Loren G. Terveen

| terveen@umn.edu | | University of Minnesota | (612) 624-8310 |
|-----------------------|--|-------------------------------------|----------------------|
| Address | Department of Computer Science and Engineering | | |
| | University of Minnesota | | |
| | Minneapolis, MN 554 | 455 | |
| Education | Ph.D. in Computer | Sciences University of | Texas 1991 |
| | M.S. in Computer S | Sciences University of | Texas 1988 |
| | B.A. in Computer S Mathematics, Histo | • | South Dakota 1984 |
| Affiliations | Member of ACM, ACM/SIGCHI | | |
| Research Interests | Human-Computer Interaction, Social Computing | | |
| Professional | Professor | University of I | Minnesota 2002 |
| Experience | Distinguished McKnight University Professor | | fessor 2017 |
| | Principal Member of Technical Staff | of AT&T Labs - | Research 1996-2002 |
| | Member of Technic | cal Staff AT&T Bell La | ıbs 1991-1996 |
| | Graduate Research | Intern Microelectronic Computer Cor | |
| | Teaching Assistant | University of | Texas at Austin 1985 |

AWARDS AND MAJOR ROLES

ACM Distinguished Scientist (awarded 2009)

ACM SIGCHI Academy (2019 -)

ACM SIGCHI President (2015-2018)

ACM Council, SIG Governing Board Representative (2016 – 2018)



RESEARCH

External Funding

Cisco: Detecting and Reducing Bias in Collaborative Virtual Meetings (CO-PI, with Stevie Chancellor PI). \$177,915 for 9/1/2021 to 12/31/2022.

NSF:CHS:Small: Incorporating and Balancing Stakeholder Values in Algorithm Design (UMN **PI**), Award Total \$500,000, UMN Share \$243,941 for 8/1/2019 to 7/31/2022.

NSF: EAGER: AI-DCL: Capture, Explain and Negotiate the Inherent Trade-offs in Machine Learning Algorithms (UMN **co-PI**), Award Total \$295,713, UMN Share \$103,267 for 10/1/2019 to 9/30/2022.

NSF:CHS: Small: Collaborative Research: Structured Data Peer Production: Addressing Challenges and Leveraging Opportunities (**PI**), \$249,738 for 9/1/2018 - 8/31/2021.

National Cancer Institute (NCI): Restore: Improving sexual outcomes of gay and bisexual prostate cancer survivors (R. Simon Rosser **PI**; my role: **Co-PI**); \$2,039,220 (directs) \$3,039,541 (total), 2017-2022.

NSF: "PFI:BIC: Smart Human-Centered Collision Warning System: sensors, intelligent algorithms and human-computer interfaces for safe and minimally intrusive car-bicycle interactions" (Co-PI, with Rajesh Rajamani (PI), Max Donath, and Nichole Morris), \$999,773 for September 1, 2016 to August 31, 2019.

NSF: "Computer-Supported Cooperative Work Doctoral Colloquium" (**PI**), \$25,000 for 03/01/2016 to 02/28/2017.

National Institute on Drug Abuse: "A Technology-Delivered Peer-to-Peer Support ARB Adherence Intervention for HIV+ Adults", (Co-PI, with Keith Horvath (PI) and Darin Erickson), \$3,302,62 for 07/01-2015 to 05/31/2020.

NSF: "HCC: Tools and Mechanisms to Support Social Participation Efforts", (**PI**), \$499,399 for 10/01/2012 to 09/30/2015.

NSF: "SoCS: Collaborative Research: Novel Algorithms and Interaction Mechanisms to Enhance Social Production", (**PI**), \$527,140, for 7/01/2012 to 06/30/2015.

NSF: "Collaborative Research: Supporting Newcomer Socialization in Online Production Communities", (**PI**), \$301,135.00 for 08/2011 to 08/31/2015.

Minnesota Department of Transportation: "Statewide Cycloplan: A Bicycle Planning Tool with Participatory GIS", (**PI**), \$130,000, for 10/01/2011 to 06/30/2013.

Metropolitan Council: "Cycloplan II", (**PI**), \$71,350, for 08/15/2011 to 05/31/2012.



NSF: "Wikisym Doctoral Consortium", (**PI**), \$13,163, for 05/01/2011 to 04/30/2012.

IBM: "Mobile Crowdsensing", (**PI**), \$100,000 awarded 04/01/2011

NSF: "Social-Computational Systems (SoCS) Community Meeting" (PI), \$48,801 for 09/01/2010 to 08/31/2011

NSF: "SoCS: Collaborative Research: Information Framing: Intelligent Interfaces for an Online Production Community", (**PI**), \$375,000 for 09/15/2010 to 08/31/2015.

NSF: "Collaborative Research: Guiding Folksonomy Development to Enable Novel Tagging Applications" (**PI**, with J. Riedl and S. Sen (Macalester College)). \$949, 788 for 04/1/2010 to 03/312014 (UMN Share).

Minnesota Department of Transportation: Bike, Bus, and Beyond: Extending Cyclopath to Enable MultiModal Routing (**PI**), \$60,627, for 07/08/2010 to 01/31/2012

NIH: An Interactive Website to Promote Communication about Sexual Health and Dating Relationships between Parents and Teens (**Co-PI**, with Sonya Brady (PI), Simon Rosser, and Renee Sieving), \$679,500 for 09/30/2009 to 08/31/2011.

Metropolitan Council: "Cycloplan" (PI), \$185,000, October 2009 – March 2011.

NSF "Collaborative Research: Understanding Online Volunteer Communities: Toward Theory-Based Design" (**co-PI**, with J. Riedl, J. Konstan, M. Snyder, & Y. Ren; R. Kraut (CMU) \$2,400,000 for 08/01/2008 to 07/31/2013.

NSF: "Recommender Systems Doctoral Consortium" (PI) \$15,415, 2007-2008.

NSF: "Mining Spatiotemporal Data: From Personal Use to Community Knowledge" (**PI**) \$449,570 for 12/1/2005 to 11/30/2009.

NSF: "Collaborative Research: Mark This! - Operationalizing the notion of "place" for interactive community systems" (**PI**, with Q. Jones (NJIT) and S. Whittaker (Univ. of Sheffield)). \$173,411 for 6/1/2003 to 5/31/2007 (UMN share).

NSF: "Being There: Mobile Devices for Community and Commerce" (**PI**, with J. Konstan, J. Riedl, and S. Shekhar). \$120,000 for 9/1/2002 to 8/31/2005.

NSF: "ITR: Collaborative Research: Designing On-Line Communities to Enhance Participation" (**co-PI**, with J. Konstan & J. Riedl, R. Kraut & S. Kiesler (CMU), P. Resnick and Y. Chen (Univ. of Michigan)). \$1,246,017 for 9/1/2003 to 8/31/2009 (UMN share).



AT&T: "VURI: Collaborative Filtering and Intelligent Interface Design for Enhanced TV Applications" (**PI**). \$35,000 for November 1, 2008 to October 31, 2009.

AT&T: "VURI: Collaborative Filtering and Intelligent Interface Design for Enhanced TV Applications" (**PI**). \$35,000 for June 1, 2007 to May 31, 2008.

Internal Funding

Minnesota/China Collaborative Research Grant: "Expertise Oriented Mining for Web Community". \$10,000 for July 1, 2007 to June 30, 2008 (PI, with Jie Tang, Tsinghua University, Beijing China).

University of Minnesota TEL grant: "The Next Generation Online Learning Environment: Designing for Community and Collaboration". \$10,00 for September 2006 to May 2007. (co-PI, with Joan Hughes, David Ernst, and Ann Ooms, College of Education and Human Development).

University of Minnesota Digital Technology Center: "Indoor Navigation Aids for Visually Impaired People". \$25,67 for June 2005 to December 2006. (co-PI, with S. Shekhar and G. Legge).

University of Minnesota Digital Technology Center: "Eye-Tracking Research on Community Websites: Photo Directories and Building Social Networks". \$19,300 for June 2004 to June 2005. (co-PI, with J. Konstan).

University of Minnesota Grant-In-Aid: "Facilitating Participation in Online Communities". \$20,397 for 1/1/2003 to 6/30/2004.

Books

1. Bickhard, M.H. and Terveen, L.G. Foundational Issues in Artificial Intelligence and Cognitive Science: Impasse and Solution, (1995), Elsevier Science.

Refereed Journal Papers

- 2. Charles Chunkai Zhang*, Mo Houtti*, C, Estelle Smith, Ruoyan Kong, and Loren Terveen. Working for Invisible Machines or Pumping Information into an Empty Void? An Exploration of Wikidata Contributors' Motivations. In *Proceedings of the ACM on Huma-Computer Interaction*, Vol. 6 (2022). (* co-first authors)
- 3. C. Estelle Smith, William Lane, Hannah Miller Hillberg, Daniel Kluver, Loren Terveen, and Svetlana Yarosh. Effective Strategies for Crowd-Powered Cognitive Reappraisal Systems: A Field Deployment of the Flip*Doubt Web Application for Mental Health. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 5 (2021).
- 4. C. Estelle Smith, Avleen Kaur, Katie Z. Gach, Loren Terveen, Mary Jo Kreitzer, and Susan O'Conner-Von. What is Spiritual Support and How Might It Impact the Design of Online Health Communities? In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 5 (2021).
- 5. Levonian, Z., Dow, M., Erickson, D.R., Ghosh, S., Miller Hillberg, H., Narayanan, S., Terveen, L. and Yarosh, L. Patterns of Patient and Caregiver Mutual Support Connections in an Online Health Community. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 4 (2020).



- 6. Zhu, H., Yu, B., Halfaker, A., and Terveen, L. Value-Sensitive Algorithm Design: Method, Case Study, and Lessons. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 2, No. 2 (2018).
- 7. Miller Hillberg, H., Levonian, Z., Terveen, L., and Hecht, B. What I See is What You Don't Get: Effects of Seeing Emoji Rendering Differences Across Platforms. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 2, No. 2 (2018).
- 8. Hall, A., Terveen, L., and Halfaker, A. Bot Detection in Wikidata Using Behavioral Cues. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 2, No. 2 (2018).
- 9. Sheppard, S.A., Turner, J., Thebault-Spieker, J., Zhu, H., and Terveen, L. Never Too Old, Cold or Dry to Watch the Sky: A Survival Analysis of Citizen Science Volunteerism. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 1, No. 2 (2017).
- 10. Thebault-Spieker, J., Kluver, D., Klein, M., Halfaker, A., Hecht, B., Terveen, L., and Konstan, J. Simulation Experiments On (The Absence of) Ratings Bias in Reputation Systems. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 1, No. 2 (2017).
- 11. Yu, B., Wang, X., Lin, A.Y., Ren, Y., Terveen, L., and Zhu, H. Out With The Old, In With The New? Unpacking Member Turnover in Online Production Groups. In *Proceedings of the ACM on Human-Computer Interaction*, Vol. 1, No. 2 (2017).
- 12. Nguyen, T.T., Harper, F.M., Terveen, L., and Konstan, J. User Personality and User Satisfaction with Recommender Systems. In *Information Systems Frontiers* (2017).
- 13. Filson Moses, J., Dwyer, P.C., Fugelstad, P.T., Kim, J.S., Maki, A., Synder, M., and Terveen, L. Encouraging Online Engagement: The Role of Interdependent Self-Construal and Social Motives in Fostering Online Participation. In *Personality and Individual Differences* (2017).
- 14. Thebault-Spieker, J., Terveen, L., and Hecht, B. Towards a Geographic Understanding of the Sharing economy: Systemic Biases in UberX and TaskRabbit. In *ACM Transactions on Computer-Human Interaction* (2017).
- 15. Brady, S.S., Sieving, R.E., Terveen, L.G., Rosser, R. S., Kodet, A.J., and Rothberg, V.D. An Interactive Website to Reduce Sexual Risk Behavior: Process Evaluation of TeensTalkHealth, JMIR Research Protocols (2015).
- 16. Ren, Y., Harper, F.M., Drenner, S., Terveen, L., Kiesler, S., Riedl, J., and Kraut, R.E. (2012). Building Member Attachment in Online Communities: Applying Theories of Group Identity and Interpersonal Bonds. *Management Information Systems Quarterly*.
- 17. Jones, Q., Grandhi, S., Karam, S., Whittaker, S., Zhou, C., and Terveen, L. Geographic 'Place' and Community Information Preferences, in *Computer-Supported Cooperative Work*.
- 18. Zhou, C., Frankowski, D., Ludford, P., Shekhar, S., Terveen, L., Discovering Personally Meaningful Places from Location Data: An Interactive Clustering Approach. *ACM Transactions on Information System*, 25, 3 (July 2007).
- 19. Ling, K., Beenen, G., Ludford, P.J., Wang, X., Chang, K., Li, X., Cosley, D., Frankowski, D., Terveen, L., Rashid, A.M., Resnick, P., and Kraut, R.E. Using Psychology to Motivate Contributions to Online Communities. *Journal of Computer-Mediated Communication*, 10, 4 (June 2005).
- 20. Terveen, L. and McDonald, D. Social Matching: A Framework and Research Agenda. *ACM Transactions on Computer-Human Interaction*, 12, 3 (2005), 401-434.
- 21. Whittaker, S., Jones, Q., Nardi, B., Creech, M., Terveen, L., Isaacs, E., and Hainsworth, J. ContactMap: organizing communication in a social desktop, in *ACM Transactions on Computer-Human Interaction*, 11, 4 (December 2004), 445-471.



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

