

Jessica Ruth Hullman
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EDUCATION

The University of Michigan School of Information, Ann Arbor, MI

Ph.D. in Information, Information Visualization and Human-Computer Interaction (2009 - 2013).
Committee: Eytan Adar (Chair), Thomas Finholt, Paul Resnick, Priti Shah.

Master of Science in Information, Specialization in Information Analysis & Retrieval, (2006 – 2008).
Advisors Michael McQuaid and Lada Adamic.

Naropa University, Boulder, CO

Master of Fine Arts in Writing and Poetics, Prose Concentration, (2004 – 2006).

Advisor Donald Preziosi (UCLA). Thesis: “Practice as Ethics: The Functional Art of Bruce Nauman.”

The Ohio State University, Columbus, OH

Bachelor of Arts Comparative Studies (*magna cum laude*, *GPA 3.73*), (2000 - 2003).

TEACHING EXPERIENCE

The University of California, Berkeley, CA

Co-instructor (with M. Agrawala)

- CS294-10, Visualization, 2014

The University of Michigan, Ann Arbor, MI

Graduate Student Instructor

- SI 649/749 (InfoVis), 2011
- SI 508/708 (Networks: Theory and Application), 2011
- Russian 347, 2007
- Russian 348, 2007-2008
- English 367, 2006-2007

Guest Lecturer

- SI 649 (InfoVis), 2011
- SI 694 (Adv. Social Computing), 2011
- SI 422 (Eval. Systems & Services), 2009-2011

Naropa University, Boulder, CO.

Graduate Student Instructor

- Writing Seminar I, 2005-2006
- Writing Seminar II, 2006

WORK EXPERIENCE

The University of Washington iSchool, Seattle, WA, 2015 – current.

Assistant Professor

The University of California, Berkeley, CA, 2014.

Postdoctoral Fellow in Computer Science Division

Research in information visualization and HCI with Prof. Maneesh Agrawala.

The University of Michigan, Ann Arbor, MI, 2009-2013.

Research Assistant

- Research in information visualization and HCI with advisor Eytan Adar.

Microsoft Research, Redmond, WA, 2012.

Research Intern, Visualization for Business and Entertainment (VIBE) group

- Design and conduct study related to automating creation of storytelling visualizations with mentor Steven Drucker.

IBM Research, T.J. Watson Research Center, Cambridge MA, 2011.

Research Intern, Visual Communication Lab at Collaborative User Experience (CUE) Lab

- Design and conduct research on cultural differences in visualization comprehension and perception with mentor Adam Perer.

Pure Visibility, Ann Arbor, MI, 2007 - 2009

Quantitative Analyst

- Work on client contracts assessing online visibility and web visitor behavior in a start-up environment. Design and teach one-day course on web analytics. Design analysis and visualization strategies for firm's larger clients (Kellogg Co., Learning Care Group).

Arbor Strategy Group, Ann Arbor, MI, 2008

Independent Consultant in Information Visualization

- Design and implement data visualization strategy and interface for marketing research firm.

AWARDS & FELLOWSHIPS

Gary M. Olson Outstanding Ph.D. Student Award, School of Information at the University of Michigan, May 2013. One chosen by faculty annually.

Rackham Centennial Award, University of Michigan, Spring/Summer 2012.

Grace Hopper Celebration Funding, University of Michigan School of Information, Nov. 2012.

Honorable Mention paper award, IEEE InfoVis 2011. Top 8% of accepted submissions.

Yahoo Boost Award, Yahoo in Conjunction with University of Michigan, Ann Arbor, MI, April 2010.

Rackham Research Grants, University of Michigan, Ann Arbor, MI, 2010, 2011.

Grant Opportunities Collaborative Spaces (GROCS) Recipient, University of Michigan, Ann Arbor, MI, November 2009. (Funding to build multi-touch table and creativity support application).

Naropa Secret Attic Faculty's Choice Best Master's Thesis Award, Naropa University, Boulder, CO, 2006.

Naropa Writing Fellow, Naropa University, Boulder, CO, 2004-2006. One of two incoming M.F.A. students selected for two year fellowship.

Dean's List, Ohio State University, Columbus, OH, Fall 2000 – Spring 2003.

REFEREED CONFERENCE PAPERS

Hullman, J., Diakopolous, N., Momeni Roochi, E., & Adar, E. Content, Context, & Critique: Commenting on a Data Visualization Blog. *ACM CSCW 2015* (28%, 575/2032).

Gao, T., **Hullman, J.**, Adar, E., Hecht, B., and Diakopoulos, N. NewsViews: An Automated Pipeline for Creating Custom Geovisualizations for News. *ACM CHI 2014* (22.8%, 464/2034)

Hullman, J., Drucker, S., Riche, N., Lee, B., Fisher, D., and Adar, E. A Deeper Understanding of Sequence in Narrative Visualization. *IEEE InfoVis 2013* (25%, 38/151).

Hullman, J., Diakopolous, N., & Adar, E. Contextifier: Automatic Generation of Annotated Stock Visualizations. *ACM CHI 2013* (20%, 392/1963).

Hullman, J., Adar, E., & Shah, P. Benefitting InfoVis with Visual Difficulties (Best Paper Honorable Mention). *IEEE InfoVis 2011* (26%).

Hullman, J. & Diakopoulos, N. Visualization Rhetoric: Framing Effects in Narrative Visualization. *IEEE InfoVis 2011* (26%).

Hullman, J., Adar, E., & Shah, P. The Effect of Social Information on Visual Judgments. *ACM CHI 2011* (27%, 302/1346).

BOOK CHAPTERS

Hullman, J., Rhodes, R., Rodriguez, F., and Shah, P. Research on Graph Comprehension and Data Interpretation: Implications for Score Reporting. In Zapata, D., & Zwick, R. (Eds.) *Recent Research on Score Reporting*. Princeton, NJ: Educational Testing Service, 2013.

THESES

Hullman, J., Understanding and Supporting Trade-offs in the Design of Communicative Visualizations. Dissertation. University of Michigan School of Information, 2013.

Hullman, J., Practice as Ethics: The Functional Art of Bruce Nauman. Naropa University, 2006. Received faculty-chosen award for best critical master's thesis.

UNDER REVIEW

Hullman, J., Krupka, E., & Adar, E. Many Visualizations From One: A Distributed Resampling Approach to Crowdsourced Data Analysis. Under revise and resubmit for *ACM Trans. on Computer Human Interaction (TOCHI)*, 2014.

WORKSHOP PAPERS

Hullman, J. How Prior Knowledge Affects the Processing of Visualized Data. Position paper. *ACM CHI 2013, Many People Many Eyes Workshop*. Paris, France (Apr. 28, 2013).

Hullman, J. Participant at *ACM CSCW CrowdCamp 2013 Workshop*. San Antonio, TX (Feb. 23-24, 2013).

Hullman, J. Not all HITs are Created Equal: Controlling for Reasoning and Learning Processes in MTurk. Position paper. Presented at *ACM CHI 2011, Workshop on Crowdsourcing and Human Computation*. Vancouver, BC (May 8, 2011).

Hullman, J., McQuaid, M., Chia, Y., Lin, T., and Zhang, Z. Chance-it: Motivating Collaborative Exploration using Spatial Layout on a Multitouch Surface. Position paper. Presented at *ACM CHI 2011, Workshop on Large Displays in Urban Life*. Vancouver, BC (May 7, 2011).

Hullman, J. A Narratology-Informed Approach to Infovis Design and Evaluation. Position paper. Presented at *IEEE INFOVIS 2010. Telling Stories with Data Workshop*. Salt Lake City, UT (Oct. 26, 2010).

Hullman, J. Framing Artistic Visualization: Aesthetic Object as Evidence. Position paper. Presented at *Creativity & Cognition 2009 Workshop on Understanding the Creative Act: Modeling to Engagement*, Berkeley, CA (Oct. 27, 2009).

POSTERS & DEMOS

Gao, T., **Hullman, J.**, Adar, E., Hecht, B., & Diakopoulos, D. NewsViews: A System for Automatically Producing Contextualized Geovisualizations for News. Demo presented at Tapestry Conference, Feb. 2014.

Hullman, J., Diakopoulos, N., and Adar, E. Putting News in Context, Automatically: An Approach to Generating Relevant & Salient News Visualizations. Poster and demo to be presented at Computation

& Journalism Symposium, Georgia Tech, Jan. 2013.

Hullman, J. Visualization Bootstrapping – A Confirmatory Technique for Visual Analytics. Poster at InfoVis 2012, Seattle WA.

TECHNICAL REPORTS

Hullman, J. & Chia, Y. UM DL1 Multitouch Table Technical Report. University of Michigan Digital Media Commons. (2010).

WORKSHOPS ORGANIZED

Diakopolous, N., DiMicco, J., **Hullman, J.**, Karhalios, K., and Perer, A. Telling Stories with Data: The Next Chapter. Workshop at *IEEE InfoVis 2011*.

DOCTORAL COLLOQUIA & MENTORING PROGRAMS

Digital Societies and Social Technologies Summer Institute (DSST) participant, July 2013. CASCI, University of Maryland 2013.

IEEE InfoVis 2012 Doctoral Colloquium, Seattle, WA. Hullman, J. The Visual Bootstrap for Individual and Group Visual Analytics. Paper and presentation.

Human Computer Interaction Consortium (HCIC) 2012.

NSF Summer Social Webshop, College Park, MD, Funded participant, August 2011.

INVITED PRESENTATIONS & INTERVIEWS

Hullman, J. (invited guest expert), Evaluating Graphics Ideas, Stat 6191, Statistical Communication and Graphics (Prof. A. Gelman), Columbia University, New York, NY, 2014.

Hullman J. (interview). Narrative Visualization Research with Jessica Hullman. Data Stories Podcast #40, <http://datastori.es/ds40-narrative-vis-research-w-jessica-hullman/>, 2014

Hullman, J. Anticipating Context in Designing Visualizations for Communication. Presented at

- Adobe, San Francisco, CA July 2014.
- Tableau Software, Seattle, WA June 2014.

Hullman, J. Understanding and Supporting Design Trade-offs for Visualization-based Communication. Presented at:

- Dept. of Computer Science, Stanford, Palo Alto, CA May 2014.
- School of Interactive Computing, Georgia Tech. Atlanta, GA Mar. 2014.
- School of Information, University of Washington, Seattle, WA Feb. 2014.
- Dept. of Cognitive Science, University of California, San Diego, CA Feb. 2014.
- Dept. of Computer Science, University of Minnesota, Minneapolis MN Feb. 2014.
- Dept. of Computer Science at the University of Colorado Boulder, CO, Jan. 2014.

Hullman, J. Understanding and Automating Complex Visualization Design Processes. Presented at Visual Computing Lab, Dept. of Computer Science at the University of California Berkeley, CA, Sept. 2013.

Hullman, J. and Adar, E. Social and Contextual Visualizations. Presented at Gale Cengage Learning, Farmington Hills, MI, April 2013.

Hullman, J. Letting the Data (and People) Speak: Visualization as Communication and Analysis. Presented at Tableau Software Co., Seattle, WA, Nov. 2012.

Hullman, J. Visualization as Communication and Analysis. Presented at dub seminar at University of Washington (Departments of Information, Comp. Science, and Human-Centered Design Engin.), Seattle, WA, Oct. 2012.

Shah, P, **Hullman, J.**, Adar, E., Miyake, A., and Freedman, E. Desirable Difficulties in Graphical Displays. Presented at American Educational Research Association (AERA) Symposium: Cognitive processes in comprehension of visual representations: Art, Diagrams, Graphs, and Models. Vancouver, B.C., April 2012.

Hullman, J. Implications of the Crowd in Collaborative Visual Analytics. Presented at HCI Lab at Tufts University Dept. of Computer Science, Cambridge, MA, Aug. 2011.

Hullman, J. Presenting Social Information Online: Evidence of Effects on Visual Judgments. Presented at IBM Collaborative User Experience Research Lab (CUE), IBM T.J. Watson Research Center, Cambridge, MA, June 2011.

Hullman, J. Visual Stories: Adapting Narratology for InfoVis. Presented at F. I. R. S. T. (Featured Information Research Student Talks), University of Michigan School of Information, October 2010.

INVITED ARTICLES & OTHER WRITING

Lease, M., **Hullman, J.**, Bigham, J.P., Bernstein, M.S., Kim, J., Lasecki, W.S., Bakhshi, S., Mitra, T., and Miller, R.C. Mechanical Turk is Not Anonymous. Social Science Research Network 2013. [Reached Top Ten Downloaded Articles].

Hullman, J. Managing Learning and Reasoning on Amazon's Mechanical Turk: All HITs are NOT Created Equal. Guest article. *Experimental Turk Blog*. Edited by G. Paolacci. April 2011. Available at <http://experimentalturk.wordpress.com/2011/04/28/managing-reasoning-styles-on-amt/>.

Hullman, J. Social Proof, Graph Perception, and the Wisdom of the Crowd. Follow the Crowd Blog. Edited by M. Bernstein et al. July 2011.

Hullman, J. Mastering Motion Charts (Advanced Topics). Guest post appearing on *The Official Google Analytics Blog*. January 27, 2009. <http://analytics.blogspot.com/2009/01/mastering-motion-charts-trend-analysis.html>

Hullman, J. Trend Analysis with Motion Charts (Advanced Topics). Guest post appearing on *The Official Google Analytics Blog*. February 10, 2009. <http://analytics.blogspot.com/2009/02/mastering-motion-charts-analyzing.html>.

Hullman, J. Invited profile on Information Analysis & Retrieval. In *The New Information Professional: Your Guide to Careers in the Digital Age* by Judy Lawson, Joanna Kroll, and Kelly Kowatch. Neal-Schuman Publishers, Inc. (2010).

PRIOR PUBLICATIONS

Hullman, J. The Functional Art of Bruce Nauman (article) *EOAGH Journal of the Arts*, 5, (2009). Ed. Tim Peterson and Charles Alexander. <http://chax.org/eoagh/issuefive/hullman.html>

Hullman, J., The Product-Sensitive Writing Center (article). *The Writing Lab Newsletter* 30.7 (2006), Purdue University.

MENTORING & ADVISING

Tong Gao, H.C.I. Master's Student, University of Michigan School of Information. Guided M.S.I. student in all aspects of full paper publication at *ACM CHI 2014*.

PROFESSIONAL & INSTITUTIONAL SERVICE

Leadership

Student Organizer of the Michigan Interactive and Social Computing (MISC) group, University of Michigan, 2011-2012.

Reviewing

ACM Computer Human Interaction (CHI), Computer Supported Cooperative Work (CSCW), Designing Interactive Systems (DIS)

IEEE Transactions on Visualization and Computer Graphics (TVCG), Internet Computing

AAAI HCOMP

Cognitive Science

Human Factors

Other Service

Student Volunteer at ACM CHI 2012, Austin, TX. May 2012.

Student Volunteer at 2011 Eyeo Festival, Minneapolis, MN, June 2011.

REFERENCES

Eytan Adar, Ph.D.
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Science
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105 S. State Street
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Building 99
Redmond, Washington 98052
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