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### SCIENTIFIC PUBLICATIONS

- Conference Papers **D3: Data-Driven Documents.** Michael Bostock, Vadim Ogievetsky, Jeffrey Heer. *To appear in IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'10)*, Oct 2011. [26% Acceptance Rate]
- Divided Edge Bundling for Directional Network Data.** David Selassie, Brandon Heller, Jeffrey Heer. *To appear in IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'10)*, Oct 2011. [26% Acceptance Rate]
- Orion: A System for Modeling, Transformation and Visualization of Multidimensional Heterogeneous Networks.** Jeffrey Heer, Adam Perer. *To appear in IEEE Visual Analytics Science & Technology (VAST)*, Oct 2011. [32% Acceptance Rate]
- ReVision: Automated Classification, Analysis and Redesign of Chart Images.** Manolis Savva, Nicholas Kong, Arti Chhajta, Li Fei-Fei, Maneesh Agrawala, Jeffrey Heer. *To appear in ACM User Interface Software & Technology (UIST)*, Oct 2011. [25% Acceptance Rate]
- Proactive Wrangling: Mixed-Initiative End-User Programming of Data Transformation Scripts.** Philip J. Guo, Sean Kandel, Joseph Hellerstein, Jeffrey Heer. *To appear in ACM User Interface Software & Technology (UIST)*, Oct 2011. [25% Acceptance Rate]
- Peripheral Paced Respiration: Influencing User Physiology during Information Work.** Neema Moraveji, Ben Olson, Truc Nguyen, Mahmoud Saadat, Yaser Khalighi, Roy Pea, Jeffrey Heer. *To appear in ACM User Interface Software & Technology (UIST)*, Oct 2011. [25% Acceptance Rate]
- MUSE: Reviving Memories Using Email Archives.** Sudheendra Hangal, Monica S. Lam, Jeffrey Heer. *To appear in ACM User Interface Software & Technology (UIST)*, Oct 2011. [25% Acceptance Rate]
- Visualizing Collaboration and Influence in the Open-Source Software Community.** Brandon Heller, Eli Marschner, Evan Rosenfeld and Jeffrey Heer. *Proc. Mining Software Repositories (MSR)*, pp. 223-226, May 2011. [35% Acceptance Rate]
- Wrangler: Interactive Visual Specification of Data Transformation Scripts.** Sean Kandel, Andreas Paepcke, Joseph Hellerstein and Jeffrey Heer. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 3363-3372, May 2011. [26% Acceptance Rate]
- CommentSpace: Structured Support for Collaborative Visual Analytics.** Wesley Willett, Jeffrey Heer, Joseph Hellerstein and Maneesh Agrawala. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 3131-3140, May 2011. [26% Acceptance Rate, **Best Paper Nominee**]
- Groups Without Tears: Mining Social Topologies from Email.** Diana MacLean, Sudheendra Hangal, Seng Keat Teh, Monica Lam and Jeffrey Heer. *Proc. ACM Intelligent User Interfaces (IUI)*, pp. 83-92, Feb 2011.

**Declarative Language Design for Interactive Visualization**, Jeffrey Heer and Michael Bostock. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'10)*, 16(6), pp. 1149-1156, Oct 2010. [26% Acceptance Rate, **Best Paper Honorable Mention**]

**Narrative Visualization: Telling Stories with Data**. Edward Segel and Jeffrey Heer. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'10)*, 16(6), pp. 1139-1148, Oct 2010. [26% Acceptance Rate]

**Perceptual Guidelines for Creating Rectangular Treemaps**. Nicholas Kong, Jeffrey Heer and Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'10)*, 16(6), pp. 990-998, Oct 2010. [26% Acceptance Rate, **Best Paper Honorable Mention**]

**Tracing Genealogical Data with TimeNets**. Nam Wook Kim, Stuart K. Card, Jeffrey Heer. *Proc. Advanced Visual Interfaces*, pp. 241-248, May 2010. [20% Acceptance Rate]

**Crowdsourcing Graphical Perception: Using Mechanical Turk to Assess Visualization Design**. Jeffrey Heer, Michael Bostock. *Proc. ACM Human Factors in Computing Systems*, pp. 203-212, Apr 2010. [22.0% Acceptance Rate, **Best Paper Nominee**]

**ProtoVis: A Graphical Toolkit for Visualization**. Michael Bostock, Jeffrey Heer. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'09)*, 15(6), pp. 1121-1128, Nov/Dec 2009. [26% Acceptance Rate]

**Sizing the Horizon: The Effects of Chart Size and Layering on the Graphical Perception of Time Series Visualizations**. Jeffrey Heer, Nicholas Kong, Maneesh Agrawala. *Proc. ACM Human Factors in Computing Systems*, pp. 1303-1312, Apr 2009. [24.5% Acceptance Rate, **Best Paper Award**]

**Graphical Histories for Visualization: Supporting Analysis, Communication, and Evaluation**. Jeffrey Heer, Jock D. Mackinlay, Chris Stolte, Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'08)*, 14(6), pp. 1189-1196, Nov/Dec 2008. [26% Acceptance Rate]

**Generalized Selection via Interactive Query Relaxation**, Jeffrey Heer, Maneesh Agrawala, Wesley Willett. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 959-968, Apr 2008. [22% Acceptance Rate]

**Design Considerations for Collaborative Visual Analytics**, Jeffrey Heer, Maneesh Agrawala. *Proc. IEEE Symposium on Visual Analytics Science and Technology (VAST)*, pp. 171-178, Nov 2007. [42% Acceptance Rate] [Invited to a special edition of Information Visualization Journal]

**Animated Transitions in Statistical Data Graphics**, Jeffrey Heer, George G. Robertson. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'07)*, 13(6), pp. 1240-1247, Nov/Dec 2007. [23% Acceptance Rate]

**Scented Widgets: Improving Navigation Cues with Embedded Visualizations**, Wesley Willett, Jeffrey Heer, Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'07)*, 13(6), pp. 1129-1136, Nov/Dec 2007. [23% Acceptance Rate]

**Voyagers and Voyeurs: Supporting Asynchronous Collaborative Information Visualization**, Jeffrey Heer, Fernanda Viégas, Martin Wattenberg. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 1029-1038, Apr 2007. [24% Acceptance Rate]

**Momento: Support for Situated Ubicomp Experimentation**, Scott Carter, Jennifer Mankoff, Jeffrey Heer. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 125-134, Apr 2007. [24% Acceptance Rate]

**Software Design Patterns for Information Visualization**, Jeffrey Heer, Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'06)*, 12(5), pp. 853-860, Sep/Oct 2006. [24% Acceptance Rate]

**Multi-Scale Banking to 45 Degrees**, Jeffrey Heer, Maneesh Agrawala. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis'06)*, 12(5), pp. 701-708, Sep/Oct 2006. [24% Acceptance Rate]

**TimeTree: Exploring Time Changing Hierarchies**, Stuart K. Card, Bongwon Suh, Bryan Pendleton, Jeffrey Heer, John W. Bodnar. *Proc. IEEE Symposium on Visual Analytics Science and Technology (VAST)*, pp. 3-10, Oct 2006. [43% Acceptance Rate]

**Profiles as Conversation: Networked Identity Performance on Friendster**, danah boyd, Jeffrey Heer. *Proc. HICSS-39, Hawaii Int'l Conf. on System Sciences, Persistent Conversation Track*, Jan 2006. [48% Acceptance Rate]

**Vizster: Visualizing Online Social Networks**, Jeffrey Heer, danah boyd. *Proc. IEEE Symposium on Information Visualization (InfoVis)*, pp. 32-39, Oct 2005. [27% Acceptance Rate]

**Prefuse: A Toolkit for Interactive Information Visualization**, Jeffrey Heer, Stuart K. Card, James A. Landay. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 421-430, Apr 2005. [25% Acceptance Rate]

**DOITrees Revisited: Scalable, Space-Constrained Visualization of Hierarchical Data**, Jeffrey Heer, Stuart K. Card. *Proc. Advanced Visual Interfaces (AVI)*, pp. 421-424, May 2004. [26% Acceptance Rate]

**Presiding Over Accidents: System Direction of Human Action**, Jeffrey Heer, Nathaniel Good, Ana Ramirez, Marc Davis, and Jennifer Mankoff. *Proc. ACM Human Factors in Computing Systems (CHI)*, pp. 463-470, 2004. [16% Acceptance Rate]

**liquid: Context-Aware Distributed Queries**, Jeffrey Heer, Alan Newberger, Christopher Beckmann, Jason I. Hong. *Proc. UbiComp 2003, 5th Annual Conference on Ubiquitous Computing*, pp. 140-148, Oct 2003. [14% Acceptance Rate]

**LumberJack: Intelligent Discovery and Analysis of Web Traffic Composition**, Ed H. Chi, Adam Rosien, Jeffrey Heer. *Proc. WEBKDD 2002: Web Mining for Usage Patterns and User Profiles*, pp. 1-16, Jul 2002. [40% Acceptance Rate]

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**A Tour through the Visualization Zoo.** Jeffrey Heer, Michael Bostock, Vadim Ogievetsky. *Comm. of the ACM*, 53(6), pp. 59-67, Jun 2010.

**Voyagers and Voyeurs: Supporting Asynchronous Collaborative Visualization,** Jeffrey Heer, Fernanda Viégas, Martin Wattenberg. *Comm. of the ACM*, 52(1), pp. 87-97, Jan 2009.

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**WebQuilt: A Proxy-based Approach to Remote Web Usability Testing,** Jason I. Hong, Jeffrey Heer, Sarah Waterson, James A. Landay. *ACM Transactions on Information Systems*, 19(3), pp. 263-285, 2001.

Book Chapters **The Design of Sense.us,** Jeffrey Heer. In T. Segaran, J. Hammerbacher (eds), *Beautiful Data*, O'Reilly Media, 2009.

**Point, Talk, Publish: Visualization and the Web,** Jeffrey Heer, Fernanda B. Viégas, Martin Wattenberg, Maneesh Agrawala. In E. Zudilova-Seinstra, T. Adriaansen, R. van Lieke (eds), *Trends in Interactive Visualisation*, Springer, 2008.

**Creation and Collaboration: Engaging New Audiences for Information Visualization,** Jeffrey Heer, Frank van Ham, Sheelagh Carpendale, Chris Weaver, Petra Isenberg. In J. Fekete, A. Kerren, C. North, J. T. Stasko (eds), *Information Visualization: Human-Centered Issues in Visual Representation, Interaction, and Evaluation*, Springer, 2008.

Short Papers **Wideband Displays: Mitigating Multiple Monitor Seams,** Jock Mackinlay, Jeffrey Heer. *Extended Abstracts, ACM Human Factors in Computing Systems (CHI)*, pp. 1521-1524, 2004.

**All Together Now: Visualizing Local and Remote Actors of Localized Activity,** Scott Lederer, Jeffrey Heer. *Extended Abstracts, ACM Human Factors in Computing Systems (CHI)*, pp. 1107-1110, 2004.

**Efficient User Interest Estimation in Fisheye Views,** Jeffrey Heer, Stuart K. Card. *Extended Abstracts, ACM Human Factors in Computing systems (CHI)*, pp. 836-837, 2003.

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**All Friends are not Equal: Using Weights in Social Graphs to Improve Search.** Sudheendra Hangal, Diana MacLean, Monica S. Lam, Jeffrey Heer. *Workshop on Social Networking Mining and Analysis, ACM KDD*, Aug 2010.

**Evaluating Visualizations to Unearth Behavior and Insight,** Jeffrey Heer. *Beyond Time and Errors: Novel Evaluation Methods for Information Visualization Workshop, ACM CHI*, 2008.

**Socializing Visualization,** Jeffrey Heer. *Social Visualization Workshop, ACM CHI*, 2006.

**Seeing the Invisible,** Jeffrey Heer, Peter Khooshabeh. *Workshop on Invisible & Transparent Interfaces, Advanced Visual Interfaces (AVI)*, 2004.

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Demos **Social Flows: A System for Mining Social Topologies from Ego-centric Social Networks**. Diana MacLean, Sudheendra Hangal, Seng Keat Teh, Monica S. Lam, Jeffrey Heer. *ACM Knowledge Discovery and Data Mining (KDD)*, Aug 2010.

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