Biographical Sketch: Jeffrey Heer

Assistant Professor, Computer Science Department
Stanford University
URL: http://hci.stanford.edu/jheer

Professional Preparation

June 2001	**University of California, Berkeley** Bachelor of Science in Electrical Engineering and Computer Science
December 2004	**University of California, Berkeley** Master of Science in Computer Science
December 2008	**University of California, Berkeley** Doctor of Philosophy in Computer Science Dissertation: *Supporting Asynchronous Collaboration for Interactive Visualization*

Appointments

2009–Present	**Stanford University** Assistant Professor, Computer Science Department
2008–Present	**OurGroup.org** Technical Advisor

Five Most Relevant Publications

1. "Voyagers and Voyeurs: Supporting Asynchronous Collaborative Visualization" by Jeffrey Heer, Fernanda Viegas, and Martin Wattenberg. *Communications of the ACM, 52(1), pp. 87-97, Jan 2009*.
2. "Design Considerations for Collaborative Visual Analytics" by Jeffrey Heer and Maneesh Agrawala. *Information Visualization Journal, 7(1), pp. 49-62, 2008*.
3. "Generalized Selection via Interactive Query Relaxation" by Jeffrey Heer, Maneesh Agrawala, and Wesley Willett. *Proc. ACM Human Factors in Computing Systems (CHI), pp. 959-968, Apr 2008*.
4. "Scented Widgets: Improving Navigation Cues with Embedded Visualizations" by Wesley Willett, Jeffrey Heer, and Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'07), 13(6), pp. 1129-1136, Nov/Dec 2007*.
5. "Vizster: Visualizing Online Social Networks" by Jeffrey Heer and danah boyd. *Proc. IEEE Symposium on Information Visualization (InfoVis), pp. 32-39, Oct 2005*.

Five Other Publications

1. "Graphical Histories for Visualization: Supporting Analysis, Communication, and Evaluation" by Jeffrey Heer, Jock D. Mackinlay, Chris Stolte, and Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'08), 14(6), pp. 1189-1196, Nov/Dec 2008*.
2. "Prefuse: A Toolkit for Interactive Information Visualization" by Jeffrey Heer, Stuart K. Card, and James A. Landay. *Proc. ACM Human Factors in Computing Systems (CHI), pp. 421-430, Apr 2005*.
3. "Protovis: A Graphical Toolkit for Visualization" by Michael Bostock and Jeffrey Heer. *IEEE Transactions on Visualization and Computer Graphics (InfoVis'09), To Appear.*
4. "TimeTree: Exploring Time Changing Hierarchies" by Stuart K. Card, Bongwon Suh, Bryan Pendleton, Jeffrey Heer, and John W. Bodnar. *Proc. IEEE Symposium on Visual Analytics Science and Technology (VAST), pp. 3-10, Oct 2006*.
5. "Sizing the Horizon: The Effects of Chart Size and Layering on the Graphical Perception of Time Series Visualizations" by Jeffrey Heer, Nicholas Kong, and Maneesh Agrawala. *Proc. ACM Human Factors in Computing Systems (CHI), pp. 1303-1312, Apr 2009. (CHI 2009 Best Paper Award)*

Educational Activities

1. Co-developed and taught class on Visualization at Stanford (Win 09, Fall 09) and UC Berkeley (Fall 05, Spr 06). Re-developed and taught class on Research Topics in Human-Computer Interaction at Stanford (Spr 09).
2. Co-organized half-day course on Visualization and Social Data Analysis at VLDB 2009.
3. Co-organized half-day course on Computation and Journalism at SIGGRAPH 2008.

Synergistic Activities

1. Led the development of the open source *prefuse*, *flare*, and *protovis* visualization toolkits (see prefuse.org, flare.prefuse.org, and protovis.org). The tools have collectively been downloaded over 100,000 times, referenced in over 500 research publications, and are actively used by the visualization research community and numerous corporations.
2. Invited keynote speaker at Conference on Innovative Data Systems Research (CIDR) to speak about recent trends in visualization and collaborative data analysis, January 2009.
3. Co-organized full-day workshop on Social Data Analysis at CHI 2008.

Collaborators

Maneesh Agrawala (Berkeley), Chris Beckmann (Google), danah boyd (Microsoft), Stuart Card (PARC), Sheelagh Carpendale (Univ. of Calgary), Scott Carter (FXPAL), Daniel Chang (Stanford), Ed Chi (PARC), John Christensen (Stanford), Nicole Coleman (Stanford), Marc Davis (Yahoo!), Anind Dey (CMU), Mira Dontcheva (Adobe), Dan McFarland (Stanford), Sue Fussell (Cornell), Yuankai Ge (Stanford), Nathan Good (PARC), Kenji Hakuta (Stanford), Pat Hanrahan (Stanford), Marti Hearst (Berkeley), Joe Hellerstein (Berkeley), Jason Hong (CMU), Petra Isenberg (Univ. of Calgary), Sara Kiesler (CMU), Aniket Kittur (CMU), Nicholas Kong (Berkeley), James Landay (Univ. of Washington), Scott Lederer (Google), Wilmot Li (Adobe), Jock Mackinlay (Tableau), Chris Manning (Stanford), Jennifer Mankoff (CMU), Tara Matthews (IBM), Alan Newberger (Google), Jeff Pierce (IBM), Bryan Pendleton (CMU), George Robertson (Microsoft), Lynn Robertson (Berkeley), Noam Sagiv (Brunel), Shiwei Song (Stanford), Chris Stolte (Tableau), Bongwon Suh (PARC), Frank van Ham (IBM), Fernanda Viegas (IBM), Martin Wattenberg (IBM), Chris Weaver (Univ. of Oklahoma), Greg Wientjes (Stanford), Wesley Willett (Berkeley)

Advisors

Maneesh Agrawala (Ph.D., Berkeley), James A. Landay (M.S., Berkeley)

Advisees at Stanford

Michael Bostock, Jason Chuang, Hyung Suk Kim, Nam Wook Kim, Nathan Sakunkoo