

WALTER S. LASECKI

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Crowdsourcing, Human-Computer Interaction, Artificial Intelligence

RESEARCH POSITIONS

Academic

University of Michigan Assistant Professor Computer Science and Engineering (EECS); and School of Information	Aug., 2015 — <i>Present</i>
Carnegie Mellon University Visiting Ph.D. Researcher Host: Jeffrey P. Bigham (HCII and LTI, School of Computer Science)	Aug., 2013 — Aug., 2015
Stanford University Visiting Ph.D. Researcher Host: Michael S. Bernstein (Computer Science Department)	Sept. — Dec., 2013

Industry

Google[x] Research Scientist (Consulting) Host: Adrien Treuille	Oct., 2014 — Apr., 2015
Google[x] Research Scientist (Visiting) Host: Adrien Treuille	May — Aug., 2014
Microsoft Research Research Intern (CLUES and ASI Groups) Mentors: Jaime Teevan, Ece Kamar, Susan Dumais, Eric Horvitz	May — Aug., 2013
Microsoft Research Research Intern (ASI Group) Mentors: Dan Bohus, Ece Kamar, Eric Horvitz	Jul. — Oct., 2012

EDUCATION

Ph.D. Computer Science , University of Rochester Advisors: Jeffrey P. Bigham (CMU) and James F. Allen	May, 2015
M.S. Computer Science , University of Rochester	Oct., 2011
B.S. Computer Science [Cum Laude], Virginia Tech	May, 2010
B.S. Mathematics - Applied Discrete Math [Cum Laude], Virginia Tech	May, 2010

AWARDS

W4A 2016 Best Technical Paper	2016
L@S 2016 Best Paper Honorable Mention	2016
University of Rochester Outstanding Dissertation Commendation	2015
Microsoft Research PhD Fellowship	2013—2015
CHI 2015 Best Paper Honorable Mention	2015
UIST 2014 Best Paper	2014
W4A 2014 Best Technical Paper	2014
CHI 2013 Best Paper Honorable Mention	2013
W4A Paciello Accessibility Challenge, Judges Award (Legion:Scribe)	2013
National Research Council Ford Foundation Fellowship, Honorable Mention	2013
UIST 2012 Best Paper Nominee	2012
UIST 2010 Student Innovation Contest, Most Creative (Whack-a-Mole)	2010

PUBLICATIONS

Conference Papers

- [P.31] Y. Chen, S.W. Lee, Y. Xie, Y. Yang, **W.S. Lasecki** and S. Oney. Codeon: On-Demand Software Development Assistance. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2017)*. Denver, CO. 2017. [25% Acceptance Rate]
- [P.30] D. Merritt, J. Jones, M.S. Ackerman and **W.S. Lasecki**. Kurator: Using The Crowd to Help Families With Personal Curation Tasks . In *Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2017)*. Portland, OR. 2017. [34% Acceptance Rate]
- [P.29] T. Huang, **W.S. Lasecki**, A. Azaria and J.P. Bigham. "Is there anything else I can help you with?": Challenges in Deploying an On-Demand Crowd-Powered Conversational Agent. In *Proceedings of the AAAI Conference on Human Computation (HCOMP 2016)*. Austin, TX. 2016. [30% Acceptance Rate]
- [P.28] Y. Gaur, **W.S. Lasecki**, F. Metze and J.P. Bigham. The Effects of Automatic Speech Recognition Quality on Human Transcription Latency. In *Proceedings of the International Cross-Disciplinary Conference on Web Accessibility (W4A 2016)*. Montreal, Canada. 2016. *Best Technical Paper*
- [P.27] Y. Chen, S. Oney and **W.S. Lasecki**. Towards Providing On-Demand Expert Support for Software Developers. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2016)*. San Jose, CA. 2016. [23% Acceptance Rate]
- [P.26] J.J. Williams, J. Kim, A. Rafferty, S. Maldonado, K. Gajos, **W.S. Lasecki** and N. Heffernan. AXIS: Generating Explanations at Scale with Learnersourcing and Machine Learning. In *Proceedings of the ACM Conference on Learning at Scale (L@S 2016)*. Edinburgh, UK. 2015. [22% Acceptance Rate] *Best Paper Honorable Mention*
- [P.25] T. Huang, **W.S. Lasecki** and J.P. Bigham. Guardian: A Crowd-Powered Spoken Dialogue System for Web APIs. In *Proceedings of the AAAI Conference on Human Computation (HCOMP 2015)*. San Diego, CA. 2015. [30% Acceptance Rate]
- [P.24] **W.S. Lasecki**, L. Rello and J.P. Bigham. Measuring Text Simplification with the Crowd. In *Proceedings of the International Cross-Disciplinary Conference on Web Accessibility (W4A 2015)*. Florence, Italy. 2015. [34% Acceptance Rate]
- [P.23] **W.S. Lasecki**, J. Kim, N. Rafter, O. Sen, J.P. Bigham and M.S. Bernstein. Apparition: Crowdsourced User Interfaces That Come To Life As You Sketch Them. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2015)*. Seoul, Korea. 2015. [23% Acceptance Rate] *Best Paper Honorable Mention – Top 5%*
- [P.22] **W.S. Lasecki**, M. Gordon, W. Leung, E. Lim, J.P. Bigham and S.P. Dow. Exploring Privacy and Accuracy Trade-Offs in Crowdsourced Behavioral Video Coding. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2015)*. Seoul, Korea. 2015. [23% Acceptance Rate]
- [P.21] **W.S. Lasecki**, J. Rzeszutarski, A. Marcus and J.P. Bigham. The Effects of Sequence and Delay on Crowd Work. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2015)*. Seoul, Korea. 2015. [23% Acceptance Rate]
- [P.20] G. Laput, **W.S. Lasecki**, J. Wiese, R. Xiao, J.P. Bigham and C. Harrison. Zensors: Adaptive, Rapidly Deployable, Human-Intelligent Sensor Feeds. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2015)*. Seoul, Korea. 2015. [23% Acceptance Rate]
- [P.19] Y. Zhong, **W.S. Lasecki**, E. Brady and J.P. Bigham. RegionSpeak: Quick Comprehensive Spatial Descriptions of Complex Images for Blind Users. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2015)*. Seoul, Korea. 2015. [23% Acceptance Rate]
- [P.18] **W.S. Lasecki**, M. Gordon, D. Koutra, M.F. Jung, S.P. Dow and J.P. Bigham. Glance: Rapidly Coding Behavioral Video with the Crowd. In *Proceedings of the ACM Symposium on User Interface Science and Technology (UIST 2014)*. Honolulu, HI. 2014. [22% Acceptance Rate]

- [P.17]  D. Retelny, S. Robaszekiewicz, A. To, **W.S. Lasecki**, J. Patel, N. Rahmati, T. Doshi, M. Valentine and M.S. Bernstein. Expert Crowdsourcing with Flash Teams. In *Proceedings of the ACM Symposium on User Interface Science and Technology (UIST 2014)*. Honolulu, HI. 2014. [22% Acceptance Rate] **Best Paper**
- [P.16]  **W.S. Lasecki**, R. Kushalnagar and J.P. Bigham. Helping Students Keep Up with Real-Time Captions by Pausing and Highlighting. In *Proceedings of the International Cross-Disciplinary Conference on Web Accessibility (W4A 2014)*. Seoul, Korea. 2014. **Best Technical Paper**
- [P.15] Loparev, A., **W.S. Lasecki**, Murray, K.I. and J.P. Bigham. Introducing Shared Character Control to Existing Video Games. In *Proceedings of Foundations of Digital Games (FDG 2014)*. Ft. Lauderdale, FL. 2014.
- [P.14] **W.S. Lasecki**, L. Weingard, G. Ferguson and J.P. Bigham. Finding Dependencies Between Actions Using the Crowd. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2014)*. Toronto, Canada. 2014. [23% Acceptance Rate]
- [P.13] J.P. Bigham and **W.S. Lasecki**. Crowd Storage: Storing Information on Existing Memories. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2014)*. Toronto, Canada. 2014. [23% Acceptance Rate]
- [P.12] **W.S. Lasecki**, J. Teevan and E. Kamar. Information Extraction and Manipulation Threats in Crowd-Powered Systems. In *Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2014)*. Baltimore, MD. 2014. [27% Acceptance Rate]
- [P.11] **W.S. Lasecki** P. Thiha, Y. Zhong, E. Brady and J.P. Bigham. Answering Visual Questions with Conversational Crowd Assistants. In *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2013)*. Seattle, WA. 2013. [29% Acceptance Rate]
- [P.10] **W.S. Lasecki**, R. Wesley, J. Nichols, A. Kulkarni, J.F. Allen and J.P. Bigham. Chorus: A Crowd-Powered Conversational Assistant. In *Proceedings of the ACM Symposium on User Interface Science and Technology (UIST 2013)*. St. Andrews, UK. 2013. [20% Acceptance Rate]
- [P.9] R. Kushalnagar, **W.S. Lasecki** and J.P. Bigham. Captions Versus Transcripts for Online Video Content. In *Proceedings of the International Cross-Disciplinary Conference on Web Accessibility (W4A 2013)*. Rio De Janeiro, Brazil. 2013.
- [P.8] I. Naim, **W.S. Lasecki**, J.P. Bigham, and D. Gildea. Text Alignment for Real-Time Crowd Captioning. In *Proceedings of the North American Chapter of the Association for Computational Linguistics Conference (NAACL 2013)*. Atlanta, GA. 2013. [30% Acceptance Rate]
- [P.7]  **W.S. Lasecki**, C.D. Miller and J.P. Bigham. Warping Time for More Effective Real-Time Crowdsourcing. In *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2013)*. Paris, France. 2013. [20% Acceptance Rate] **Best Paper Honorable Mention – Top 5%**
- [P.6] **W.S. Lasecki**, Y. Song, H. Kautz and J.P. Bigham. Real-Time Crowd Labeling for Deployable Activity Recognition. In *Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2013)*. San Antonio, TX. 2013. [35% Acceptance Rate]
- [P.5] **W.S. Lasecki** and J.P. Bigham. Online Quality Control for Real-time Crowd Captioning. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2012)*. Boulder, CO. 2012. [28% Acceptance Rate]
- [P.4] R. Kushalnagar, **W.S. Lasecki** and J.P. Bigham. A Readability Evaluation of Real-Time Crowd Captions in the Classroom. In *Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2012)*. Boulder, CO. 2012. [28% Acceptance Rate]
- [P.3]  **W.S. Lasecki**, C.D. Miller, A. Sadilek, A. Abumoussa, D. Borrello, R. Kushalnagar and J.P. Bigham. Real-time Captioning by Groups of Non-Experts. In *Proceedings of the ACM Symposium on User Interface Science and Technology (UIST 2012)*. Boston, MA. 2012. [21% Acceptance Rate] **Best Paper Award Nominee – Top 3%**

- [P.2] **W.S. Lasecki**, S.C. White, K.I. Murray and J.P. Bigham. Crowd Memory: Learning in the Collective. *10th Collective Intelligence 2012 (CI 2012)*. Boston, MA. 2012.
- [P.1] **W.S. Lasecki**, K.I. Murray, S. White, R.C. Miller and J.P. Bigham. Real-Time Crowd Control of Existing Interfaces. In *Proceedings of the ACM Symposium on User Interface Science and Technology (UIST 2011)*. Santa Barbara, CA. 2011. [25% Acceptance Rate]

Book Chapters

- [B.2] J.J. Williams, J. Kim, E.L. Glassman, A. Rafferty and **W.S. Lasecki**. Making Static Lessons Adaptive through Crowdsourcing & Machine Learning. Chapter in *Design Recommendations for Intelligent Tutoring Systems: Domain Modeling (Volume 4)*. 2016.
- [B.1] **W.S. Lasecki** and J.P. Bigham. Interactive Crowds: Real-Time Crowdsourcing and Crowd Agents. Chapter in *Human Computation*. Ed. Pietro Michelucci. Springer Link. 2014. *Top 25% most downloaded Springer book in 2013*

Journal Articles

- [J.3] J.P. Bigham, **W.S. Lasecki**, and J.O. Wobbrock. Target Acquisition and the Crowd Actor. *Human Computation Journal (HCJournal)*. 2(2). December, 2015.
- [J.2] **W.S. Lasecki**, C. Homan and J.P. Bigham. Architecting Real-Time Crowd-Powered Systems. *Human Computation Journal (HCJournal)*. 1(1). September, 2014.
- [J.1] R. Kushalnagar, **W.S. Lasecki**, and J.P. Bigham. Accessibility Evaluation of Classroom Captions. *ACM Transactions on Accessibility (TACCESS)*. January, 2014.

Magazine Articles


- [M.2] **W.S. Lasecki**, C.D. Miller, I. Naim, R. Kushalnagar, A. Sadilek, D. Gildea, and J.P. Bigham. Scribe: Deep Integration of Human and Machine Intelligence to Caption Speech in Real-Time. *Communications of the ACM (CACM)*. To Appear. 2017.
- [M.1] **W.S. Lasecki** and J.P. Bigham. Real-Time Captioning with the Crowd. *ACM Interactions*. May, 2014.

Workshop and Consortia Papers

- [W.13] J.P. Bigham, **W.S. Lasecki**, C. Kulkarni. Crowdsourcing and Crowd Work. In *CHI Courses (CHI 2017)*. Denver, CO. 2017.
- [W.12] S. Gourava, Jhala, D. Koutra, **W.S. Lasecki**. Towards Crowd-Assisted Data Mining. In *CHI Workshop on Human Centered Machine Learning (HCML 2016)*. San Jose, CA. 2016.
- [W.11] Y. Chen, S. Oney, **W.S. Lasecki**. Towards software development microtasks. In *CHI Workshop on Productivity Decomposed: Getting Big Things Done with Little Microtasks (CHI 2016)*. San Jose, CA. 2016.
- [W.10] **W.S. Lasecki**, J. Teevan, E. Kamar. The Cost of Asking Crowd Workers to Behave Maliciously. In *AAMAS Workshop on Human-Agent Interaction Design and Models (HAIDM 2015)*. Istanbul, Turkey. 2015.
- [W.9] **W.S. Lasecki**, M. Gordon, J. Teevan, E. Kamar, J.P. Bigham. Preserving Privacy in Crowd-Powered Systems. In *AAMAS Workshop on Human-Agent Interaction Design and Models (HAIDM 2015)*. Istanbul, Turkey. 2015.
- [W.8] G.V. de la Cruz Jr., B. Peng, **W.S. Lasecki**, M.E. Taylor. Generating Real-Time Crowd Advice to Improve Reinforcement Learning Agents. In *Association for the Advancement of Artificial Intelligence Workshop on Learning for General Competency in Video Games (AAAI-WS 2015)*. Austin, TX. 2014.

- [W.7] **W.S. Lasecki**. Crowd-Powered Intelligent Systems. In *AAAI Conference on Human Computation Doctoral Consortium (HCOMP-DC 2014)*. Pittsburgh, PA. 2014.
- [W.6] **W.S. Lasecki**. Powering Interactive Intelligent Systems with the Crowd. In *ACM Symposium on User Interface Science and Technology Doctoral Symposium (UIST-DS 2014)*. Honolulu, HI. 2014.
- [W.5] **W.S. Lasecki**, A. Ritter and J.P. Bigham. Powering Spoken Language Interactions with the Crowd. In *ACM Conference on Human Factors in Computing Systems Workshop on Designing Speech and Language Interactions (CHI DSLI 2014)*. Toronto, Canada. 2014.
- [W.4] A. Sadilek, C.M. Homan, **W.S. Lasecki**, V. Silenzio and H. Kautz. Modeling Fine-Grained Dynamics of Mood at Scale. In *ACM Conference on Web Search and Data Mining Workshop on Diffusion Networks and Cascade Analytics (WSDM DiffNet 2014)*. Selected for Oral Presentation. New York, NY. 2014.
- [W.3] **W.S. Lasecki**, D. Bohus and E. Kamar. Conversations in the Crowd: Collecting Data for Task-Oriented Dialog Learning. In *Human Computation Workshop on Scaling Speech, Language Understanding and Dialogue through Crowdsourcing*. Palm Springs, CA. 2013.
- [W.2] **W.S. Lasecki**. Crowdsourcing for Deployable Intelligent Systems. *Association for the Advancement of Artificial Intelligence Doctoral Consortium (AAAI-DC 2013)*. Bellevue, WA. 2013.
- [W.1] **W.S. Lasecki** and J.P. Bigham. Spoken Control of Existing Mobile Interfaces With the Crowd. *ACM Conference on Human Factors in Computing Systems Workshop on Mobile Accessibility (CHI MOBACC 2013)*. Paris, France. 2013.

Live Demos and Competitions

- [D.9] S.W. Lee, Y. Yang, S. Yan, Y. Zhang, I. Wong, Z. Tan, M. McGruder, C.M. Homan and **W.S. Lasecki**. Creating Interactive Behaviors in Early Sketch by Recording and Remixing Crowd Demonstrations. *AAAI Conference on Human Computation and Crowdsourcing – Demo (HCOMP 2016)*. 2016.
- [D.8] J. Yim, W. Leung, J. Jasani, E. Lim, A.M. Henderson, M. Gordon, D. Koutra, J.P. Bigham, S.P. Dow and **W.S. Lasecki**. Coding Varied Behavior Types Using the Crowd. *ACM Conference on Computer Supported Cooperative Work and Social Computing – Demo (CSCW 2016)*. 2016.
- [D.7] **W.S. Lasecki**, R. Kushalnagar and J.P. Bigham. Legion Scribe: Real-Time Captioning by Non-Experts. *ACM SIGACCESS Conference on Computers and Accessibility – Captioning Challenge (ASSETS 2014)*. 2014.
- [D.6] **W.S. Lasecki**, M. Gordon, S.P. Dow and J.P. Bigham. Glance: Enabling Rapid Interactions with Data Using the Crowd. *ACM Conference on Human Factors in Computing Systems – Interactivity (CHI 2014)*. 2014. [50% Acceptance Rate]
- [D.5] **W.S. Lasecki**, C.D. Miller, R. Kushalnagar and J.P. Bigham. Real-Time Captioning by Non-Experts with Legion Scribe. *ACM SIGACCESS Conference on Computers and Accessibility – Captioning Challenge (ASSETS 2013)*. 2013.
- [D.4] **W.S. Lasecki**, R. Wesley, J. Nichols, A. Kulkarni, J.F. Allen and J.P. Bigham. Chorus: A Crowd-Powered Conversational Assistant. *ACM Symposium on User Interface Science and Technology – Demos (UIST 2013)*. 2013.
- [D.3]  **W.S. Lasecki**, C.D. Miller, R. Kushalnagar and J.P. Bigham. Legion Scribe: Real-Time Captioning by Non-Experts. *International Cross-Disciplinary Conference on Web Accessibility – The Paciello Group Web Accessibility Challenge (W4A 2013)*. 2013. **Judges Award**
- [D.2] **W.S. Lasecki**, R. Wesley, A. Kulkarni and J.P. Bigham. Speaking with the Crowd. *ACM Symposium on User Interface Science and Technology – Demos (UIST 2012)*. 2012.
- [D.1] **W.S. Lasecki**, K.I. Murray, S. White, R.C. Miller and J.P. Bigham. Real-Time Crowd Control of Existing Interfaces. *ACM Symposium on User Interface Science and Technology – Demos (UIST 2011)*. 2011.

Posters and Abstracts

- [A.27] S.W. Lee, Y. Chen, N. Klugman, S.R. Gouravajhala, A. Chen and **W.S. Lasecki**. Exploring Coordination Models for Ad Hoc Programming Teams. *ACM Conference on Human Factors in Computing Systems Late Breaking Work (CHI 2017)*. [38% Acceptance Rate]
- [A.26] J.J. Williams, A.N. Rafferty, A. Ang, D. Tingley, **W.S. Lasecki** and J. Kim. Connecting Instructors and Learning Scientists via Collaborative Dynamic Experimentation. *ACM Conference on Human Factors in Computing Systems Late Breaking Work (CHI 2017)*. [38% Acceptance Rate]
- [A.25] Y. Chen, S. Oney and **W.S. Lasecki**. Expert Crowd Support Systems for Software Developers. Oral presentation. *Collective Intelligence Conference (CI 2016)*.
- [A.24] J.J. Williams, J. Kim, A.N. Rafferty, S. Maldonado, K. Gajos, **W.S. Lasecki** and N. Heffernan. AXIS - An Adaptive Tool for Generating Explanations Using MOOClets for Crowdsourcing and Machine Learning. *Learning with MOOCs Conference (LWMOOCs 2016)*.
- [A.23] M. Gordon, J.P. Bigham and **W.S. Lasecki**. LegionTools: A Toolkit + UI for Recruiting and Routing Crowds to Synchronous Real-Time Tasks. *ACM Symposium on User Interface Science and Technology Posters (UIST 2015)*.
- [A.22] G.V. de la Cruz Jr., B. Peng, **W.S. Lasecki** and M.E. Taylor. Towards Integrating Real-Time Crowd Advice with Reinforcement Learning. *ACM Conference on Intelligent User Interfaces (IUI 2015)*.
- [A.21] **W.S. Lasecki**, C.M. Homan and J.P. Bigham. Tuning the Diversity of Open-Ended Responses From the Crowd. *Human Computation Works-in-Progress (HCOMP 2014)*.
- [A.20] M. Gordon, **W.S. Lasecki**, W. Leung, E. Lim, S.P. Dow and J.P. Bigham. Glance Privacy: Obfuscating Personal Identity While Coding Behavioral Video. *Human Computation Works-in-Progress (HCOMP 2014)*.
- [A.19] T. Huang, **W.S. Lasecki**, A. Ritter and J.P. Bigham. Combining Non-Expert and Expert Crowd Work to Convert Web APIs to Dialog Systems. *Human Computation Works-in-Progress (HCOMP 2014)*.
- [A.18] **W.S. Lasecki***, Y. Zhong* and J.P. Bigham. Increasing the Bandwidth of Crowdsourced Visual Question Answering to Better Support Blind Users. *ACM SIGACCESS Conference on Computers and Accessibility Captioning Competition (ASSETS 2014)*.
- [A.17] D. Scarafoni, M. Gordon, **W.S. Lasecki** and J.P. Bigham. Comparing Human and Automated Agents in a Coordinated Navigation Domain. *University of Rochester Undergraduate Research Exposition. Professor's Choice Award*
- [A.16] J. Teevan, D. Liebling and **W.S. Lasecki**. Selfsourcing Personal Tasks. *ACM Conference on Human Factors in Computing Systems Works-in-Progress (CHI 2014)*. [49% Acceptance Rate]
- [A.15] **W.S. Lasecki**, J. Teevan and E. Kamar. Raising an Army: Attacking Crowd Systems. *CrowdConf*. Selected for oral presentation.
- [A.14] **W.S. Lasecki** and J.P. Bigham. Automated Support for Collective Memory of Conversational Interactions. *Human Computation Works-in-Progress (HCOMP 2013)*.
- [A.13] P. Singh, **W.S. Lasecki**, P. Barelli and J.P. Bigham. HiveMind: Tuning Crowd Response with a Single Value. *Human Computation Works-in-Progress*.
- [A.12] **W.S. Lasecki**, C.D. Miller, R. Kushalnagar and J.P. Bigham. Legion:Scribe. *ACM SIGACCESS Conference on Computers and Accessibility Captioning Competition (ASSETS 2013)*.
- [A.11] **W.S. Lasecki**, J. Teevan and E. Kamar. Information Extraction and Manipulation Threats in Crowd-Powered Systems. *Association for the Advancement of Artificial Intelligence MSR Intern Posters (AAAI 2013)*.
- [A.10] **W.S. Lasecki**, L. Weingard, J.P. Bigham and G. Ferguson. Crowd Formalization of Action Conditions. *Association for the Advancement of Artificial Intelligence Student Abstracts (AAAI 2013)*.

- [A.9] **W.S. Lasecki**, L. Weingard, G. Ferguson and J.P. Bigham. Finding Action Dependencies Using the Crowd. *Knowledge Capture Posters (KCAP 2013)*.
- [A.8] **W.S. Lasecki**. Real-Time Conversational Crowd Assistants. *ACM Conference on Human Factors in Computing Systems Student Research Competition (CHI 2013)*. [36% Acceptance Rate]
- [A.7] M. Murphy, C.D. Miller, **W.S. Lasecki** and J.P. Bigham. Adaptive Time Windows for Real-Time Crowd Captioning. *ACM Conference on Human Factors in Computing Systems Work-in-Progress (CHI 2013)*. 2013. [45% Acceptance Rate]
- [A.6] **W.S. Lasecki**, T. Lau, G. He and J.P. Bigham. Crowd-Based Recognition of Web Interaction Patterns. *ACM Symposium on User Interface Science and Technology Posters (UIST 2012)*. [40% Acceptance Rate]
- [A.5] Y.C. Song, **W.S. Lasecki**, J.P. Bigham and H. Kautz. Online Training of Activity Recognition Systems. *ACM International Conference on Ubiquitous Computing Posters (UBICOMP 2012)*.
- [A.4] **W.S. Lasecki**, J.P. Bigham, J.F. Allen and G. Ferguson. Real-time Collaborative Planning with the Crowd. In *Proceedings of the Association for the Advancement of Artificial Intelligence Student Abstracts (AAAI 2012)*.
- [A.3] **W.S. Lasecki**, C.D. Miller, D. Borrello and J.P. Bigham. Online Sequence Alignment for Real-time Audio Transcription by Non-experts. *Association for the Advancement of Artificial Intelligence Student Abstracts (AAAI 2012)*.
- [A.2] **W.S. Lasecki** and J.P. Bigham. Self-Correcting Crowds. *ACM Conference on Human Factors in Computing Systems Works-In-Progress (CHI 2012)*.
- [A.1] Y. Zhong, P. Thiha, G. He, **W.S. Lasecki** and J.P. Bigham. Using Real-time Feedback to Improve Visual Question Answering. *ACM Conference on Human Factors in Computing Systems Works-In-Progress (CHI 2012)*.

Technical Reports and Theses

- [T.11] **W.S. Lasecki**. Crowd Agents: Interactive Intelligent Systems Powered by the Crowd. *University of Rochester Department of Computer Science Ph.D. Dissertation*. 2015. [Outstanding Dissertation Award Commendation](#)
- [T.10] **W.S. Lasecki**, C.M. Homan and J.P. Bigham. Tuning the Diversity of Open-Ended Responses from the Crowd. *arXiv Report 1408.6621*. 2014.
- [T.9] **W.S. Lasecki**, A. Marcus, J. Rzeszotarski and J.P. Bigham. Using Microtask Continuity to Improve Crowdsourcing. *Carnegie Mellon University Technical Report CMU-HCII-14-100*. 2014.
- [T.8] D. Scarafoni, M. Gordon, **W.S. Lasecki** and J.P. Bigham. Comparing Human and Automated Agents in a Coordinated Navigation Domain. *University of Rochester Technical Report #989*. 2014.
- [T.7] A. Sadilek, C.M. Homan, **W.S. Lasecki**, V. Silenzio and H. Kautz. Modeling Fine-Grained Dynamics of Mood at Scale. *University of Rochester Technical Report #988*. 2014.
- [T.6] A. Loparev, **W.S. Lasecki**, K.I. Murray and J.P. Bigham. Introducing Shared Character Control to Existing Video Games. *University of Rochester Technical Report #986*. 2013.
- [T.5] M. Lease, J. Hullman, J.P. Bigham, M. S. Bernstein, J. Kim, **W.S. Lasecki**, S. Bakhshi, T. Mitra and R.C. Miller. Mechanical Turk is Not Anonymous. *Social Science Research Network*. 2013. [Reached Top 10 Most Downloaded Articles](#)
- [T.4] **W.S. Lasecki**, A. Kulkarni, R. Wesley, J. Nichols, C. Hu, J.F. Allen and J.P. Bigham. Chorus: Letting the Crowd Speak with One Voice. *University of Rochester Technical Report #983*. 2012.
- [T.3] **W.S. Lasecki**. Crowd Agents. *University of Rochester Masters Thesis*. 2012.

- [T.2] **W.S. Lasecki** and H. Kautz. Planning With Tests, Branches, and Non-Deterministic Actions as Satisfiability. *University of Rochester Technical Report #979*. 2012.
- [T.1] P. Singh, **W.S. Lasecki**, P. Barelli and J.P. Bigham. HiveMind: A Framework for Optimizing Open-Ended Responses From the Crowd. *University of Rochester Technical Report #978*. 2012.

PATENTS

- [I.1] J.P. Bigham and **W.S. Lasecki**, K.I. Murray, S. White. *Closed-Loop Crowd Control of Existing Interfaces*. United States Patent #20,140,015,749. July, 2012.

FUNDING

Grants

- Improving Employability via Physical Crowdsourced Tasks** (with T. Dillahunt)
Co-Principal Investigator (*Total Award Value \$19,635*). UM Poverty Solutions. 2017
- Efficient Human-in-the-Loop Computer Vision Algorithms to Create Datasets of Rare Traffic Events from Video** (with J. Corso)
Principal Investigator (*Total Award Value \$199,810*). Mobility Transformation Center. 2017
- Computer Vision and Crowdsourcing for Vehicle Crash Analysis** (with J. Corso)
Co-Principal Investigator (*Total Award Value \$153,824*). DENSO. 2016
- Sapphire Project** (with S. Singh [PI], H. Lee, J. Mars, R. Mihalcea, E. Provost, D. Radev)
Co-Principal Investigator (*Total Award Value ~\$4,500,000*). IBM. 2015–2018
- UM MCubed 2.0: Intelligent Software Assistants via Collaborative Programming**
Principal Investigator (*Total Award Value \$60,000*) 2015–2017
- UM Undergraduate Researcher Support**
Principal Investigator (*Award Value \$7,100*). University of Michigan. 2015
- NSF SBIR Phase 1: Exploring the Feasibility of Deployable Crowd-Powered Real-Time Captioning Supplemented with Automatic Speech Recognition** (with J.P. Bigham)
Principal Investigator (*Award Value \$150,000*). National Science Foundation. 2014
#IIS-1448616 [Legion Labs LLC]
- Google Research Award: Co-Author** (*Award Value \$78,315*) 2013
Crowdsourcing Speech-to-Text in Less Than 5 Seconds [PI: *J.P. Bigham*]
- NSF i-Corps Program: Entrepreneurial Lead** (*Award Value \$50,000*) 2013
- Microsoft Research: Ph.D. Fellow** (*Award Value \$132,500*) 2013–2015
- oDesk Research Grant: Project Lead** (*Award Value \$1,000*) 2013
- NSF Small Core Grant: Co-Author** (*Award Value \$500,000*) 2012
Real-Time Captioning by Groups of Non-Experts for Deaf and Hard of Hearing Students
[#IIS-1218209, PI: *Jeffrey P. Bigham*, Co-PIs: *Daniel Gildea, Raja Kushalnagar*]

Other Funding

- UM New Faculty Fellow** (*Award Value \$3,000*) 2015
- UIST 2014 Doctoral Consortium Travel Grant** (*Award Value \$2,600*) 2014
- HCOMP 2014 Doctoral Consortium Travel Grant** (*Award Value \$700*) 2014
- Google I/O Travel Grant** (*Award Value \$500*) 2014
- AAAI Symposium Invited Speaker Travel Grant** (*Award Value \$500*) 2014
- Heidelberg Laureate Forum Travel Grant** (*Award Value \$1,560*) 2013
- AAAI 2013 Doctoral Consortium Travel Grant** (*Award Value \$1,000*) 2013
- CHI 2013 Student Research Competition Travel Grant** (*Award Value \$500*) 2013

INVITED TALKS

Real-Time Crowdsourcing for Complex Systems. <i>Carnegie Mellon University – HCII Crowdsourcing Lunch.</i> Pittsburgh, PA.	Feb., 2017
Crowd-Powered Conversational Systems. <i>Linguistic Data Consortium (LDC) Crowdsourcing Workshop.</i> Philadelphia, PA.	Oct., 2016
Real-Time Crowdsourcing. <i>CMO-BIRS Crowdsourcing and Networks Workshop.</i> Oaxaca, Mexico.	Aug., 2016
Crowd-Powered Conversational Systems. <i>IBM.</i> Yorktown, NY.	Jun., 2016
Towards Creating Crowd-Powered Tools for Creating Tools. <i>Google.</i> Mountain View, CA.	May, 2016
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Purdue University.</i> West Lafayette, IN.	Apr., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of Wisconsin, Madison.</i> Madison, WI.	Apr., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Adobe Research.</i> San Francisco, CA.	Apr., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Carnegie Mellon University.</i> Pittsburgh, PA.	Mar., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Georgia Institute of Technology.</i> Atlanta, GA.	Mar., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>The Ohio State University.</i> Columbus, OH.	Mar., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of California, San Diego (CSE).</i> San Diego, CA.	Mar., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of California, San Diego (CogSci).</i> San Diego, CA.	Mar., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of Toronto.</i> Toronto, Canada.	Mar., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Microsoft Research.</i> Seattle, WA.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of Washington.</i> Seattle, WA.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of Michigan.</i> Ann Arbor, MI.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Princeton University.</i> Princeton, NJ.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Northeastern University.</i> Boston, MA.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Cornell University.</i> Ithaca, NY.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of Waterloo.</i> Waterloo, Canada.	Feb., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>University of Pennsylvania.</i> Philadelphia, PA.	Jan., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Saarland University.</i> Saarland, Germany.	Jan., 2015
Crowd-Agents: Creating Crowd-Powered Interactive Systems. <i>Microsoft Research, New England.</i> Boston, MA.	Dec., 2014
Rapidly Understanding and Creating Content Using Real-Time Crowds. <i>HCI Seminar, University of Rochester.</i> Rochester, NY.	Oct., 2014

Rapidly Understanding and Creating Content Using Real-Time Crowds. <i>Crowdsourcing Lunch Seminar, Carnegie Mellon University.</i> Pittsburgh, PA.	Oct., 2014
Crowd-Powered Interactive Systems. <i>Google[x] Tech Talk.</i> Mountain View, CA.	Aug., 2014
Crowd-Powered Interactive Systems. <i>Technicolor Research.</i> Los Altos, CA.	Aug., 2014
Crowd-Powered Interactive Systems. <i>University of California San Diego.</i> San Diego, CA.	Jul., 2014
Information Extraction and Manipulation Threats to Crowd-Powered Systems. <i>Social Hacking and Cognitive Security, AAAI Spring Symposium.</i> Stanford, CA.	Mar., 2014
Crowd Agents: Using the Crowd to Power Deployable Intelligent Systems. <i>Stanford University.</i> Stanford, CA.	Dec., 2013
Crowd Agents: Using the Crowd to Power Deployable Intelligent Systems. <i>IBM Research.</i> Almaden, CA.	Nov., 2013
Using Crowd Agents to Create Deployable Intelligent Systems. <i>Microsoft Research.</i> Seattle, WA. [Video: bit.ly/175X1bi]	Aug., 2013
Crowdsourcing for Deployable Intelligent Systems. <i>AAAI 2013 Doctoral Consortium.</i> Bellevue, WA.	Jul., 2013
Crowd Agents: Using Real-Time Crowdsourcing to Enable Intelligent Interaction. <i>DUB Group, University of Washington.</i> Seattle, WA.	Jul., 2013
Human Computation. <i>Guest Lecture, Human-Computer Interaction [CSC 2/412].</i> Rochester, NY.	Dec., 2011
Continuous Real-Time Crowdsourcing. <i>Xerox Research.</i> Webster, NY.	Oct., 2011

INVITED WORKSHOPS AND SYMPOSIA

Linguistic Data Consortium (LDC) Crowdsourcing Workshop. Philadelphia, PA.	Oct., 2016
CMO-BIRS Crowdsourcing and Networks Workshop. Oaxaca, Mexico.	Aug., 2016
Microsoft Faculty Summit. Seattle, WA.	Jul., 2016
NSF CISE CAREER Workshop. Arlington, VA.	Apr., 2016
Research Lab at Google I/O. San Francisco, CA.	Jun., 2014
Social Hacking and Cognitive Security, AAAI Spring Symposium. Stanford, CA.	Mar., 2014
CrowdCamp HCOMP 2013. Palm Springs, CA.	Nov., 2013
First Heidelberg Laureate Forum. Heidelberg, Germany.	Sept., 2013
CrowdCamp CSCW 2013. San Antonio, TX.	Feb., 2013
CrowdCamp CHI 2012. Austin, TX.	May, 2012

SELECT PRESS COVERAGE

Human Smarts Plus AI Could Unlock Computer Vision <i>Kyle Vanhemert, Wired:</i> wrd.cm/1KtfPVK	Apr., 2015
Sensors App Lets You Crowdfund Live Camera Monitoring <i>Tim Hornyak, PC World:</i> bit.ly/1diI4f2	Apr., 2015
One Old Android Phone Could Make All Your Dumb Things Smart <i>Chris Mills, Gizmodo:</i> bit.ly/1HkCUf8	Apr., 2015
Sensors: Making Sense With Live Question Feeds <i>Nancy Owano, Phys.org:</i> bit.ly/1Fqn5BY	Apr., 2015
Tech Companies are Sending your Secrets to Crowdsourced Armies of Low-Paid Workers <i>Kashmir Hill, Fusion.net:</i> fus.in/1IjKO50	Mar., 2015
Human Computation Journal Sees The Light Of Day <i>Egle Marija Ramanauskaitė, Technology.org:</i> bit.ly/1EGCa0y	Oct., 2014
Stanford team looks to take crowdsourcing to a whole new level <i>Stanford News:</i> stanford.io/1zs1O3D	Aug., 2014
Stanfords Symbolic Systems [...] <i>Clifton B. Parker, Stanford News:</i> stanford.io/Ycfd4O	Aug., 2014
Making Computers Smarter, and Helping Deaf People, Too <i>Julie Rehmeyer, Scientific American:</i> bit.ly/1fyLZGa	Sept., 2013
Computer Science Graduate Student Awarded Microsoft Research Fellowship <i>Leonor Sierra, University of Rochester News:</i> bit.ly/17uiOYX	Apr., 2013
An Instant Path to an Online Army <i>Randall Stross, New York Times:</i> nyti.ms/Zdz91V	Apr., 2013
Where Siri Has Trouble Hearing, a Crowd of Humans Could Help <i>Jessica Leber, MIT Technology Review:</i> bit.ly/YljITz	Mar., 2013
Amazon Mechanical Turk Workers Not as Anonymous as They Think <i>Carl Franzen, The Verge:</i> bit.ly/15Axp6c	Mar., 2013
Artificial Intelligence, Powered by Many Humans <i>Tom Simonite, MIT Technology Review:</i> bit.ly/P9prYd	Sept., 2012
Crowd-Talk Yields Great Answers, Says University Team <i>Nancy Owano, Phys.org:</i> bit.ly/ROI4F8	Sept., 2012
Crowdsourcing Could Help Deaf People Subtitle Their Everyday Life <i>Jamie Condliffe, Gizmodo:</i> bit.ly/OZbsCS	Jul., 2012
Crowdsourcing Serves Up the Subtitles to Your Life <i>Jacob Aron, New Scientist:</i> bit.ly/MkMOh9	Jul., 2012
UIST 2011: Crowdsourcing Research <i>Brad Stenger, NY Times:</i> bit.ly/nulZux	Oct., 2011

TEACHING EXPERIENCE

- User Interface Development [EECS 493]**, *University of Michigan* Fall 2016
- Social Computing Systems [EECS 498]**, *University of Michigan* Winter 2016, 2017
Created a new senior undergraduate level course at UM on the principles and creation of social computing systems. This is a project-based course that satisfies the College of Engineering's "Major Design Experience" requirement.
- Crowdsourcing and Human Computation Systems [EECS 598]**, *University of Michigan* Fall 2015
Created a new graduate-level course at UM on crowdsourcing systems.
- Co-Instructor, Crowd Programming**, *Carnegie Mellon University* Spring 2014
Co-designed and co-taught a new course at CMU on crowdsourcing.
Co-Instructor: Jeffrey P. Bigham
- Teaching Assistant, Artificial Intelligence**, *University of Rochester* Spring 2011, 2012
Lead TA for an upper level undergraduate AI course [CSC 242].
Co-designed a new curriculum, managed TAs, led workshops, and graded work.
Instructor: George Ferguson
- Teaching Assistant Workshop Leader**, *University of Rochester* Summer 2011
Helped direct a graduate TA training program for graduate students. Guided discussions and provided advice to a group of incoming graduate students.
- Teaching Assistant Workshop**, *University of Rochester* Summer 2010
Participated in a voluntary graduate TA training program.

PHD STUDENTS

Current Advisees

- Yan Chen** - Expertise in online crowds in the context of real-time intelligent software development assistants.
- Sai R. Gouravajhala** - Interactive intelligent tools for data analytics powered by mixed-expertise crowds.
- Youxuan (Lucy) Jiang** - Conversational advisors for decision making in expert domains.
- Harmanpreet (Harman) Kaur** - Communication, teams, and tool ecosystems.
- Sang Won Lee** - Interactive, real-time collaboration systems for creative tasks.
- Jean Young Song** - Crowdsourcing for intelligent sensing.
- Shiyan Yan** - Hybrid crowd and machine learning systems.

Ph.D. Committee Member

- Catherine Finegan-Dollak** (*in progress*) – TBD. Advisor: Drago Radev.
- Ting-Hao 'Kenneth' Huang (CMU)** (*in progress*) – Crowd-powered conversational systems.
Primary advisor: Jeffrey P. Bigham.
- Xin Rong** (*in progress*) – Data mining for software developer support and troubleshooting tools.
Primary advisor: Eytan Adar.
- David Merritt** (*2016*) – Mixed expertise crowds and intelligent context-aware systems.
Primary advisor: Mark Ackerman.

UNDERGRADUATE AND MASTERS STUDENTS

* = Paper award

UMich Advisees

Jinyeong Yim (MS, Mech.E.)	[D.8]
Miles Mcgruder	[D.9]
Zhengxi Tan	[D.9]
Isabelle Wong	[D.9]
Yiwei Yang	[D.9]
Yujin Zhang	[D.9]
Samantha Silveira (MSE, CSE)	
Yilei An	
Raymond Fok	
Ashley Foster	
Abigail Grobbel	
Jaylin Herskovitz	
Diego Holt	
Yanda Huang	
Sinmisola Kareem	
Cryserica Jeter	
Masha Koubenski	
Varun Kutirakulam	
Zihan Li	
Anthony Liu	
Xieyang Liu	
Tianle Lu	
Brent Marieb	
Gabriel Matute	
Gaole Meng	
Roshan Narayan	
Justin Parus	
Karma Patel	
Zelin 'Tony' Pu	
Sudharshna Radhakrishnan	
Aditi Ramaswamy	
Akshay Rao	
Rhea Singh	
Clement Sutjiatma	
Aaron Tatum	
Anthony Tung	
Tami VanOmen (co-advised with Steve Oney)	
Kyle Wang	
Fan Yang	
Adam Yee [now: MHCI student @ CMU HCII]	
Emmie Zhang	
Rishuv Mehta (DCDS HS)	

Other Undergraduate Advisees

Mitchell Gordon	[P.22], [P.18], [W.9], [D.6], [A.26], [A.21], [A.18*], [T.8]
– <i>ASSETS 2014 SRC: 1st Place</i>	
– <i>ACM 2015 SRC Grand Finals: 2nd Place</i>	
– <i>CRA Outstanding UG Researcher: Winner</i>	
– First Position: PhD Student at Stanford CS	
Christopher Miller	[P.3*], [P.7*], [D.3*], [D.5], [A.3], [A.7], [A.13]
– <i>CRA Outstanding UG Researcher: Hon. Mention</i>	
Rachel Wesley	[P.10], [D.4], [D.2]
– <i>CRA Outstanding UG Researcher: Hon. Mention</i>	
Donato Borrello	[P.3*], [A.3]
Grant He	[A.6], [A.1]
Dan Scarafoni	[A.18*], [T.8]
Preet Singh	[A.14], [T.1]
Brian Fults	[undergraduate research paper (VT)]
Winnie Leung (CMU)	[P.22], [A.21]
Ellen Lim (CMU)	[P.22], [A.21]
Matt Murphy	[A.7]
Nicholas Rafter	[P.23]
Bram Adams, David Bang, Emily Danchik, Rebecca Everson, Zevran Gong (CMU), Aubrey Henderson (CMU), Francis Hinson, Archana Iyer (CMU), Jeel Jasani (CMU), Nazmin Kharodia, Ellis Mitchell, Andrew Nocka, Angela Ren (M.S., CMU), Ge Wu, Liang Xin (M.S.), Binley Yang, Jacqueline Yeung (CMU), Yongke Yu	

PROFESSIONAL SERVICE

Editorial and Senior Committee Positions

UIST 2017: Program Committee
HCOMP 2017: Senior Program Committee
ASSETS 2017: Program Committee
Collective Intelligence 2017: Program Committee
CHI 2017: Program Committee
HCOMP 2016: Short Papers Co-Chair
UIST 2016: Program Committee
CHI 2016: Program Committee
ASSETS 2016: Program Committee
Collective Intelligence 2016: Program Committee
HCOMP 2015: [Senior] Program Committee
HCOMP 2015: Works-In-Progress and Demos Co-Chair
ASSETS 2015: Program Committee
UIST 2015: Recreation Co-Chair
Human Computation Journal, 2013–Present: Associate Editor
CrowdCamp 2014: Organizer
Collective Intelligence 2014: Proceedings Co-Chair
HCOMP 2013: Microtalks Co-Chair

Advisory Committees

NIEUW: Novel Incentives and Workflows in Linguistic Data Collection and Annotation
– Run by the Linguistic Data Consortium (LDC)

Reviewing

AAAI [Program Committee]: Main Track Papers (2014); Web Track Papers (2012)
ASSETS: Posters (2015); Best Papers (2015)
CHI: Papers (2013, 2014, 2015); *Productivity Decomposed* Workshop [Program Committee] (2016) Alt.CHI Papers (2014); Works-in-Progress (2013, 2014)
CHI PLAY: Papers (2014)
CSCW: Papers (2013, 2014, 2015, 2016, 2017); Works-in-Progress (2014)
DIS: Papers (2014); Works-in-Progress (2014)
EICS: Late Breaking Results (2013)
HAIDM Workshop: Papers [Program Committee] (2016)
HCOMP: Works-in-Progress (2013)
HRI: Papers (2015)
IJCAI: *Interactive Machine Learning* Workshop [Program Committee] (2016)
IJHCS: Papers (2015)
IUI: Papers (2013, 2015)
MobileHCI: Papers (2014, 2015)
Springer Journal: Proposal Reviewer (2013)
UIST: Papers (2013, 2014, 2015); Demos (2012)
W4A: Papers (2014)
WWW [Program Committee]: Papers [Crowdsourcing and Social Media Track] (2016, 2017)

Volunteering and Other Service

CRA Outstanding Undergraduate Researcher Award 2016: Selection Committee.
CRA Outstanding Undergraduate Researcher Award 2015: Selection Committee.
CHI 2015: Translation Committee. Seoul, South Korea
CSCW 2013: Student Volunteer. San Antonio, TX
ASSETS 2013 Doctoral Consortium: Student Volunteer. Boulder, CO

COMPANIES

Legion Labs, Inc. Co-Founder and CTO Lead product development for Scribe, a real-time captioning service Work with universities to improve classroom accessibility for deaf and hard of hearing users	2013–Present
Edict Software Co. Owner Managed a staff of on average 6 – 8 programmers, designers and artists Provided programming, web design, and 3D mock-up services to small businesses	2007–2010

PROFESSIONAL MEMBERSHIPS

IEEE Special Technical Community for Human Computation	2013–Present
ACM Special Interest Group on Accessible Computing (SIGACCESS)	2013–Present
ACM Special Interest Group on Artificial Intelligence (SIGART)	2010–Present
Association for the Advancement of Artificial Intelligence (AAAI)	2009–Present
Association of Computing Machinery (ACM)	2007–Present

DEPARTMENT / INTERNAL SERVICE

CSE AccessComputing [Founding] Representative	2016–Present
CSE Teaching Visioning Committee	2017
Co-Director, Michigan Interactive and Social Computing group (MISC), University of Michigan	2016–2017
CSE Faculty Search Committee, University of Michigan	2016–2017
CSE Graduate Student Admissions Committee, University of Michigan	2016–2017
CSE Graduate Student Admissions Committee, University of Michigan	2015–2016
CS Graduate Student Admissions Committee, University of Rochester	2011–2013
Creator, Undergraduate Research Opportunities Webpage	2012–2013
University Teaching Assistant Workshop Leader	2011
CSE Undergraduate Curriculum Committee	2011