
Gelman, A., Hullman, J., Wlezien, C., and Morris, G. E.  
Judgment and Decision Making
- 2020 **Challenges in Evaluating Interactive Visual Machine Learning Systems**  
Boukhelifa, N., Bezerianos, A., Chang, R., Collins, C., Drucker, S., Endert, A., Hullman, J., North, C., and Sedlmair, M.  
IEEE Computer Graphics & Applications (CGA)
- 2020 **Visual Reasoning Strategies for Effect Size Judgments and Decisions**  
Kale, A., Kay, M., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2020, 25.6%, 64/250)  
🏆 Best Paper Award.
- 2020 **Bayesian-Assisted Inference from Visualized Data**  
Kim, Y-S., Kayongo, P., Grunde-McLaughlin, M., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2020, 25.6%, 64/250)
- 2019 **Why Authors Don't Visualize Uncertainty**  
Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2019, 25.7%, 54/209)
- 2019 **Illusion of Causality in Visualized Data**  
Xiong, C., Shapiro, J., Hullman, J., and Franconeri, S.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2019, 25.7%, 54/209)
- 2018 **In Pursuit of Error: A Survey of Uncertainty Visualization Evaluation**  
Hullman, J., Qiao, X., Correll, M., Kale, A., and Kay, M.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2018, 25.7%, 47/183)
- 2018 **Hypothetical Outcome Plots Help Untrained Observers Judge Trends in Ambiguous Data**  
Kale, A., Nguyen, F., Kay, M., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2018, 25.7%, 47/183)
- 2017 **Keeping Multiple Views Consistent: Constraints, Validations & Exceptions**  
Qu, Z. and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2017, 23%, 39/170)  
🏆 Honorable Mention Award.
- 2017 **Imagining Replications: Graphical Prediction & Discrete Visualizations Improve Recall & Estimation of Effect Uncertainty**

- Hullman, J., Kay, M., Kim, Y-S., & Shrestha, S  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2017, 23%, 39/170)
- 2017 **Data Through Others' Eyes: The Impact of Visualizing Others' Expectations on Visualization Interpretation**  
Kim, Y-S., Reinecke, K., and Hullman, J.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2017, 23%, 39/170)
- 2017 **Finding a Clear Path: Structuring Strategies for Visualization Sequences**  
Hullman, J., Kosara, R., and Lam, H.  
Computer Graphics Forum (Proceedings of EuroVis 2017, 27%, 46/170)
- 2015 **Hypothetical Outcome Plots Outperform Error Bars and Violin Plots for Inferences About Reliability of Variable Ordering**  
Hullman, J., Resnick, P., and Adar, E.  
PLOS ONE
- 2013 **A Deeper Understanding of Sequence in Narrative Visualization**  
Hullman, J., Drucker, S., Riche, N., Lee, B., Fisher, D., and Adar, E.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2013, 25%, 38/151)
- 2011 **Benefitting InfoVis with Visual Difficulties**  
Hullman, J., Adar, E., and Shah, P.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2011, 26%, 44/172)  
○ Honorable Mention Award.
- 2011 **Visualization Rhetoric: Framing Effects in Narrative Visualization**  
Hullman, J. and Diakopoulos, N.  
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis 2011, 26%, 44/172)

## — Referred Conference Proceedings

- 2025 **Underspecified Human Decision Experiments Considered Harmful**  
Hullman, J., Kale, A., and Hartline, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2025, 25.1%, 1249/4524)
- 2025 **Characterizing Photorealism and Artifacts in Diffusion Model-Generated Images**  
Kamali, N., Nakamura, K., Kumar, A., Chatzimparmpas, A., Hullman, J., and Groh, M.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2025, 25.1%, 1249/4524)
- 2025 **Seeing Eye to AI? Applying Deep-Feature-Based Similarity Metrics to Information Visualization**  
Long, S., Chatzimparmpas, A., Alexander, E., Kay, M., and Hullman, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2025, 25.1%, 1249/4524)
- 2024 **A Conceptual Framework for Ethical Evaluation of Machine Learning Systems**  
Gupta, N. R., Hullman, J., and Subramonyam, H.  
Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society
- 2024 **Measure-Observe-Remeasure: An Interactive Paradigm for Differentially-Private Exploratory Analysis**  
Nanayakkara, P., Kim, H., Wu, Y., Sarvghad, A., Mahyar, N., Miklau, G., and Hullman, J.  
IEEE symposium on Privacy & Security (Proceedings of S&P 2024)
- 2024 **A Statistical Framework for Measuring AI Reliance**  
Guo, Z., Wu, Y., Hartline, J., and Hullman, J.  
ACM Conference on Fairness, Accountability, & Transparency (Proceedings of FAccT 2024)

- 2024 **Evaluating the Utility of Conformal Prediction Sets for AI-Advised Image Labeling**  
Zhang, D., Chatzimpampas, A., Kamali, N., and Hullman, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2024, 26.3%, 1060/4028)  
○ Honorable Mention Award.
- 2024 **Erie: A Declarative Grammar for Data Sonification**  
Kim, H., Kim, Y-S., and Hullman, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2024, 26.3%, 1060/4028)
- 2024 **Milliways: Taming Multiverses through Principled Evaluation of Data Analysis Paths**  
Sarma, A., Hwang, K., Hullman, J., and Kay, M.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2024, 26.3%, 1060/4028)
- 2024 **Designing Shared Information Displays for Agents of Varying Strategic Sophistication**  
Zhang, D., Hartline, J., and Hullman, J.  
ACM Conference on Computer-Supported Cooperative Work (Proceedings of CSCW 2024)
- 2023 **MetaExplorer: Facilitating Reasoning with Epistemic Uncertainty in Meta-analysis**  
Kale, A., Lee, S., Goan, T., Tipton, E., and Hullman, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2023, 28%, 880/3099)
- 2023 **multiverse: Multiplexing alternative data analyses in R notebooks**  
Sarma, A., Kale, A., Moon, M., Taback, N., Chevalier, F., Hullman, J., and Kay, M.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2023, 28%, 880/3099)  
○ Honorable Mention Award.
- 2022 **What's Driving Conflicts Around Differential Privacy for the US Census**  
Nanayakkara, P. and Hullman, J.  
IEEE Symposium on Privacy & Security (Proceedings of S&P 2022)
- 2022 **The Worst of Both Worlds: A Comparative Analysis of Errors in Learning from Data in Psychology and Machine Learning**  
Hullman, J., Kapoor, S., Nanayakkara, P., Gelman, A., and Narayanan, A.  
AAAI/ACM Conference on Artificial Intelligence, Ethics, & Society (Proceedings of AIES 2022, 34%, 79/235)
- 2022 **Examining Responsibility and Deliberation in AI Impact Statements and Ethics Reviews**  
Liu, D., Nanayakkara, P., Hullman, J., Sakha, S., Abuhamad, G., Blodgett, S. L., Diakopoulos, N., and Elliasi-Rad, T.  
AAAI/ACM Conference on Artificial Intelligence, Ethics, & Society (Proceedings of AIES 2022, 34%, 79/235)
- 2022 **Cicero: A Declarative Grammar for Responsive Visualization**  
Kim, H., Rossi, R., Du, F., Koh, E., Guo, S., Hullman, J., and Hoffswell, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2022, 24.6%, 634/2579)
- 2022 **Visualizing Privacy-Utility Trade-Offs in Differentially Private Data Releases**  
Nanayakkara, P., Bater, J., He, X., Hullman, J., and Rogers, J.  
Proceedings of Privacy Enhancing Technologies Symposium (PoPETS '22)
- 2021 **Unpacking the Expressed Consequences of AI Research in Broader Impact Statements**  
Nanayakkara, P., Hullman, J., and Diakopoulos, N.  
AAAI/ACM Conference on Artificial Intelligence, Ethics, & Society (Proceedings of AIES 2021, 37.7%, 105/282)
- 2020 **How Visualizing Inferential Uncertainty can Mislead Readers About Treatment Effects in Scientific Results**  
Hofman, J., Goldstein, D., and Hullman, J.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2020, 24.3%, 760/3126)  
○ Honorable Mention Award.

- 2020 **Human Factors in Model Interpretability: Industry Practices, Challenges, and Needs**  
 Hong, S., Hullman, J., and Bertini, E.  
 ACM Conference on Computer-Supported Cooperative Work (Proceedings of CSCW 2020)
- 2019 **Inking Your Insights: Investigating Digital Externalization Behaviors During Data Analysis**  
 Kim, Y-S., Henry, N., Lee, B., Brehmer, M., Pahud, M., Hinkley, K. and Hullman, J.  
 ACM Conference on Interactive Systems & Surfaces (Proceedings of ISS 2019, 30.6%, 26/85)
- 2019 **A Bayesian Cognition Approach to Improve Data Visualization**  
 Kim, Y-S., Walls, L., Krafft, P., and Hullman, J.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2019, 23.8%, 705/2938)
- 2019 **Vocal Shortcuts for Creative Experts**  
 Kim, Y-S., Dontcheva, M., Adar, E., and Hullman, J.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2019, 23.8%, 705/2938)
- 2019 **Decision-Making Under Uncertainty in Research Synthesis: Designing for the Garden of Forking Paths**  
 Kale, A., Kay, M., and Hullman, J.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2019, 23.8%, 705/2938)
- 2019 **Some Prior(s) Experience Necessary: Templates for Getting Started with Bayesian Analysis**  
 Phelan, C., Hullman, J., Kay, M., and Resnick, P.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2019, 23.8%, 705/2938)
- 2019 **Belief-Driven Data Journalism**  
 Nguyen, F., Shrestha, S., Germuska, J., Kim, Y-S., and Hullman, J.  
 Computation+Journalism
- 2018 **Picturing Science: Design Patterns in Graphical Abstracts**  
 Hullman, J., and Bach P.  
 International Conference on the Theory and Application of Diagrams (Proceedings of DIAGRAMS 2018, 35%)
- 2018 **Improving Comprehension of Measurements Using Concrete Re-expression Strategies**  
 Hullman, J., Kim, Y-S., Nguyen, F., and Agrawala, M.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2018, 25.7%, 666/2590)
- 2018 **Uncertainty Displays Using Quantile Dotplots or CDFs Improve Transit Decision-Making**  
 Fernandes, M., Walls, L., Munson, S., Hullman, J., and Kay, M.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2018, 25.7%, 666/2590)  
 ○ Honorable Mention Award.
- 2017 **Explaining the Gap: Visualizing One's Predictions Improves Recall and Comprehension of Data**  
 Kim, Y-S., Reinecke, K., and Hullman, J.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2017, 25%, 600/2400)  
 ○ Best Paper Award.
- 2017 **GraphScape: A Model for Automated Reasoning about Visualization Similarity and Sequencing**  
 Kim, Y., Wongsuphasawat, K., Hullman, J., and Heer, J.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2017, 25%, 600/2400)  
 ○ Honorable Mention Award.
- 2017 **PersaLog: Personalization of News Article Content**  
 Adar, E., Gearig, C., Balasubramanian, A., and Hullman, J.  
 ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2017, 25%, 600/2400)

- 2016 **SimpleScience: Lexical Simplification of Scientific Terminology**  
Kim, Y-S, Hullman, J., Burgess, M., and Adar, E.  
Conference on Empirical Methods in Natural Language Processing (Proceedings of EMNLP 2016, 22%, 87/400)
- 2016 **Generating Personalized Spatial Analogies of Distances and Areas**  
Kim, Y-S, Hullman, J., and Agrawala, M.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2016, 23%, 538/2300)
- 2016 **When(ish) is my Bus: User-centered Visualizations of Uncertainty in Everyday Mobile Predictive Systems**  
Kay, M., Kola, T., Hullman, J., and Munson, S.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2016, 23%, 538/2300)
- 2015 **DeScipher: A Text Simplification Tool for Science Journalism**  
Kim, Y-S, Hullman, J., and Adar, E.  
Computation+Journalism
- 2015 **Designing for Personalized Article Content**  
Gearig, C., Adar, E., and Hullman, J.  
Computation+Journalism
- 2015 **Designing for Personalized Article Content**  
Hullman, J., Krupka, E., and Adar, E.  
Collective Intelligence
- 2015 **Content, Context, & Critique: Commenting on a Data Visualization Blog**  
Hullman, J., Diakopolous, N., Momeni Roochi, E., and Adar, E.  
ACM Conference on Computer-Supported Cooperative Work (Proceedings of CSCW 2025, 28%, 575/2032)
- 2014 **NewsViews: An Automated Pipeline for Creating Custom Geovisualizations for News**  
Gao, T., Hullman, J., Adar, E., Hecht, B., and Diakopoulos, N.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2014, 22.8%, 464/2034)
- 2013 **Contextifier: Automatic Generation of Annotated Stock Visualizations**  
Hullman, J., Diakopolous, N., and Adar, E..  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2013, 20%, 392/1963)
- 2011 **The Effect of Social Information on Visual Judgments**  
Hullman, J., Adar, E., and Shah, P.  
ACM Conference on Human Factors in Computing Systems (Proceedings of CHI 2011, 27%, 302/1346)

\*Through 2016, I used a convention for student papers where I listed myself earlier when I was the primary faculty mentor. From 2017 to the present, I list myself last when I am the primary faculty mentor on a publication.

## — Referred Workshop Proceedings

- 2024 **Unexploited Information Value in Human-AI Collaboration**  
Guo, Z., Wu, Y., Hartline, J., and Hullman, J.  
Behavioral ML Workshop at NeurIPS 2024
- 2024 **Learning from Personal Preferences**  
Jiang, K., Ustun, B., and Hullman, J.  
Pluralistic Alignment Workshop at NeurIPS 2024
- 2024 **Measuring Free-Form Decision-Making Inconsistency of Language Models in Military Crisis Simulations**  
Shrivastava, A., Lamparth, M., and Hullman, J.  
SoLaR Workshop at NeurIPS 2024

- 2024 **A Statistical Framework for Measuring AI Reliance**  
Guo, Z., Wu, Y., Hartline, J., and Hullman, J.  
Collaborative AI and Modeling of Humans Workshop at AAAI 2024
- 2020 **Anticipatory ethics and the role of uncertainty**  
Nanayakkara, P., Diakopoulos, N., and Hullman, J.  
NeurIPS 2020 Navigating the Broader Impacts of AI Research Workshop
- 2019 **Adaptation and Learning Priors in Visual Inference**  
Kale, A., and Hullman, J.  
VISxVISION Workshop at IEEE VIS 2019
- 2019 **Modeling the Interpretation of Visualized Statistics as Bayesian Cognition**  
Kim, Y-S., Walls, L., Krafft, P., and Hullman, J.  
Behavioral Economics Workshop at Economics and Computation (EC) 2019
- 2018 **Translating Scientific Graphics for Public Audiences**  
Qiao, X., and Hullman, J.  
VisGuides: 2nd Workshop on the Creation, Curation, Critique and Conditioning of Principles and Guidelines in Visualization Workshop at IEEE InfoVis 2018
- 2016 **Evaluating Visualization Sets: Trade-offs Between Local Effectiveness and Global Consistency**  
Qu, Z., and Hullman, J.  
Workshop on BEyond time and errors: novel evaluation methods for Information Visualization (BELIV 2016) at IEEE InfoVis 2016
- 2015 **Expectation Visualization**  
Kim, Y-S., and Hullman, J.  
Personal Visualization Workshop at IEEE InfoVis 2015
- 2013 **How Prior Knowledge Affects the Processing of Visualized Data**  
Hullman, J.  
Many People Many Eyes Workshop at ACM CHI 2013
- 2011 **Not all HITs are Created Equal: Controlling for Reasoning and Learning Processes in MTurk**  
Hullman, J.  
Workshop on Crowdsourcing and Human Computation at ACM CHI 2011
- 2011 **Chance-it: Motivating Collaborative Exploration using Spatial Layout on a Multitouch Surface**  
Hullman, J., McQuaid, M., Chia, Y., Lin, T., and Zhang, Z.  
Workshop on Large Displays in Urban Life at ACM CHI 2011
- 2010 **A Narratology-Informed Approach to Infovis Design and Evaluation**  
Hullman, J.  
Position paper. Telling Stories with Data Workshop at IEEE InfoVis 2010
- 2010 **Framing Artistic Visualization: Aesthetic Object as Evidence**  
Hullman, J.  
Workshop on Understanding the Creative Act: Modeling to Engagement at Creativity & Cognition 2009

## — Theses

- 2014 **Understanding and Supporting Trade-offs in the Design of Communicative Visualizations**  
Hullman, J.  
Dissertation. University of Michigan School of Information

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## Technical Reports

- Aug. 2019 **Mechanical Turk is Not Anonymous**  
Lease, M., Hullman, J., Bigham, J.P., Bernstein, M.S., Kim, J., Lasecki, W.S., Bakhshi, S., Mitra, T., and Miller, R.C.  
Social Science Research Network 2013. Rank: 8,366/882,206

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## Popular Press Articles

- Aug. 2021 **States Are Suing the Census Bureau Over Its Attempts to Make Data More Private**  
Nanayakkara, P., and Hullman, J.  
Slate Future Tense. <https://slate.com/technology/2021/08/census-bureaudifferential-privacy-lawsuit.html>
- Sept. 2020 **There's More Than Meets the Eye in 2020 Election Forecasts**  
Hullman, J.  
The Hill.  
<https://thehill.com/opinion/campaign/515291-theres-more-than-meets-the-eye-in-2020-election-forecasts>
- Aug. 2020 **If you want more women in your workforce, here's how to recruit**  
Pierson, E., Redmiles, E., Battle, L., and Hullman, J.  
Nature Careers. <https://www.nature.com/articles/d41586-020-02489-w>
- Aug. 2020 **Is Your Chart a Detective Story or a Police Report?**  
Gelman, A. and Hullman, J.  
WIRED. <https://www.wired.com/story/is-your-chart-a-detective-story-or-a-police-report/>
- Aug. 2020 **We Need Better Risk Communication to Combat the Coronavirus**  
Schrager, A. and Hullman, J.  
National Review.  
<https://www.nationalreview.com/2020/08/coronavirus-better-risk-communication-needed-combat-pandemic/>
- Apr. 2020 **Leading with Unknowns in COVID 19 Model Results**  
Hullman, J.  
Scientific American Blog.  
<https://blogs.scientificamerican.com/observations/leading-with-the-unknowns-in-covid-19-models/>
- Sept. 2019 **Confronting Unknowns: How to Interpret Common Visualizations of Uncertainty**  
Hullman, J.  
Scientific American. <https://www.scientificamerican.com/article/how-to-get-better-at-embracing-unknowns/>

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## Workshops Organized

- 2025 **Predictions and Uncertainty**  
Hullman, J., Srinivas, V., and Vijayaraghavan, A.  
Workshop at COLT 2025.
- 2024 **Statistical Frontiers in LLMs and Foundation Models**  
Angelopoulos, A., Bates, S., D'Amour, A., Hashimoto, T., Hullman, J., and Yang, F.  
Workshop at NeurIPS 2024.
- 2024 **Theoretical Foundations of Human-AI Complementarity**  
Organized with Jason Hartline  
IDEAL Institute Special Quarter on Interpretability, Privacy, & Fairness
- 2024 **Trust and Reliance in Evolving Human-AI Workflows (TREW)**  
Bansal, G., Bucina, Z., Wu, T., Smith-Renner, A., Ashktorab, Z., Holstein, K., Zhang, W., and Hullman, J.  
Workshop at ACM CHI 2024

- 2023 **Trust and Reliance in AI-Augmented Tasks (TRAIT)**  
Bansal, G., Smith-Renner, A., Bucina, Z., Wu, T., Holstein, K., **Hullman, J.**, and Stumpf, S.  
Workshop at ACM CHI 2023
- 2022 **Trust and Reliance in Human-AI Teams (TRAIT)**  
Bansal, G., Smith-Renner, A., Bucina, Z., Wu, T., Holstein, K., **Hullman, J.**, and Stumpf, S.  
Workshop at ACM CHI 2022
- 2021 **Chart Question Answering**  
Haehn, D., Franconeri, S., **Hullman, J.**, Kriegeskorte, N., and Pfister, H.  
Workshop at CVPR 2021
- 2019 **EVIVA ML: Evaluation of Interactive Visual Machine Learning**  
Boukhelifa, N., Bezerianos, A., Bertini, E., Collins, C., Drucker, S., **Hullman, J.**, and Sedlmair, M.  
Workshop at IEEE VIS 2019
- 2019 **HCI for Accurate, Impartial and Transparent Journalism: Challenges and Solutions**  
Aitamurto, T., Annany, M., Anderson, C., Birnbaum, L., Diakopoulos, N., Hansen, M., **Hullman, J.**, Ritchie, N.  
Workshop at ACM CHI 2019
- 2017 **Designing for Uncertainty: When Does Uncertainty Help?**  
Greis, M., **Hullman, J.**, Correll, M., Kay, M., and Schaer, O.  
Workshop at ACM CHI 2017
- 2011 **Telling Stories with Data: The Next Chapter**  
Diakopoulos, N., DiMicco, J., **Hullman, J.**, Karhalios, K., and Perer, A.  
Workshop at IEEE InfoVis 2011

## — Invited Plenary Presentations

- July 2025 **Opening the Human Blackbox in Model Assisted Decisions**  
Keynote at Gender Inclusion Workshop, ACM Economics and Computation 2025, Palo Alto, CA.
- Oct. 2024 **Benchmarking Visualization for Decision-Making**  
Keynote at 2024 Conference on Digital Experimentation (CODE @MIT). Boston, MA.
- Oct. 2024 **The Meaning of Quantified Uncertainty is its Use**  
Capstone at Uncertainty Visualization Workshop at IEEE VIS 2024. St. Petersburg, FL.
- June 2024 **Data Analysis and Imagination**  
Keynote at Theory & Methods Fortnights, Alan Turing Institute. London, UK.
- Mar. 2024 **Graphical Tools for Hypothesizing about Effects**  
Keynote at Visualizing Biological Data (VIZBI). Los Angeles, CA.
- Oct. 2022 **Toward Robust Communication of Modeling Results (*for Prediction or Explanation*)**  
Keynote at Conference on Non-traditional Data, Natural Language Processing, & Machine Learning.  
Organized by Sveriges Riksbank, U.S. Federal Reserve Board, and Bank of Italy. Stockholm, Sweden.
- July 2021 **Theories of Inference for Visualization Interactions**  
Keynote at BioVIS Workshop, co-located with ISMB.
- Oct. 2020 **Interactive Analysis Needs Theories of Inference**  
Keynote at Visualization in Data Science (VDS) Workshop, Co-located with IEEE VIS.
- June 2020 **Why Interactive Analysis Needs Theories of Inference**  
Keynote at Human-in-the-loop Data Analysis Workshop, Co-located with SIGMOD.

- Dec. 2019 **Supporting Reasoning with Uncertainty with Data Visualization**  
Keynote at Data Science and Visualization Symposium. University of Miami.
- Nov. 2019 **How to Visually Communicate Uncertain Data**  
Keynote at Conference on Global Risk, Uncertainty, & Volatility.  
Organized by U.S. Federal Reserve Board, Swiss National Bank, and Bank of Canada. Zurich, Switzerland.
- 2016 **Storytelling with Visualization**  
Keynote at Tapestry Conference. Organized by Tableau Software.

## — Invited Presentations

- Aug. 2025 **Aligning Uncertainty Quantification with Human Decision-makers Needs**  
Workshop on Design of Responsible AI. Apple, Cupertino, CA.
- June 2025 **Eliciting and Validating Beliefs from LLMs**  
Workshop on Belief Elicitation. University of Chicago, Chicago, IL.
- Apr. 2025 **Opening the Human Blackbox in Model Assisted Decisions**  
Institute for Policy Research Colloquium. Northwestern University, Evanston, IL.
- Apr. 2025 **The Value of Information in Model-Assisted Decisions**  
Stochastics and Statistics Seminar. MIT, Cambridge, MA.
- Feb. 2025 **Opening the Human Blackbox in Model-Assisted Decisions**  
Department of Statistics Seminar. Stanford University, Palo Alto, CA.
- Feb. 2025 **Benchmarking Decisions from Visualizations and Predictions**  
Department of Psychology Advanced Statistical Methods Seminar. Princeton University, Princeton, NJ.
- Aug. 2024 **Benchmarking Human-AI Performance**  
Human Centered Machine Learning Workshop. Apple. Cupertino, CA.
- July 2024 **The Meaning of Quantified Uncertainty is its Use**  
Workshop on Individualized Prediction. Berkeley, CA.
- June 2024 **Opening the Human Blackbox in Model-Assisted Decisions**  
BIRS Workshop on Bridging Prediction & Intervention Problems in Social Systems. Banff, CAN.
- Mar. 2024 **Data Visualization for Inference: Opportunities and Challenges**  
Health Data Science Distinguished Speaker Series. Boston University.
- Feb. 2024 **Strategic visualization of uncertainty**  
Workshop on Advancing Risk Communication with Decision-Makers for Tropical Cyclones.  
National Academies of Science, Engineering, & Medicine (NASEM).
- Jan. 2024 **Hypothesizing about effects in experiment design and interpretation**  
Toyota Technological Institute at Chicago (TTIC).
- Sept. 2023 **Evaluating Visualizations for Inference and Decision-Making**  
Department of Statistics Colloquium, Columbia University.
- May 2023 **Toward Robust Data Visualization for Inference**  
Distinguished Data Science Lecture, Cornell University.
- May 2023 **Toward Robust Data Visualization for Inference**  
Computer Science Seminar, University of Illinois–Urbana Champaign.

- Feb. 2023 **Using theories of decision-making under uncertainty to improve data visualization**  
Behavioral Economics Seminar, Booth School of Business, University of Chicago.
- Jan. 2023 **Navigating Privacy-Utility Trade-offs in Public Data**  
Institute for Policy Research, Northwestern University.
- Nov. 2022 **Using theories of decision-making under uncertainty to improve data visualization**  
Simon's Institute at the University of California Berkeley.
- Nov. 2022 **Improving the robustness of data visualization for trustworthy inference**  
University of California Berkeley iSchool Distinguished Lecture Series.
- Nov. 2022 **Toward Robust Visualization for Inference**  
Scientific Computing & Imaging Institute (SCI) Seminar, University of Utah.
- Oct. 2022 **Visualizing Privacy-Utility Trade-offs in Differentially Private Data Releases**  
Microsoft Research Summit.
- July 2022 **The Worst of Both Worlds: A Comparative Analysis of Errors in Learning from Data in Psychology and Machine Learning**  
Princeton Workshop on Reproducibility in Machine Learning.
- June 2022 **Better Visualizations for Model Checks**  
International Society for Bayesian Analysis World Meeting, Montreal, CA.
- Mar. 2022 **Visualizations as Model Checks**  
Martin Zelen Memorial Symposium, Harvard University Department of Biostatistics.
- Mar. 2022 **Strategic Communication of Uncertainty**  
Meeting of the Presidential Council of Advisors on Science and Technology.
- Theories of Inference for Data Interactions**
- Dec. 2021 Stanford HCI Seminar.
- Nov. 2021 University of California–San Diego Data Science Seminar.
- June 2021 Bayes Webinar, Hosted by Generable.
- Apr. 2021 Cornell Behavioral Economics and Decision Research Center (BEDR)
- Dec. 2020 DREAM Lab, University of Massachusetts–Amherst.
- Nov. 2020 CMU HCII Seminar, Carnegie Mellon University.
- Jan. 2021 **Supporting Reasoning with Uncertainty with Data Visualization**  
New York City Data Viz Meetup.
- How to Communicate Uncertainty in Forecasts**
- Oct. 2020 The Centers for Disease and Control (CDC).
- Sept. 2020 After Dark Online Series, San Francisco Exploratorium.
- Beyond Visualization: Improving Reasoning Under Uncertainty from Data**
- June 2020 Dept. of Risk and Insurance, University of Wisconsin–Madison.
- May 2020 Marketing Dept., Leeds School of Business, University of Colorado–Boulder.
- Dec. 2019 **Supporting Reasoning with Uncertainty with Data Visualization**  
Washington Post, Washington D.C.
- June 2019 **Seeing What We (Should) Think Through Visualization Interaction**  
Chicago Data Vis Meetup, Chicago, IL.
- May 2019 **Improving Inference and Decision Making from Visualized Data**  
Lawrence Dumas Domain Dinner, Northwestern University, Evanston, IL.

- Supporting Reasoning with Uncertainty with Data Visualization**  
 Apr. 2019 Biostats Seminar, Feinberg School of Medicine, Northwestern University, Chicago, IL.  
 Mar. 2019 Michigan Interactive and Social Computer Seminar (MISC), University of Michigan, Ann Arbor, MI.
- Interactive Visualization for News Readers' Beliefs: Why and How** (with Yea-Seul Kim)  
 Mar. 2019 NICAR 2019 Invited Session, Newport Beach, CA.
- Seeing What We (Should) Think Through Visualization Interaction**  
 Feb. 2019 Medill Faculty Colloquium, Northwestern University, Evanston, IL.
- Supporting Reasoning About Uncertainty Through Data Visualization**  
 Jan. 2019 Scientific Computing & Imaging Institute, University of Utah, Salt Lake City, UT.  
 Dec. 2018 NORC at the University of Chicago, Chicago, IL.  
 Nov. 2018 Neubauer Collegium, University of Chicago, Chicago, IL.
- Seeing What We (Should) Think Through Visualization Interaction**  
 Oct. 2018 MIT CSAIL HCI Seminar, Boston, MA.
- Interrogating Shared Representations in Mixed Initiative Systems**  
 June 2018 Invited discussant for Jeff Heer's presentation on Agency & Automation  
 HCIC, Watsonville CA.
- Improving Data Reasoning Through Visualization and Automation**  
 2018 Northwestern University Computer Science CS+X Seminar.
- Reconciling Single Vs. Multiple View Criteria in InfoVis** (with Zening Qu)  
 2017 Tableau Software, Seattle, WA.
- Seeing What We Think Through Visualization Interaction**  
 2017 Northwestern University Technology & Social Behavior Series Distinguished Lecture.
- Visualization Tools for Improving Reasoning with Data**  
 2016 Microsoft Research, New York City, NY.
- The Visual Uncertainty Experience**  
 2016 OpenVis.
- Data-Driven Storytelling**  
 2016 Dagstuhl seminar.
- Uncertainty Visualization**  
 2015 NSF seminar on Hazard Mapping at University of Washington.
- Making Sense of Scales with a Database of Measurements**  
 2015 Design Use Build (DUB) seminar at University of Washington.
- Tools for Understanding and Repurposing Visualized Data** (with Maneesh Agrawala)  
 Oct. 2014 Tableau Software, Seattle, WA.
- Anticipating Context in Designing Visualizations for Communication**  
 July 2014 Adobe, San Francisco, CA.  
 June 2014 Tableau Software, Seattle, WA.
- Understanding and Supporting Design Trade-offs for Visualization-based Communication**  
 May 2014 Dept. of Computer Science, Stanford University.  
 Mar. 2014 School of Interactive Computing, Georgia Tech.  
 Feb. 2014 School of Information, University of Washington.  
 Feb. 2014 Dept. of Cognitive Science, University of California–San Diego.  
 Feb. 2014 Dept. of Computer Science, University of Minnesota.

- Jan. 2014 Dept. of Computer Science at the University of Colorado–Boulder.
- Apr. 2013 **Social and Contextual Visualizations** (with Eytan Adar)  
Gale Cengage Learning, Farmington Hills, MI.
- Nov. 2012 **Letting the Data (and People) Speak: Visualization as Communication and Analysis**  
Tableau Software, Seattle, WA.
- Oct. 2012 **Visualization as Communication and Analysis**  
Design Use Build (DUB) seminar at University of Washington.
- Aug. 2011 **Implications of the Crowd in Collaborative Visual Analytics**  
HCI Lab at Tufts University Dept. of Computer Science, Cambridge, MA.
- June 2011 **Presenting Social Information Online: Evidence of Effects on Visual Judgments**  
IBM Collaborative User Experience Research Lab (CUE), IBM T.J. Watson Research Center, Cambridge, MA.
- Oct. 2010 **Visual Stories: Adapting Narratology for InfoVis**  
F. I. R. S. T. (Featured Information Research Student Talks), University of Michigan School of Information.

## — Invited Panels & Interviews

- 2025 **Plenary Panel - Can Current LLM Technology do Strategy?**  
Panelist at Ion Conference on AI and Strategy.  
Sundance, UT.  
Organizer/Moderator: Todd Zenger.
- 2025 **AI Safety**  
Panelist at University of Chicago Existential Risk Lab Conference on AI Safety.  
Chicago, IL.  
Organizer/Moderator: Jo Jiao.
- 2024 **Frameworks for Evaluating Individual Decisions**  
Panelist at Workshop on Individualized Prediction.  
Berkeley, CA.  
Organizer/Moderator: Ben Recht.
- 2024 **Clinical versus Statistical Prediction**  
Panelist at BIRS Workshop on Bridging Prediction & Intervention in Social Systems.  
BIRS, Banff, CA.  
Moderator: Deb Raji.
- 2024 **Communicating Uncertainty and Probabilistic Information about TC Tracks, Timing and Severity**  
Panelist at Workshop on Advancing Risk Communication with Decision-Makers for Tropical Cyclones  
National Academies of Science, Engineering, & Medicine (NASEM).  
Moderator: Ann Bostrom. Panelists: Lace Padilla.
- 2023 **Manifestation of Gender and Intersectional Bias in Artificial Intelligence**  
Panelist at Northwestern Pritzker School of Law Conference on Gender and Intersectional Bias  
in Artificial Intelligence  
Moderator: Dan Linna. Panelists: Hammond, K., Rahman, H., Worsley, M.
- 2023 **ChatGPT and Generative Artificial Intelligence**  
Panelist at Northwestern Center for Advancing Safety of Machine Intelligence  
Moderator: Kris Hammond. Panelists: David Leake, Ben Lorica.

- 2022 **Future Paths**  
Panelist at Princeton Workshop on Reproducibility in Machine Learning  
Moderator: Arvind Narayanan. Panelists: Hofman, J., Stewart, B.
- 2021 **CDC ERASE Maternal Mortality Workshop**  
Panelist  
Moderator: Amanda Makulec. Panelists: Fowlers, A., Schwabish, J.
- 2021 **CDC Data Visualization Day**  
Panelist  
Moderator: Amanda Makulec. Panelists: Burn-Murdoch, J., Meeks, E.
- 2020 **Communicating uncertainty**  
Panelist at Computation+Journalism 2020  
Moderator: Alberto Cairo. Panelists: Christiansen, J., D'Ignazio, C.
- 2020 **Uncertainty Representations**  
Interview with Data Skeptic podcast, Interpretability series  
<https://dataskeptic.com/blog/episodes/2020/uncertainty-representations>
- 2020 **Uncertainty Representations**  
Interview with Data Skeptic podcast, Interpretability series  
<https://dataskeptic.com/blog/episodes/2020/uncertainty-representations>
- 2019 **The State-of-the-Art and Future of Uncertainty Visualization**  
Panel organizer / chair at Joint Statistical Meetings of the American Statistical Association (JSM)  
Panelists: Kay, M., Kirby, M., and Padilla, L.
- 2019 **What Makes a Successful Data Visualization**  
Panelist at Joint Statistical Meetings of the American Statistical Association (JSM)  
Moderator: Du Toit, N. Panelists: Fingerson, L., Robbins, N. and Tyner, S.
- 2019 **Visualizing Uncertainty with Jessica Hullman and Matthew Kay**  
Interview with Data Stories Podcast  
<http://datastori.es/134-visualizing-uncertainty-with-jessica-hullman-and-matthew-kay/>
- 2018 **IEEE VIS 2018 Highlights with Jessica Hullman and Robert Kosara**  
Interview with Data Stories Podcast  
<https://datastori.es/130-highlights-from-ieee-vis-2018/>
- 2018 **Data Visualization in Psychology: Some Principles and Practices**  
Panelist at Conference of the Association of Psychological Science (APS)  
Moderator: Kevin Lanning. Panelists: Tverksy, B., Wickham, H.
- 2017 **IEEE VIS 2017 Highlights with Jessica Hullman and Robert Kosara**  
Interview with Data Stories Podcast  
<http://datastori.es/108-review-of-ieee-vis17-with-jessica-hullman-and-robert-kosara/>
- 2016 **IEEE VIS 2016 Highlights with Jessica Hullman and Robert Kosara**  
Interview with Data Stories Podcast  
<http://datastori.es/86-highlights-from-ieee-vis16-with-jessica-hullman-and-robert-kosara/>
- 2016 **How Can We Improve Empirical Research on Understanding Visual Information?**  
Panelist at IEEE InfoVis 2016  
Moderator: Pierre Dragicevic. Panelists: Haroz, S., Kay, M., Rensink, R.
- 2016 **Critical Visualization**  
Panelist at IEEE InfoVis 2016  
Moderator: Angus Forbes. Panelists: Offenhuber, D., Paris-Westbrook, J., Trowbridge, A.

- 2015 **The Art and Science of Data Visualization**  
Panelist at University of Washington eScience  
Panelists: Heer, J., Howe, B.
- 2014 **Narrative Visualization Research with Jessica Hullman**  
Interview with Data Stories Podcast  
<http://datastori.es/ds40-narrative-vis-research-w-jessica-hullman/>

## — Teaching

Northwestern University, Evanston, IL.

### Instructor and creator

- 2025 CS 497: Individualized Prediction and Decision-making  
2023–2024 CS 497: Explanation and Reproducibility in Data-Driven Science  
2019– CS 396/496: Interactive Information Visualization  
2018–2021 JOUR 474: Data Analysis & Communication for Journalists

### Instructor

- 2021– CS 401: Introduction to Graduate Studies in Computer Science

The University of Washington, Seattle, WA

### Instructor and creator

- 2015–2018 INFO 474: Interactive Information Visualization  
2015–2018 INFX 562: Interactive Information Visualization

The University of California, Berkeley, CA

### Co-instructor (with M. Agrawala)

- 2014 CS294-10: Visualization

The University of Michigan, Ann Arbor, MI

### Graduate Student Instructor

- 2011 SI 649/749: Information Visualization  
2011 SI 508/708: Networks: Theory and Application  
2007 Russian 347  
2007–2008 Russian 348  
2006–2007 English 367

## — Current Ph.D. Students

- 2025- Chair. **Huaman Sun**. Ph.D. student, Northwestern University Technology & Social Behavior.  
2025- Chair. **Dong Shu**. Ph.D. student, Northwestern University Computer Science.  
2024- Co-chair. **Xudong Tang**. Ph.D. student, Northwestern University Computer Science.  
2023- Co-chair. **Negar Kamali**. Ph.D. student, Northwestern University Computer Science.  
2022- Chair. **Ziyang Guo**. Ph.D. student, Northwestern University Computer Science.

## — Former Ph.D. Students & Committees

- 2025 Co-chair. **Abhraneel Sarma**. Ph.D. student, Northwestern University Computer Science.  
2025 Co-chair. **Paula Kayongo**. Ph.D. student, Northwestern University Computer Science.  
2025 Committee member. **Yifan Wu**. Ph.D. student, Northwestern University Computer Science.  
2024 Chair. **Priyanka Nanayakkara**. Ph.D. student, Northwestern University Technology & Social Behavior.  
2024 Chair. **Hyeok Kim**. Ph.D. student, Northwestern University Computer Science.

- 2024 Chair. **Dongping Zhang**. Ph.D. student, Northwestern University Technology & Social Behavior.
- 2022 Chair. **Alex Kale**. Ph.D. student, University of Washington Information School.
- 2020 Chair. **Yea-Seul Kim**. Ph.D. student, University of Washington Information School.
- 2025 Committee member. **Snehal Prabhudesai**. Ph.D. student, University of Michigan Computer Science.
- 2024 Committee member. **Lukas Lazarek**. Ph.D. student, Northwestern University Computer Science.
- 2022 Committee member. **Ethan Manilow**. Ph.D. student, Northwestern University Computer Science.
- 2020 Committee member. **Younghoon Kim**. Ph.D. student, University of Washington Computer Science & Engineering
- 2018 Committee member. **Daniel Epstein**. Ph.D. student, University of Washington Computer Science & Engineering
- 2018 Committee member. **Ray Hong**. Ph.D. student, University of Washington Human-Centered Design & Engineering

## — Professional Service

- 2023–current **Steering Committee**  
ACM Fairness, Accountability, & Transparency in Artificial Intelligence (FaccT).
- 2021–2024 **Associate Editor**  
IEEE Transactions on Visualization and Computer Graphics (TVCG).
- 2022 **Scientific Advisor**  
Member of CSAC, Council of Scientific Advisors to the U.S. Census
- Conference Organization**
- 2023 ACM Fairness, Accountability, & Transparency in Artificial Intelligence (FaccT), Program Chair
- 2022 IEEE VIS, Posters Chair
- 2021 Computation+Journalism, General Chair
- 2020–2021 IEEE VIS, Organizing Committee: Tutorials Chair
- 2020 Computation+Journalism, Program Chair
- 2019 IEEE VIS, Organizing Committee: Community Chair
- Program Committees**  
ACM CHI 2025, NeurIPS 2025, ICLR 2024, IEEE VIS 2021, 2020; ACM CHI 2019; IEEE InfoVis 2019, 2018, 2016; EuroVis S.T.A.R. 2018, 2017; HILDA 2017, 2018; Computation+Journalism 2016, 2017, 2018; BELIV 2016; ACM UIST 2015

## — Institutional Service

- 2024– Chair, **Ph.D. Admissions**. Northwestern University Computer Science.
- 2024 **Ginni Rometty Chair Committee**. Northwestern University Computer Science.
- 2023–2025 **Graduate Program Enhancement Committee**. Northwestern University Computer Science.
- 2023 **Faculty Hiring Committee**. Northwestern University Computer Science.
- 2021, 2019 **Ph.D. Admissions Committee**. Northwestern University Technology & Social Behavior.
- 2019–2022 **Strategic Planning Committee**. Northwestern University Computer Science.
- 2018–2019 **Curriculum Committee**. Northwestern University Journalism.
- 2017–2018 **Open Faculty Search Committee**. University of Washington Information School.
- 2016–2017 **Data Science Lecturer Search Committee (Chair)**. University of Washington Information School.
- 2016–2018 **Admissions Committee**. University of Washington Information School.

