Michael S. Bernstein

Associate Professor of Computer Science
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Research Interests

Human-computer interaction, social computing, human-centered artificial intelligence

Academic History

Massachusetts Institute of Technology, Cambridge, MA   2012
Ph.D., Electrical Engineering and Computer Science

Massachusetts Institute of Technology, Cambridge, MA   2008
Master of Science, Electrical Engineering and Computer Science

Stanford University, Stanford, CA   2006
Bachelor of Science with Honors and Distinction, Symbolic Systems

Employment Record

Stanford University, Stanford, CA   1/13–present
Associate Professor of Computer Science, 2019–present
Assistant Professor of Computer Science, 2013–2019

Facebook Data Science Team, Menlo Park, CA   7/12–12/12
Postdoctoral Researcher

Professional Activities

Conference Chair
2023	CI 2023: ACM Collective Intelligence 2023 (w/ Saiph Savage, Alessandro Bozzon)
	HCOMP 2023: AAAI Human Computation and Crowdsourcing 2023 (w/ Saiph Savage, Alessandro Bozzon)

Program Committee Chair
2019	UIST: ACM Symposium on User Interface Software and Technology
2017	Collective Intelligence

Editor
2024	CSCW: ACM Conference On Computer-Supported Cooperative Work And Social Computing

Program Committee
2019	ACM CSCW
2018	ACM UIST
2017	ACH CHI
	ACM CSCW
2016	ACM CHI

2015	ACM UIST
2014	ACM UIST
	ACM CSCW
2013	ACM WWW
	AAAI HCOMP
	AAAI ICWSM
2012	AAAI HCOMP
	AAAI ICWSM
2011	ACM UIST
	AAAI ICWSM

Associate Editor

2022–present	ACM Collective Intelligence
2016–2019	ACM Transactions on Social Computing
2012	IEEE Computing, special issue on crowdsourcing
2011–2012	CrowdResearch.org
2010–2011	ACM XRDS magazine (formally Crossroads)

Venue Chair

2023	Organizer, UIST workshop on Architecting Novel Interactions With Generative AI Models
2021	Social Computing Systems Summer Camp co-chair
2012	ACM CHI videos chair, Technical Program
	Collective Intelligence proceedings chair
	CHI workshop on Rapidly Iterating Ideas in Crowdsourcing and Human Computation
2011	ACM CHI videos chair, Technical Program
	CHI workshop on Crowdsourcing and Human Computation
2010	AAAI UIST student volunteer chair
	AAAI ICWSM program committee
2007	General Chair, First Workshop on Human Computer Interaction and Information Retrieval (HCIR)

Organizations

Founding Chair, Stanford Ethics and Society Review (ESR) program
Founding Organizer, CrowdResearch.org. 2011 – 2014.
Founding Organizer, BostonCHI Labs research consortium. 2009 – 2012.
Organizer, MIT CSAIL Human-Computer Interaction Speaker Seminar. 2006 – 2010.
Invited blogger, ACM Communications of the ACM Blog. 2009 – 2010.

University and Departmental Service

2024	Interim Director, Stanford Symbolic Systems Program
	Director, Stanford Computer Science CURIS program
	Co-chair, Stanford Ethics and Society Review (ESR) program
	Organizer, Stanford Seminar on People, Computers and Design
	Stanford Computer Science executive committee
	Stanford d.school Director's Council
	Co-chair, Stanford Ethics and Society Review (ESR) program
2023	VPUE Undergraduate Advisory Council
	Director, Stanford Computer Science CURIS program
	Stanford Ethics in Engineering Task Force
	Co-chair, Stanford Ethics and Society Review (ESR) program
	Organizer, Stanford Seminar on People, Computers and Design
	Symbolic Systems steering committee

	Computer Science executive committee
	HCI qualifying exam chair
2022	Co-chair, Stanford Ethics and Society Review (ESR) program
	Organizer, Stanford Seminar on People, Computers and Design
	Symbolic Systems steering committee
	Computer Science executive committee
	Director, Stanford Computer Science CURIS program
	HCI qualifying exam chair
2021	Co-chair, Stanford Ethics and Society Review (ESR) program
2020	HCI qualifying exam chair
	Organizer, Stanford Seminar on People, Computers and Design
	Symbolic Systems steering committee
	Member, Stanford Faculty Task Force on Race Studies
2019	HCI qualifying exam chair
	Organizer, Stanford Seminar on People, Computers and Design
	Symbolic Systems steering committee
	Member, Stanford Long-Range Planning Committee on Ethics, Technology and Society
2018	Director, Stanford Computer Science CURIS program
	HCI qualifying exam chair
	Organizer, Stanford Seminar on People, Computers and Design
2017	HCI Lecturer search committee
	Symbolic Systems steering committee
	Center for Computational Social Science steering committee
	HCI qualifying exam chair
	Organizer, Stanford Seminar on People, Computers and Design
2016	HCI qualifying exam lead creator & chair
	Symbolic Systems steering committee
	Stanford Center for the Study of Language and Information advisory board
	Curriculum committee task force on scaling CS educational capacity
	Organizer, Stanford Seminar on People, Computers and Design
2015	VPTL Year of Learning steering committee
	Symbolic Systems steering committee
	Stanford Center for the Study of Language and Information advisory board
	Organizer, Stanford Seminar on People, Computers and Design
2014	Online learning ad-hoc committee
	Symbolic Systems steering committee
	Stanford Center for the Study of Language and Information advisory board
	Organizer, Stanford Seminar on People, Computers and Design
2013	Symbolic Systems steering committee
	Stanford Center for the Study of Language and Information advisory board

Awards and Honors

Selected Honors

Computer History Museum Patrick J. McGovern Tech for Humanity Prize
Lasting Impact Award, ACM UIST
Alfred P. Sloan Research Fellowship
Bass University Fellow, Stanford University

2023	Best Paper award, ACM UIST
	Best Paper award, ACM CSCW
	Best Paper award, ACM CHI

	Best Paper honorable mention, ACM CSCW
2022	Bass University Fellow: Akiko Yamazaki and Jerry Yang University Fellow in Undergraduate Education
	Methods award, ACM CSCW
	Best Paper award, ACM CHI
	CASBS Faculty Fellow
2021	Computer History Museum Patrick J. McGovern Tech for Humanity Prize
	CASBS Fellowship
	Siegel Family Endowment Partner Research Fellow
	Tau Beta Pi Teaching Honor Roll
2020	Lasting Impact Award, ACM UIST
	Best Paper honorable mention x2 (two independent honorable mentions on different papers), ACM CSCW
2019	STMicroelectronics Faculty Scholar, Stanford University 2019–2023
	Best Paper award, ACM CHI
	Best Paper honorable mention, AAAI HCOMP
2018	Best Paper honorable mention, ACM CHI
2017	Best Paper award, ACM CHI
	Best Paper award, ACM CSCW
	Best Paper honorable mention, ACM UIST
	Best Paper honorable mention x2 (two independent honorable mentions on different papers), ACM CHI
	Outstanding Academic Title, American Library Association, *Choice:* Handbook of Collective Intelligence
2016	Alfred P. Sloan Research Fellowship
	Best Paper award, ACM CHI
	Best Paper honorable mention, ACM CHI
2015	Invited paper in Communications of the ACM, Technical Perspective
	Best Paper honorable mention x5 (five independent honorable mentions on different papers), ACM CHI
	Best Paper honorable mention, ACM CSCW
2014	Best Paper award, ACM UIST
	National Academy of Sciences Kavli Fellow
	NSF CAREER award
2013	Robert N. Noyce Family Faculty Scholar (2013–2015)
	Yahoo! Academic Career Enhancement Award
	Best Paper honorable mention, ACM CHI
	Best Paper honorable mention, ACM CHI
2012	Best Short Paper honorable mention, ACM CSCW
	George M. Sprowls Award for best doctoral thesis in Computer Science at MIT
	Microsoft Research PhD Fellowship
2011	Best Paper award, AAAI ICWSM
	Best Student Paper award, ACM UIST
2010	Best Short Paper honorable mention, ACM CHI
2009	Xerox Graduate Fellowship
2008	National Science Foundation Graduate Research Fellowship
2007	Best Paper award, ACM UIST
2006	

Publications

Top-tier venues in human-computer interaction include ACM conferences such as CHI, UIST, and CSCW. In 2018, CSCW transitioned to a hybrid journal structure and renamed itself Proceedings of the ACM: CSCW (PACM: CSCW). Students are typically named first in human-computer interaction research and faculty are named last. Supervised PhD, Masters, and undergraduate students **bolded** and postdocs *italicized*, per Stanford policy.

Refereed Conference and PACM (conference-journal hybrid) papers

[1] **Ma, T.**, Bernstein, M., Johari, R., and Garg, N. Balancing Producer Fairness and Efficiency via Prior-Weighted Rating System Design. *International AAAI Conference on Web and Social Media (ICWSM).* 2025.

[2] Lee, Y., **Lam, M., Vasconcelos, H.,** Bernstein, M., and Finn, C. Clarify: Improving Model Robustness With Natural Language Corrections. *UIST 2024: ACM Symposium on User Interface Software and Technology.* 2024.

[3] Valentine, M., Pratt, A., Hinds, R., and Bernstein, M. The Algorithm and the Org Chart: How Algorithms Can Conflict with Organizational Structures. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2024).* 2024.

[4] Valentine, M., Bohn, R., Pratt, A., Jain, P., Singer, S., and Bernstein, M. Constructing a Classification Scheme— and its Consequences. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2024).* 2024.

[5] *Seering, J.*, **Khadka, M.,** Haghighi, N., Yang, T., **Xi, Z.,** and Bernstein, M. Chillbot: Content Moderation in the Backchannel. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2024).* 2024.

[6] **Popowski, L., Zhang, Y.,** and Bernstein. M. Commit: Online Groups with Participation Commitments. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2024).* 2024.

[7] **Lam, M., Teoh, J.,** Landay, J., Heer, J., and Bernstein, M. Concept Induction: Analyzing Unstructured Text with High-Level Concepts Using LLooM. *CHI 2024: SIGCHI Conference on Human Factors in Computing Systems.* 2024.

[8] **Shaikh, O.**, Chai, V., Gelfand, V., Yang, D., and Bernstein, M. Rehearsal: Simulating Conflict to Teach Conflict Resolution. *CHI 2024: SIGCHI Conference on Human Factors in Computing Systems.* 2024.

[9] *Zhang, A.*, Bernstein, M., Karger, D., and Ackerman, M. Form-From: A Design Space of Social Media Systems. *Proc. ACM Hum.-Comput. Interact. CSCW, (Apr. 2024).* 2024.

[10] *Jia, C.,* **Lam, M., Mai, M.C.,** Hancock, J., and Bernstein, M. Embedding Democratic Values into Social Media AIs via Societal Objective Functions. *Proc. ACM Hum.-Comput. Interact. CSCW, (Apr. 2024).* 2024.

[11] **Park, J.S.**, **O'Brien, J.**, Cai, C., Ringel Morris, M., Liang, P., and Bernstein, M.S. Generative Agents: Interactive Simulacra of Human Behavior. *UIST 2023: ACM Symposium on User Interface Software and Technology.* Best Paper award.

[12] **He, W.**, **Gordon, M.**, **Popowski, L.,** and Bernstein, M.S. Cura: Curation at Social Media Scale. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2023).* 2023. Best Paper award.

[13] **Shaikh, O.**, Zhang, H., Held, W., Bernstein, M.S., and Yang, D. On Second Thought, Let's Not Think Step by Step! Bias and Toxicity in Zero-Shot Reasoning. *ACL 2023: Annual Meeting of the Association for Computational Linguistics.* 2023.

[14] **Lam, M.**, Ma, Z., **Li, A.**, **Freitas, I.**, Wang, D., Landay, J., and Bernstein, M.S. Model Sketching: Centering Concepts in Early-Stage Machine Learning Model Design. *CHI 2023: SIGCHI Conference on Human Factors in Computing Systems.* 2023.

[15] Cao, H., Lu, Y., Deng, Y., McFarland, D., and Bernstein, M.S. Breaking Out of the Ivory Tower: A Large-scale Analysis of Patent Citations to HCI Research. *CHI 2023: SIGCHI Conference on Human Factors in Computing Systems.* 2023. Best Paper award.

[16] **Vasconcelos, H.**, Jörke, M., Grunde-McLaughlin, M., Gerstenberg, T., Bernstein, M.S., and Krishna, R. 2023. Explanations Can Reduce Overreliance on AI Systems During Decision-Making. *Proc. ACM Hum.-Comput. Interact. CSCW, (Jan. 2023).* 2023. Best Paper honorable mention.

[17] **Ma, Z.**, Wang, R., Fei-Fei, L.F.-F., Bernstein, M.S., and **Krishna, R.** ELIGN: Expectation Alignment as a Multi-Agent Intrinsic Reward. *NeurIPS 2022.* 2022.

[18] **Park, J.S., Popowski, L.,** Cai, C., Morris, M.R., Liang, P., and Bernstein, M.S. 2022. Social Simulacra: Creating Populated Prototypes for Social Computing Systems. *UIST 2022: ACM Symposium on User Interface Software and Technology.*

[19] **Lam, M.S., Gordon, M.L.,** Metaxa, D., Hancock, J., Landay, J., and Bernstein, M.S. 2022. End-User Audits: A System Empowering Communities to Lead Large-Scale Investigations of Harmful Algorithmic Behavior. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2022).*

[20] **Park, J.S.,** *Seering, J.,* and Bernstein, M.S. 2022. Measuring the Prevalence of Anti-Social Behavior in Online Communities. *Proc. ACM Hum.-Comput. Interact. CSCW, (Nov. 2022).*

[21] **Gordon, M.L., Lam, M.S., Park, J.S.,** Patel, K., Hancock, J.T., Hashimoto, T., and Bernstein, M.S. 2022. Jury Learning: Integrating Dissenting Voices into Machine Learning Models. *CHI 2022: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper award.**

[22] **Hu, X.E.,** Hinds, R., Valentine, M.E., and Bernstein, M.S. 2022. A "Distance Matters" Paradox: Facilitating Intra-Team Collaboration Can Harm Inter-Team Collaboration. *Proc. ACM Hum.-Comput. Interact. CSCW, (April 2022).*

[23] **Pan, C.A., Yakhmi, S., Iyer, T.P.,** Strasnick, E., *Zhang, A.X.,* and Bernstein, M.S. 2022. Comparing the Perceived Legitimacy of Content Moderation Processes: Contractors, Algorithms, Expert Panels, and Digital Juries. *Proc. ACM Hum.-Comput. Interact. CSCW, (April 2022).*

[24] Morina, D., and Bernstein, M.S. 2022. A Web-Scale Analysis of the Community Origins of Image Memes. *Proc. ACM Hum.-Comput. Interact. CSCW, (April 2022).*

[25] **Park, J. S.,** Bernstein, M., Brewer, R., Kamar, E., and Morris, Meredith R. Understanding the Representation and Representativeness of Age in AI Data Sets. *AIES 2021: AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society.*

[26] **Gordon, M.,** Zhou, K., Hashimoto, T., and Bernstein, M. 2021. The Disagreement Deconvolution: Bringing Machine Learning Performance Metrics In Line With Reality. *CHI 2021: SIGCHI Conference on Human Factors in Computing Systems.*

[27] **Hu, X.E.,** *Whiting, M.E.,* and Bernstein, M. 2021. Can Online Juries Make Consistent, Repeatable Decisions? *CHI 2021: SIGCHI Conference on Human Factors in Computing Systems.*

[28] **Kovacs, G.,** Wu, Z., and Bernstein, M. 2021. Not Right Now, But Ask Again Next Time: Users Weaken Their Behavior Change Regimen Over Time, But Believe They Will Imminently Re-Strengthen It. *CHI 2021: SIGCHI Conference on Human Factors in Computing Systems.*

[29] *Zhang, A.,* **Hugh, G.,** and Bernstein, M. PolicyKit: Building Governance in Online Communities. 2020. *UIST 2020: ACM Symposium on User Interface Software and Technology.*

[30] Cao, H., **Chen, V., Yang, V., Lee, Y.J., Stone, L.,** *Whiting, M.,* and Bernstein, M. 2020. My Team Will Go On: Differentiating High and Low Viability Teams through Team Interaction. *Proc. ACM Hum.-Comput. Interact. CSCW, (October 2020).* **Best Paper honorable mention.**

[31] **Khadpe, P., Krishna, R.,** Fei-Fei, L.F.-F., Hancock, J., and Bernstein, M. 2020. Conceptual Metaphors Impact Perceptions of Human-AI Collaboration. *Proc. ACM Hum.-Comput. Interact. CSCW, (October 2020).* **Best Paper honorable mention.**

[32] *Whiting, M.,* **Gao, I., Xing, M., Diarrassouba, N. (J.), Nguyen, T.,** and Bernstein, M. 2020. Parallel Worlds: Repeated Initializations of the Same Team To Improve Team Viability. *Proc. ACM Hum.-Comput. Interact. CSCW, (October 2020).*

[33] Zhou, S., **Gordon, M., Krishna, R., Narcomey, A.,** Fei-Fei, L.F.-F., and Bernstein, M. 2019. HYPE: Human eYe Perceptual Evaluation of Generative Models. *NeurIPS 2019.* **Oral presentation (top 0.5% of submissions).**

[34] *Whiting, M.,* **Blaising, A., Barreau, C., Fiuza, L., Marda, N.,** Valentine, M., and Bernstein, M. 2019. Did It Have To End This Way? Understanding the Consistency of Team Fracture. *Proc. ACM Hum.-Comput. Interact. CSCW, (November 2019).*

[35] *Whiting, M.,* **Hugh, G.,** and Bernstein, M. 2019. Fair Work: Crowd Work Minimum Wage with One Line of Code. *HCOMP 2019.* **Best Paper honorable mention.**

[36] **Park, J.**, **Krishna, R.**, **Khadpe, P.**, Li Fei-Fei, and Bernstein, M. 2019. AI-based Request Augmentation to Increase Crowdsourcing Participation. *HCOMP 2019.*

[37] Chen, V., Varma, P., **Krishna, R.**, Bernstein, M., Ré, C., and Fei-Fei, L.F.-F. 2019. Scene Graph Prediction with Limited Labels. *ICCV 2019.*

[38] **Krishna, R.**, Fei-Fei, L.F-F., Bernstein, M. 2019. Information Maximizing Visual Question Generation. *CVPR 2019.*

[39] **Alkhatib, A.**, and Bernstein, M. 2019. Street–Level Algorithms: A Theory At The Gaps Between Policy and Decisions. *CHI 2019: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper award.**

[40] **Kovacs, G., Gregory, A.M., Ma, Z., Wu, Z., Emami, G., Ray, J.**, and Bernstein, M. 2019. Conservation of Procrastination: Do Productivity Interventions Save Time Or Just Redistribute It? *CHI 2019: SIGCHI Conference on Human Factors in Computing Systems.*

[41] **Salehi, N.**, and Bernstein, M. 2018. Hive: Collective Design Through Network Rotation. *Proc. ACM Hum.-Comput. Interact. 2, CSCW, Article 151 (November 2018).*

[42] **Kovacs, G., Wu, Z.**, and Bernstein, M. 2018. Rotating Online Behavior Change Interventions Increases Effectiveness But Also Increases Attrition. *Proc. ACM Hum.-Comput. Interact. 2, CSCW, Article 95 (November 2018).*

[43] **Krishna, R.**, Chami, I., Bernstein, M., and Fei-Fei, L. 2018. Referring Relationships. *CVPR 2018.*

[44] Zhou, S., Valentine, M., and Bernstein, M. 2018. In Search of the Dream Team: Temporally Constrained Multi-Armed Bandits for Identifying Effective Team Structures. *CHI 2018: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[45] **Fast, E.**, Chen, B., **Mendelsohn, J.**, Bassen, J., and Bernstein, M. 2018. Iris: A Conversational Agent for Complex Tasks. *CHI 2018: SIGCHI Conference on Human Factors in Computing Systems.*

[46] **Retelny, D.**, Bernstein, M., and Valentine, M. 2017. No Workflow Can Ever Be Enough: How Crowdsourcing Workflows Constrain Complex Work. *Proc. ACM Hum.-Comput. Interact. 1, CSCW, Article 89 (November 2017).*

[47] Vaish, R., Gaikwad, S., **Kovacs, G.**, Veit, A., **Krishna, R.**, Ibarra, I.A., Simoiu, C., Wilber, M., Belongie, S., Goel, S., Davis, J., Bernstein, M. Crowd Research: Open and Scalable University Laboratories. 2017. *UIST 2017: ACM Symposium on User Interface Software and Technology.* **Best Paper honorable mention.**

[48] Lin, Z., **Salehi, N.**, Yao, B., Chen, Y., Bernstein, M. Better When It Was Smaller? Community Content and Behavior After Massive Growth. 2017. *ICWSM 2017: AAAI Conference on Web and Social Media.*

[49] Valentine, M., **Retelny, D., To, A., Rahmati, N., Doshi, T.**, Kim, M., Fonua, M., Bernstein, M. Flash Organizations: Crowdsourcing Complex Work by Structuring Crowds As Organizations. 2017. *CHI 2017: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper award.**

[50] **Alkhatib, A.**, Bernstein, M., Levi, M. Examining Crowd Work and Gig Work Through The Historical Lens of Piecework. 2017. *CHI 2017: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[51] *Kokkalis, N.*, Fan, C., Roith, J., Bernstein, M., Klemmer, S. MyriadHub: Efficiently Scaling Personalized Email Conversations with Valet Crowdsourcing. *CHI 2017: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[52] **Cheng, J.**, Bernstein, M., Danescu-Niculescu-Mizil, C., Leskovec, J. Anyone Can Become a Troll: Causes of Trolling Behavior in Online Discussions. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.* **Best Paper award.**

[53] **Salehi, N., McCabe, A.**, Valentine, M., and Bernstein, M. Huddler: Convening Stable and Familiar Crowd Teams Despite Unpredictable Availability. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.*

[54] **Kim, J., Sterman, S., Cohen, A.A.B.**, and Bernstein, M. Mechanical Novel: Crowdsourcing Complex Work through Reflection and Revision. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.*

[55] **Kim, J.**, Agrawala, M., and Bernstein, M. Mosaic: Designing Online Creative Communities for Sharing Works-in-Progress. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.* **Best Paper honorable mention.**

[56] *Kokkalis, N.,* Fan, C., and Bernstein, M. Founder Center: Enabling Access to Collective Social Capital. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.*

[57] **Hata, K.**, **Krishna, R.,** Fei-Fei, L., and Bernstein, M. A Glimpse Far into the Future: Understanding Long-term Crowd Worker Accuracy. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.*

[58] Mark E. Whiting, Dilrukshi Gamage, Aaron Gilbee, Snehal Gaikwad, Shirish Goyal, Alipta Ballav, Dinesh Majeti, Nalin Chhibber, Freddie Vargus, Teo Moura, Angela Richmond-Fuller, Varshine Chandrakanthan, Gabriel Bayomi Tinoco Kalejaiye, Tejas Seshadri Sarma, Yoni Dayan, Adam Ginzberg, Mohammed Hashim Kambal, Kristy Milland, Sayna Parsi, Catherine A. Mullings, Henrique Orefice, Sekandar Matin, Vibhor Sehgal, Sharon Zhou, Akshansh Sinha, Jeff Regino, Rajan Vaish, Michael S. Bernstein. Crowd Guilds: Worker-led Reputation and Feedback on Crowdsourcing Platforms. 2017. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work and Social Computing.*

[59] Lu, C., **Krishna, R.**, Bernstein, M., and Fei-Fei, L. Visual Relationship Detection with Language Priors. 2016. *ECCV 2016: European Conference on Computer Vision.* Oral presentation.

[60] Gaikwad, S.S., Morina, D., Ginzberg, A., Mullings, C., Goyal, S., Gamage, D., Diemert, C., Burton, M., Zhou, S., Whiting, M., Ziulkoski, K., Ballav, A., Gilbee, A., Niranga,, S.S., Sehgal, V., Lin, J., Kristianto, L., Richmond-Fuller, A., Regino, J., Chhibber, N., Majeti, D., Sharma, S., Mananova, K., Dhakal, D., Dai, W., Purynova, V., Sandeep, S., Chandrakanthan, V., Sarma,, T., Matin, S., Nassar, A., Nistala, R., Stolzoff, A., Milland, K., Mathur, V., Vaish, R., and Bernstein, M. Boomerang: Rebounding the Consequences of Reputation Feedback on Crowdsourcing Platforms. 2016. *UIST 2016: ACM Symposium on User Interface Software and Technology.*

[61] **Fast, E.**, and Bernstein, M. Meta: Enabling Programming Languages to Learn from the Crowd. 2016. *UIST 2016: ACM Symposium on User Interface Software and Technology.*

[62] **Fast, E.**, **Vachovsky, T.**, and Bernstein, M. Shirtless and Dangerous: Quantifying Linguistic Signals of Gender Bias in an Online Fiction Writing Community. 2016. *ICWSM 2016: AAAI Conference on Weblogs and Social Media.*

[63] **Fast, E.**, Chen, B., and Bernstein, M. Empath: Understanding Topic Signals in Large-Scale Text. 2016. *CHI 2016: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper award.**

[64] **Fast, E.**, McGrath, W., **Rajpurkar, P.**, and Bernstein, M. Augur: Mining Human Behaviors from Fiction to Power Interactive Systems. 2016. *CHI 2016: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[65] **Krishna, R., Hata, K.**, Chen, S., Kravitz, J., Shamma, D., Fei-Fei, L., and Bernstein, M. Embracing Error to Enable Rapid Crowdsourcing. 2016. *CHI 2016: SIGCHI Conference on Human Factors in Computing Systems.*

[66] Suzuki, R., **Salehi, N., Lam, M.S., Marroqin, J.,** and Bernstein, M. Atelier: Repurposing Expert Crowdsourcing Tasks as Micro-internships. 2016. *CHI 2016: SIGCHI Conference on Human Factors in Computing Systems.*

[67] Ikeda, K., and Bernstein, M. Pay It Backward: Per-Task Payments on Crowdsourcing Platforms Reduce Productivity. 2016. *CHI 2016: SIGCHI Conference on Human Factors in Computing Systems.*

[68] Zhu, Y., Groth, O., Bernstein, M., and Fei Fei, L. Visual7W: Grounded Question Answering in Images. 2016. *CVPR 2016.*

[69] **Salehi, N.**, Irani, L., Bernstein, M., **Alkhatib, A.**, **Ogbe, E.**, Milliland, K., and Clickhappier. We Are Dynamo: Overcoming Stalling and Friction in Collective Action for Crowd Workers. 2015. *CHI 2015: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[70] **Cheng, J.**, Teevan, J., Iqbal, S., and Bernstein, M. Break It Down: A Comparison of Macro- and Microtasks. 2015. *CHI 2015: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[71] **Cheng, J.**, Teevan, J., and Bernstein, M. Measuring Crowdsourcing Effort with Error-Time Curves. 2015. *CHI 2015: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[72] **Kim, J.**, Dontcheva, M., Li, W., Bernstein, M., and Steinsapir, D. Motif: Supporting Novice Creativity through Expert Patterns. 2015. *CHI 2015: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[73] L., W., Kim, J., Rafter, N., **Sen, O.**, Bigham, J., and Bernstein, M. Apparition: Crowdsourced User Interfaces That Come To Life As You Sketch Them. 2015. *CHI 2015: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[74] Johnson, J., **Krishna, R.**, Stark, M., Li-Jia Li, Shamma D., Bernstein, M., and Fei-Fei, L. Image Retrieval using Scene Graphs. 2015. *CVPR 2015: Computer Vision and Pattern Recognition.*

[75] **Kulkarni, C.**, Bernstein, M., and Klemmer, S. Rapid peer feedback in MOOCs emphasizes iteration and improves performance. 2015. *Learning@Scale 2015.*

[76] **Kotturi, Y., Kulkarni, C.**, Bernstein, M., and Klemmer, S. 2015. Structure and messaging techniques for online peer learning systems that increase stickiness. *Learning@Scale 2015.*

[77] **Cheng, J.**, and Bernstein, M. Flock: Hybrid Crowd-Machine Learning Classifiers. 2015. *CSCW 2015: ACM Conference on Computer-Supported Cooperative Work.* **Best Paper honorable mention.**

[78] **Kulkarni, C., Cambre, J., Kotturi, Y.**, Bernstein, M., and Klemmer, S. Making Distance Matter with Small Groups in Massive Classes. 2015. *CSCW 2015: ACM Conference on Computer-Supported Cooperative Work.*

[79] **Retelny, D.**, Robaszkiewicz, S., **To, A.**, L., W., **Patel, J., Rahmati, N., Doshi, T.**, Valentine, M., and Bernstein, M. Expert Crowdsourcing with Flash Teams. 2014. *UIST 2014: ACM Symposium on User Interface Software and Technology.* **Best Paper award.**

[80] Verroios, V., and Bernstein, M. Context Trees: Crowdsourcing Global Understanding from Local Views. 2014. *HCOMP 2014: AAAI Conference on Human Computation and Crowdsourcing.*

[81] Demiralp, Ç., Bernstein, M., and Heer, J. Learning Perceptual Kernels for Visualization Design. 2014. *InfoVis 2014: IEEE Transactions on Visualization and Computer Graphics.*

[82] **Fast, E., Steffee, D., Wang, L.**, and Bernstein, M. Emergent, Crowd-scale Programming Practice in the IDE. 2014. *CHI 2014: SIGCHI Conference on Human Factors in Computing Systems.*

[83] Vaish, R., **Wyngarden, K., Chen, J., Cheung, B.**, Bernstein, M. Twitch Crowdsourcing: Crowd Contributions in Short Bursts of Time. 2014. *CHI 2014: SIGCHI Conference on Human Factors in Computing Systems.*

[84] Deng, J., Russakovsky, O., Krause, J., Bernstein, M., Berg, A., and Fei-Fei, L. Scalable Multi-label Annotation. 2014. *CHI 2014: SIGCHI Conference on Human Factors in Computing Systems.*

[85] Bakshy, E., Eckles, D., Bernstein, M. Advanced Internet Experimentation with PlanOut. 2014. *WWW 2014: International World Wide Web Conference.*

[86] **Kulkarni, C.**, Socher, R., Bernstein, M., Klemmer, S. Scaling Short-answer Grading by Combining Peer Assessment with Algorithmic Scoring. *Learning@Scale 2014.*

[87] **Cheng, J.**, Bernstein, M. Catalyst: Triggering Collective Action with Thresholds. 2014. *CSCW 2014: ACM Conference on Computer-Supported Cooperative Work.*

[88] **Kim, J., Cheng, J.**, Bernstein, M. Ensemble: Exploring Complementary Strengths of Leaders and Crowds in Creative Collaboration. 2014. *CSCW 2014: ACM Conference on Computer-Supported Cooperative Work.*

[89] **Fast, E.**, Lee, C., Aiken, A., Bernstein, M., Koller, D., and Smith, E. Crowd-scale Interactive Formal Reasoning and Analytics. 2013. *UIST 2013: ACM Symposium on User Interface Software and Technology.*

[90] Bernstein, M., Bakshy, E., Burke, M., and Karrer, B. Quantifying the Invisible Audience in Social Networks. 2013. *CHI 2013: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[91] *Kokkalis, N.*, Koehn, T., Pfeiffer, C., Chornyi, D., Bernstein, M., and Klemmer, S. EmailValet: Managing Email Overload through Private, Accountable Crowdsourcing. 2013. *CSCW 2013: ACM Conference on Computer-Supported Cooperative Work.*

[92] Kittur, A., Nickerson, J., Bernstein, M., Gerber, E., Shaw, A., Zimmerman, J., Lease, M., and Horton, J. The Future of Crowd Work. 2013. *CSCW 2013: ACM Conference on Computer-Supported Cooperative Work.*

[93] Bernstein, M., Teevan, J., Dumais, S., Liebling, D., and Horvitz, E. Direct Answers for Search Queries in the Long Tail. 2012. *CHI 2012: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention.**

[94] Bernstein, M., Karger, D.R., Miller, R.C., and Brandt, J. Analytic Methods for Optimizing Realtime Crowdsourcing. 2012. *CI 2012: Collective Intelligence.*

[95] André, P., Bernstein, M., and Luther, K. 2012. Who Gives A Tweet? Evaluating Microblog Content Value. *CSCW 2012: ACM Conference on Computer-Supported Cooperative Work.* **Best Short Paper honorable mention.**

[96] Bernstein, M., Brandt, J., Miller, R.C., and Karger, D.R. 2011. Crowds in Two Seconds: Enabling Realtime Crowd-Powered Interfaces. *UIST 2011: ACM Symposium on User Interface Software and Technology.*

[97] Xiao, X., Bernstein, M., Yao, L., Lakatos, D., Gust, L., Acquah, K., Ishii, H. 2011. PingPong++: Community Customization in Games and Entertainment. *ACE 2011: ACM Conference on Advances in Computer Entertainment Technology.*

[98] Bernstein, M., Monroy-Hernandez, A., Harry, D., André, P., Panovich, K., and Vargas, G. 2011. 4chan and /b/: An Analysis of Anonymity and Ephemerality in a Large Online Community. *ICWSM 2011: AAAI Conference on Weblogs and Social Media.* **Best Paper award.**

[99] Marcus, A., Bernstein, M., Badar, O., Karger, D.R., Madden, S., and Miller, R.C. 2011. TwitInfo: Aggregating and Visualizing Microblogs for Event Exploration. *CHI 2011: SIGCHI Conference on Human Factors in Computing Systems.*

[100] Bernstein, M., Miller, R.C., Little, G., Ackerman, M., Hartmann, B., Karger, D.R., Crowell, D., and Panovich, K. 2010. Soylent: A Word Processor with a Crowd Inside. *UIST 2010: ACM Symposium on User Interface Software and Technology.* **Best Student Paper award.**

[101] Bernstein, M., Suh, B., Hong, L., Chen, J., Kairam, S., and Chi, E.H. 2010. Eddi: Interactive Topic-Based Browsing of Social Status Streams. *UIST 2010: ACM Symposium on User Interface Software and Technology.*

[102] Bernstein, M., Marcus, A., Karger, D.R., and Miller, R.C. 2010. Enhancing Directed Content Sharing on the Web. *CHI 2010: SIGCHI Conference on Human Factors in Computing Systems.*

[103] Chen, J., Nairn, R., Nelson, L., Bernstein, M., and Chi. E.H. Short and Tweet: Experiments on Recommending Content from Information Streams. *CHI 2010: SIGCHI Conference on Human Factors in Computing Systems.*

[104] Bernstein, M., Tan, D., Smith, G., Czerwinski, M., and Horvitz, E. 2009. Collabio: A Game for Annotating People within Social Networks. *UIST 2009: ACM Symposium on User Interface Software and Technology.*

[105] Van Kleek, M., Bernstein, M., Panovich, K., Vargas, G., Karger, D.R., and schraefel, mc. 2009. Note to Self: Examining Personal Information Keeping in a Lightweight Notekeeping Tool. *CHI 2009: SIGCHI Conference on Human Factors in Computing Systems.* **Best Short Paper honorable mention.**

[106] Bernstein, M., Sharger, J., and Winograd, T. 2008. Taskposé: Exploring Fluid Boundaries in a Task-Based Window Manager. *UIST 2008: ACM Symposium on User Interface Software and Technology.*

[107] Miller, R.C., Chou, V., Bernstein, M., Little, G., Van Kleek, M., Karger, D., and schraefel, mc. 2008. Inky: A Sloppy Command Line for the Web with Rich Visual Feedback. *UIST 2008: ACM Symposium on User Interface Software and Technology.*

[108] Van Kleek, M., Bernstein, M., Karger, D.R., and schraefel, mc. 2007. GUI — Phooey!: The Case for Text Input. In *Proceedings of UIST 2007: ACM Symposium on User Interface Software and Technology.*

[109] Hartmann, B., Klemmer, S.R., Bernstein, M., Abdulla, L., Burr, B., Robinson-Mosher, A., Gee, J. 2006. Reflective physical prototyping through integrated design, test, and analysis. In *Proceedings of UIST 2006: ACM Symposium on User Interface Software and Technology.* **Best Paper award.**

Refereed Journal Publications

[1]

[2] Hurt, B., Hoque, O.B., Mokrzycki, F., Mathew, A., Xue, M., Gabitsinashvili, L., Mokrzycki, H., Fischer, R., Telesca, N., Xue, L.A. Ritchie, J., Zamfirescu-Pereira, J.D., Bernstein, M., Whiting, M., and Marathe, M. COVID-

19 non-pharmaceutical interventions: data annotation for rapidly changing local policy information. 2023. *Nature Scientific Data* 10 (126).

[3] **Krishna, R., Lee, D.**, FeiFei, L. and Bernstein, M.S. 2022. Socially Situated Artificial Intelligence Enables Learning from Human Interaction. *Proceedings of the National Academy of Sciences* 119 (39).

[4] *Seering, J.*, Dym, B., Kaufman, G., & Bernstein, M. (2022). Pride and Professionalization in Volunteer Moderation: Lessons for Effective Platform-User Collaboration. *Journal of Online Trust and Safety*, *1*(2).

[5] Bernstein, M., Levi, M., Magnus, D., Rajala, B., Satz, D., and Waeiss, C. 2021. Ethics and Society Review: Ethics Reflection As A Precondition to Research Funding. *Proceedings of the National Academy of Sciences* 118 (52).

[6] **Salehi, N.**, Bernstein, M. 2018. Ink: Increasing Worker Agency to Reduce Friction in Hiring Crowd Workers. *ACM Transactions on Computer-Human Interaction (TOCHI), 25(2).*

[7] **Krishna, R.**, Zhu, Y., Groth, O., Johnson, J., **Hata, K.**, Kravitz, J., Chen, S., Kalantidis, Y., Jia-Li, L., Shamma, D.A., Bernstein, M., Fei-Fei, L. 2017. Visual Genome: Connecting Language and Vision Using Crowdsourced Dense Image Annotations. International Journal of Computer Vision (IJCV).

[8] Russakovsky, O., Deng, J., Su, H., Krause, J., Satheesh, S., Ma, S., Huang, Z., Karpathy, A., Khosla, A., Bernstein, M., Berg, A.C. and Fei-Fei, L. 2015. ImageNet Large Scale Visual Recognition Challenge. International Journal of Computer Vision (IJCV).

[9] Bernstein, M., Tan, D., Smith, G., Czerwinski, M., and Horvitz, E. Personalization via Friendsourcing. 2010. *ACM Transactions on Computer-Human Interaction (TOCHI), 17(2).*

[10] Bernstein, M., Van Kleek, M., Karger, D.R., and schraefel, mc. 2008. Information Scraps: How and Why Information Eludes our Personal Information Management Tools. *ACM Transactions on Information Systems (TOIS), 26(4).*

Software

[1] Generative agents source code. 1,800 forks and 14,800 stars. Released open source.

[2] Fair Work script for fair payment of crowd workers on Amazon Mechanical Turk. fairwork.stanford.edu and released open source.

[3] Daemo crowdsourcing platform, as part of the Stanford Crowd Research Collective. Released open source.

[4] PlanOut web experimentation framework. Developed with Eytan Bakshy and Dean Eckles. Released open source. Others have since ported the system to PHP, Java, Ruby, Go, and Javascript.

Books

[1] Valentine, M., and Bernstein, M. Under Contract. *Flash Teams: Experts Everywhere, All the Time*. MIT Press.

[2] Malone, T., and Bernstein, M., Editors. 2015. *The Handbook of Collective Intelligence.* MIT Press.
Outstanding Academic Title citation, American Library Association *Choice.*

Book Chapters

[1] **Krishna, R.**, **Gordon, M.**, Fei-Fei, L.F.-F., Bernstein, M. Visual Intelligence through Human Interaction. In Li, Y. and Hilliges, O., Editors. *Artificial Intelligence for Human Computer Interaction: A Modern Approach.* Springer, 2021.

[2] Bigham, J., Bernstein, M., and Adar, E. Human-Computer Interaction and Collective Intelligence. In Malone, T. and Bernstein, M., Editors. *Collective Intelligence Handbook*. MIT Press, 2015.

[3] Little, G., Miller, R.C., Chou, V., Bernstein, M., Lau, T., Cypher, A. Sloppy Programming. In Cypher, A., Dontheva, M., Lau, T., and Nichols, J., Editors. *No Code Required: Giving Users Tools to Transform the Web.* Burlington: Morgan Kaufmann, 2010.

Juried Invited Articles, Nonarchival Papers, Posters, Videos, Works in Progress, Demonstrations

[1] Bernstein, M., Christin, A., Hancock, J., Hashimoto, T., *Jia, C.*, **Lam, M.**, Meister, N., Persily, N., *Piccardi, T.*, Saveski, M., Tsai, J., Ugander, J., & Xu, C. (2023). Embedding Societal Values into Social Media Algorithms. *Journal of Online Trust and Safety*, *2*(1). https://doi.org/10.54501/jots.v2i1.148

[2] Levi, M., Bernstein, M.S., Weiss, C. Broadening the Ethical Scope. 2022. *The American Journal of Bioethics*.

[3] **Lam, M.**, Young, G.B., Xu, C.Y., **Krishna, R.**, Bernstein, M. 2019. Eevee: Transforming Images by Bridging High-level Goals and Low-level Edit Operations. In *CHI 2019.*

[4]   **Krishna, R.,** Lee, D., Fei-Fei, L., Bernstein, M. 2018. Engagement Learning: Expanding Visual Knowledge by Engaging Online Participants. In *UIST 2018*.

[5]   Zhou, S., Mu, T., Goel, K., Bernstein, M., Brunskill, E. 2018. Shared Autonomy for Interactive Systems. In *UIST 2018*.

[6]   *Whiting, M.*, Gamage, D., Goyal, S., Gilbee, A., Majeti, D., Fuller, A., Salih, M., Sarma, T., Mathur, V., Pandey, M., Gaikwad, S., Vaish, R., and Bernstein, M. Designing a constitution for a self-governing crowdsourcing marketplace. In *Collective Intelligence 2017*.

[7]   Valentine, M., Bernstein, M., and **Retelny, D**. 2016. Crowd organizations: crowdsourcing complex work via reconfigurable organizational structures. In *Collective Intelligence 2016*.

[8]   **Metaxa-Kakavouli, D.**, Rusak, G., Teevan, J., Bernstein, M. The Web Is Flat: The Inflation of Uncommon Experiences Online. In *CHI 2016*. Best paper, late-breaking work.

[9]   Gaikwad, S., Morina, D., Nistala, R., Agarwal, M., Cossette, A., Bhanu, R., Savage, S., Narwal, V., Rajpal, K., Regino, J., Mithal, A., Ginzberg, A., Nath, A., R. Ziulkoski, K., Cossette, T., Gamage, D., Richmond-Fuller, A., Suzuki, R., Herrejon, J., V. Le, K., Flores-Saviaga, C., Thilakarathne, H., Gupta, K., Dai, W., Sastry, A., Goyal, S., Rajapakshe, T., Abolhassani, N., Xie, A., Reyes, A., Ingle, S., Jaramillo, V., . Godinez, M., Angel, W., Godinez, M., Toxtli, C., Flores, J., Gupta, A., Sethia, V., Padilla, D., Milland, K., Setyadi, K., Wajirasena, N., Batagoda, M., Cruz, R., Damon, J., Nekkanti, D., Sarma, T., . Saleh, M., Gongora-Svartzman, G., Bateni, S., Toledo-Barrera, G., Pena, A., Compton, R., Aariff, D., Palacios, L., P. Ritter, M., ha K.K., Ni, Kay, A., Uhrmeister, J., Nistala, S., Esfahani, M., Bakiu, E., Diemert, C., Matsumoto, L., Singh, M., Jaramillo-Lopez, V., Patel, K., **Krishna, R., Kovacs, G.,** Vaish, R., Bernstein, M. 2015. Daemo: a Self-Governed Crowdsourcing Marketplace. In *UIST 2015*.

[10]   **Salehi, N.**, Bernstein, M. 2015. Drawing Crowds out of Markets and Into Users' Just-in-Time Needs. In *Collective Intelligence 2015*.

[11]   Vaish, R., Davis, J., Bernstein, M. 2015. Crowdosurcing the Research Process. In *Collective Intelligence 2015*.

[12]   **Kim, J.**, Bagla, A., Bernstein, M. 2015. Designing Creativity Support Tools for Failure. In *Creativity and Cognition 2015*.

[13]   **Fast, E.**, Rajpurkar, P., Bernstein, M. 2015. Text Mining Human Behaviors for Interactive Systems. In *CHI 2015*.

[14]   Pandey, V., Kotturi, Y., **Kulkarni, C.**, Bernstein, M., and Klemmer, S. Connecting Stories and Pedagogy Increases Participant Engagement in Discussions. In *Learning@Scale 2015*.

[15]   Embiricos, A., **Rahmati, N.**, Zhu, N., and Bernstein, M. Structured handoffs in expert crowdsourcing improve communication and work output. 2014. In *UIST 2014*.

[16]   **Retelny, D.**, Robaszkiewicz, S., To, A., Bernstein, M. Expert Crowdsourcing with Flash Teams. 2013. In *CrowdConf 2013*.

[17]   Marcus, A., Bernstein, M., Badar, O., Karger. D.R., Madden, S., Miller, R.C. 2011. Tweets as Data: Demonstration of TweeQL and TwitInfo. In *SIGMOD 2011 Demos*.

[18]   Bernstein, M., Ackerman, M.A., Chi, E.H., and Miller, R.C. The Trouble with Social Computing Systems Research. 2011. In *alt.chi 2011: Extended Abstracts of CHI 2011*.

[19]   Bernstein, M., André, P., Luther. K., Poole, E., Solovey, E., Paul, S., Kane, S., and Grudin, J. CHIstory. 2009. In *CHI 2009: SIGCHI Conference on Human Factors in Computing Systems*. Most Entertaining Video award.

[20]   Bernstein, M., Van Kleek, M., schraefel, mc, and Karger, D.R. 2007. Management of Personal Information Scraps. 2007. In *Extended Abstracts of CHI 2007: Work-in-progress.* People's Choice award.

[21]   Bernstein, M., Robinson-Mosher, A., Yeh, R.B., Klemmer, S.R. 2006. Diamond's Edge: From Notebook to Table and Back Again. In *Conference Supplement to Ubicomp 2006: Posters*.

[22]   Hartmann, B., Klemmer, S.R., Bernstein, M., and Mehta, N. 2005. *d.tools: Visually Prototyping Physical UIs through Statecharts. In Conference Supplement to UIST 2005*: *Demonstrations*. Seattle, WA, October 2005.

Magazine Articles
[1]   Bernstein, M., Miller, R.C., Little, G., Ackerman, M., Hartmann, B., Karger, D.R., Crowell, D., and Panovich, K. 2015. Soylent: A Word Processor with a Crowd Inside. Research Highlight, *Communications of the ACM*.

[2]   Marcus, A., Bernstein, M., Badar, O., Karger, D.R., Madden, S., and Miller, R.C. Processing and Visualizing the Data in Tweets. *SIGMOD Record 40,* 4 (2012).

[3]   Bernstein, M. Doing work, or Doing Work? *Communications of the ACM* 53, 8 (Aug. 2010), 8-9.

Workshop Papers

[1]   Lee, Y., **Lam, M.**, Vasconcelos, H., Bernstein, M., and Finn, C. 2023. Interactive Model Correction with Natural Language. *NeurIPS workshop: XAI in Action: Past, Present, and Future Applications.*

[2]   Kreiss, E., Srinivasan, K., *Piccardi, T.*, Hermosillo, J.A., Bennett, C., Bernstein, M.S., Morris, M.R. and Potts, C., 2023. Characterizing Image Accessibility on Wikipedia across Languages. *WikiWorkshop 2023.*

[3]   Ma, T., Johari, R., Bernstein, M. S., & Garg, N. (2022). Parametric Empirical Bayes for Predicting Quality in Rating Systems. In *KDD Workshop on Online Marketplaces.*

[4]   Zhou, S., Luccioni, A., Cosne, G., Bernstein, M., and Bengio, Y. Establishing an Evaluation Metric to Quantify Climate Change Image Realism. In *NeurIPS 2019 Workshop on Tackling Climate Change with Machine Learning.*

[5]   Bernstein, M. 2016. Working for the Machine. In *Proceedings of the 2016 CHI Workshop on Productivity Decomposed.*

[6]   Bernstein, M., Kairam, S., Suh, B., Hong, L., and Chi, E.H. 2010. A Torrent of Tweets: Managing Information Overload in Online Social Streams. In *Proceedings of the 2010 CHI Workshop on Microblogging: What and How Can We Learn from It?*

[7]   André, P., schraefel, mc, Bernstein, M., Dix. A., Luther, K., and White, R. Designing for Schadenfreude (or, how to express well-being and see if you're boring people). In *Proceedings of the 2010 CHI Workshop on Microblogging: What and How Can We Learn from It?*

[8]   Suh, B., Hong, L., Convertino, G., Chi, E.H., and Bernstein, M. Sensemaking with Tweeting. In *Proceedings of the 2010 CHI Workshop on Microblogging: What and How Can We Learn from It?*

[9]   Bernstein, M., Marcus, A., Karger, D.R., and Miller, R.C. 2010. Who am I? Two-four-six-oh-one! In *Proceedings of the 2010 CSCW Workshop on Revisiting Research Ethics in the Facebook Era.*

[10]   Bernstein, M., Van Kleek, M., schraefel, mc, and Karger, D.R. 2008. Evolution and Evaluation of an Information Scrap Manager. In *Proceedings of PIM 2008: CHI 2008 Workshop on Personal Information Management.*

[11]   Van Kleek, M., Bernstein, M., André, P., Pertunnen, M., Karger, D.R., schraefel, mc. 2008. Simplifying knowledge creation and access for end users on the SW. In *Proceedings of the SWUI 2008: CHI 2008 Workshop on Semantic Web User Interfaces.*

[12]   Bernstein, M., Van Kleek, M., Karger, D.R., and schraefel, mc. 2007. Personal Information Retrieval and the Problem of Information Scraps. In *Proceedings of HCIR 2007: Workshop on Human-Computer Interaction and Information Retrieval.*

[13]   Bernstein, M., Van Kleek, M., Karger, D.R., and schraefel, mc. 2007. Information Scraps: Eluding our Personal Information Management Tools. In *Proc. CSW 2007: CSAIL Student Workshop.*

Exhibitions

[1]   Streaming crowd data from PingPong++ embedded in:
        Dublon, G., Pardue, L., Mayton, B., Swartz, N., Hurst, P., Joliat, N., and Paradiso, J. 2011. DoppelLab. *Ars Electronica.*

Presentations

Invited Plenary Talks and Distinguished Lectures

[1]   *Generative Agents: Interactive Simulacra of Human Behavior*
        Michigan AI Symposium Keynote. October 17 2023.
        Tsinghua University Symposium on Large Language Models. September 5 and September 10, 2023.

[2]   *AI and Society: Institutional, Design, and Engineering Responses*
        Sungkyunkwan International Conference, Sungkyunkwan University. January 14 2022.

[3]   *Good Data, Bad Data: Lessons from a Decade of Crowdsourcing Research*
        NeurIPS workshop keynote: Data-centric AI. December 13 2021.

[4]   *Computer History Museum Patrick J. McGovern Tech for Humanity Changemaker Award Talk*
        Computer History Museum. October 19 2021.

[5]   *Computation and Organization*
        VLDB workshop keynote: Trust, Ethics, and Excellence in Crowdsourced Data Management at Scale. August 20

2021.

ITeG Lecture Series. University of Kassel. February 10 2021.

The Academic Fringe Festival. TU Delft. January 18 2021.

[6] *UIST+CSCW: A Celebration of Systems Research in Collaborative and Social Computing*
UIST 2020. Zoom. October 19 2020.

[7] *Crowds, Computation, and the Future of Work*
IEEE HMData keynote. Los Angeles, California. December 09 2019.

[8] *Crowds, Computation, and the Future of Work*
Pinterest Distinguished Speaker Series. San Francisco, California. July 26 2018.

[9] *In A Flash: Crowdsourcing Organizations, Teams, and Research*
Cornell Computer Science Colloquium Series. Ithaca, New York. November 16 2017.

[10] *In A Flash: Crowdsourcing Organizations, Teams, and Research*
Carnegie Mellon University HCII Department Seminar. Pittsburgh, Pennsylvania, February 10 2017.

[11] *Crowdsourcing A Meeting of Minds: Designing the Future of Work*
Open and User Innovation Conference. Plenary. Boston, Cambridge, August 1 2016.

[12] *Crowdsourcing A Meeting of Minds: Designing the Future of Work*
Collective Intelligence. Plenary. New York, New York, June 2 2016.

[13] *A Meeting of Minds: Enabling Expert Crowdsourcing*
Accenture Distinguished Lecture Series. San Jose, CA, December 12 2014.

[14] *Collective Intelligence*
Kavli Frontiers of Science. Irvine, CA, November 17 2014.

[15] *Crowd-Powered Systems*
Vanguard [next]. San Francisco, CA, December 10 2013.

[16] *Crowd-Powered Systems*
WebScience SoHuman workshop. Keynote. Paris, France, May 1 2013.

Other Invited Presentations

[1] Kol Emeth Yom Iyun: AI and Consciousness. Palo Alto, CA. February 4 2024.

[2] SIGCHI Winter School. Colombo, Sri Lanka. January 2-4 2024.

[3] *Generative Agents: Interactive Simulacra of Human Behavior*
NeurIPS Synthetic Data Workshop. December 16 2023.
International Conference on Social Computing. September 3 2023.

[4] *Designing Artificial Intelligence to Navigate Societal Disagreement*
Asia Society. December 1 2022.
HAI Humans in Charge conference. November 15 2022.
Bell Labs. June 20 2022.

[5] *ESR: Ethics and Society Review of AI Research*
ERCIM Beyond Compliance: Research Ethics in Digital Sciences. October 17 2022.

[6] *Perceived Legitimacy of Social Media Content Moderation Processes.*
Meta, Integrity Team. April 22 2022.

[7] *I Disagree! Aligning AI with the Messy Reality of Societal Disagreement*
HCI International. July 26 2021.

[8] *ESR: Ethics and Society Review of AI Research*
Turing Institute. July 15 2021.

[9] *Threshold Effects*
Stanford HAI Workshop on Foundation Models. August 23 2021.

[10] *Tech Talk: Accelerating Work and Innovation*
Psychology of Technology Institute. Remote talk. January 11 2021.

[11] *Computation and Organization*
University of Rochester. Remote talk. October 8 2020.

[12] *Crowds, Computation, and the Future of Work*
AAAI Collaborative Open Science. Stanford, California. March 25 2019.
Microsoft Research. Redmond, Washington. January 22 2019.

[13] *In A Flash: Crowdsourcing Organizations, Teams, and Research*
Adobe Research. San Francisco, California. February 14 2017.
Data On Purpose Conference. Stanford, California, February 8 2017.

[14] *Crowdsourcing A Meeting of Minds: Designing the Future of Work*
Microsoft Research Faculty Summit. Redmond, Washington, July 14, 2016.

[15] *A Meeting of Minds: Enabling Expert Crowdsourcing*
HCOMP Workshop on Crowdsourcing, Online Education, and MOOCs. Pittsburgh, PA, November 2 2014.
Google, Mountain View, CA, July 28 2014.
Foundation Capital, Menlo Park, CA, June 30 2014.
oDesk, Menlo Park, CA, June 12 2014.
Stanford Computational Science Conference, Stanford, CA, April 11 2014.

[16] *Crowd-Powered Systems*
NIPS crowdsourcing workshop, Lake Tahoe, NV, December 9 2013.
KredibleNet Workshop, Stanford, CA, October 18 2013.
Twitter, San Francisco, CA, April 25 2013.
Stanford Computer Forum, Stanford, CA, April 16 2013.
Symbolic Systems Forum, Stanford, CA, January 14 2013.
MediaX, Stanford, CA, January 8 2013.
Institute for the Future, Palo Alto, CA, November 7 2012.
CrowdConf, San Francisco, CA, October 23 2012.
Facebook Data Science, Menlo Park, CA, April 2 2012.
Microsoft Research, Redmond, WA, March 29 2012.
Google Research, Mountain View, CA, March 2 2012.
Microsoft Research New England, Cambridge, MA, January 20 2012.
IBM Research, Cambridge, MA, May 24 2011.

[17] *Crowd-Powered Interfaces*
IBM Research, Haifa, Israel, December 29 2010.

[18] *Soylent: A Word Processor with a Crowd Inside*
Cyberlaw: Difficult Issues with Jonathan Zittrain, Harvard University, Cambridge MA, Sept 27 2010.

[19] *Data for the people, by the people*
HarambeeNet 2010, Durham, NC, July 9 2010.

[20] *Crowd-Powered Interfaces*
DARPA ISAT, Washington D.C., June 24 2010.

[21] *Personalization via Friendsourcing*
IBM Research Almaden, CA, July 22 2009.

Department Seminars

[1] *Generative Agents: Interactive Simulacra of Human Behavior*
Carnegie Mellon Human-Computer Interaction Institute Seminar. February 28 2025.
Cornell Information Science Colloquium. September 18 2024.
UCLA Behavioral Decision Making Seminar. April 19 2024.
MIT HCI Seminar. March 5 2024.
MIT Colloquium on the Brain and Cognition. October 19 2023.

[2] *Designing Artificial Intelligence to Navigate Societal Disagreement*
University of Toronto SRI Seminar. October 26 2022.

[3] *Teaching AIs Social Graces*
Google People and AI Research (PAIR). June 29 2021.

[4] *ESR: Ethics and Society Review of AI Research*

Turing Institute. July 15 2021.

[5] *Crowds, Computation, and the Future of Work*
University of California, Berkeley. Berkeley, California. January 23 2019.
University of Washington. Seattle, Washington. December 5 2018.

[6] *In A Flash: Crowdsourcing Organizations, Teams, and Research*
Northwestern University Segal Speaker Series. Evanston, Illinois. May 15 2018.

[7] *Crowdsourcing A Meeting of Minds: Designing the Future of Work*
Harvard Digital Seminar. Cambridge, Massachusetts, November 30 2016.
University of Washington. Seattle, Washington, August 8 2016.

[8] *Crowdsourcing A Meeting of Minds: Designing the Future of Work*
New York University, GovLab Seminar. New York, New York, June 2 2016.
University of Illinois Urbana Champaign HCI Seminar. Urbana, Illinois, December 8 2015.
NYU IS Seminar. New York, New York, November 6 2015.
Carnegie Mellon University. Pittsburgh, Pennsylvania, October 27 2015.

[9] *A Meeting of Minds: Enabling Expert Crowdsourcing*
UC Berkeley BiD Seminar. Berkeley, CA, March 31 2015.
University of Toronto. Toronto, Ontario, Canada, March 27 2015.
University of Waterloo. Waterloo, Canada, March 26 2015.
UCI Informatics Seminar Series. Irvine, CA, January 16 2015.
Stanford Liberation Technology Seminar. Stanford, CA, January 15 2015.
Technion. Haifa, Israel, December 22 2014.

[10] *Crowd-Powered Systems — Job Talk*
Drexel University, Philadelphia, PA, August 20 2013.
University of Illinois at Urbana-Champaign, Urbana, IL, October 16 2012.
Michigan School of Information, Ann Arbor, MI, March 26 2012.
Michigan Computer Science and Engineering, Ann Arbor, MI, March 22 2012.
Carnegie Mellon Univeristy, Pittsburgh, PA, March 19 2012.
UC San Diego Computer Science and Engineering, La Jolla, CA, March 16 2012.
UC San Diego Cognitive Science, La Jolla, CA, March 14 2012.
Brown University, Providence, RI, March 8 2012.
Stanford University, Stanford, CA, March 5 2012.
University of Washington Computer Science and Engineering, Seattle, WA, February 28 2012.
Princeton University, Princeton, NJ, February 22 2012.
University of Washington Information School, Seattle, WA, February 16 2012.
UC Berkeley, Berkeley, CA, February 7 2012.
UC Los Angeles, Los Angeles, CA, February 2 2012.
Columbia University, New York, NY, January 30 2012.

[11] *Crowd-Powered Systems*
Emory University, Atlanta, GA, January 27 2012.
Georgia Institute of Technology, Atlanta, GA, January 26 2012.
Tufts University, Cambridge, MA, January 19 2012.

[12] *Crowd-Powered Interfaces*
Carnegie Mellon University, Pittsburgh, PA, March 1 2011.

[13] *Information Scraps: Understanding and Design*
University of Washington, Seattle, WA, June 11 2008.

Patents

[1] Teevan, J., Dumais, S.T., Bernstein, M.S., Horvitz, E., Morris, M., Jeong, J., Liebling, D. 2016. Providing crowdsourced answers to information needs presented by search engine and social networking application users.

[2] Bernstein, M., Hong, L., Chi, E., and Suh, B. 2014. System and method for identifying topics for short text communications.

Students

Ph.D. Students: Current

[1] Beleicia Bullock (equally co-advised with James Landay, Computer Science). Thesis: TBD. 2021–anticipated 2027.

[2] Catherine Mullings (main advisor, co-advised with Camille Utterback, Art Practice). Thesis: TBD. 2019–anticipated 2026.

[3] Joon Sung Park (equally co-advised with Percy Liang, Computer Science). Thesis: TBD. 2020–anticipated 2026.

[4] Jordan Troutman. Thesis: TBD. 2021–anticipated 2027.

[5] Lindsay Popowski. Thesis: TBD. 2021–anticipated 2027.

[6] Michelle Lam (equally co-advised with James Landay, Computer Science). Thesis: TBD. 2021–anticipated 2026.

[7] Omar Shaikh (equally co-advised with Diyi Yang, Computer Science). Thesis: TBD. 2022–anticipated 2028.

[8] Dora Zhao (equally co-advised with Diyi Yang, Computer Science). Thesis: TBD. 2024–anticipated 2029.

Ph.D. Students: Alumni

[1] Mitchell Gordon. Assistant Professor at MIT EECS. Co-advised with James Landay, Computer Science. Thesis: "Human-AI Interaction under Societal Disagreement". 2018–2023.

[2] Ranjay Krishna. Assistant Professor at University of Washington. Equally co-advised with Fei-Fei Li, Computer Science. Thesis: "Visual Intelligence through Human Learning". 2016–2021.

[3] Geza Kovacs. Senior Research Scientist at Google. Thesis: "HabitLab: In-the-wild Behavior Change Experiments at Scale". 2014–2019.

[4] Niloufar Salehi. Assistant Professor at UC Berkeley. Thesis: "Design for Collective Action". 2013–2018.

[5] Ethan Fast. Co-founder at Vcreate. Thesis: "Capturing Human Behavior and Language for Interactive Systems". Joined: 2013. Graduated: 2018.

[6] Justin Cheng. Staff Data Scientist at Discord. Equally co-advised with Jure Leskovec, Computer Science. Thesis: "Antisocial Computing: Explaining and Predicting Negative Behavior Online". 2013–2017.

[7] Daniela Retelny. Senior User Experience Researcher at Instagram. Equally co-advised with Melissa Valentine, Management Science & Engineering. "Expert Crowdsourcing with Flash Teams and Organizations". 2013–2017.

[8] Joy Kim. Senior Research Scientist at Adobe. Thesis: "Designing Crowdsourcing Techniques Based on Expert Creative Practice". 2013–2017.

[9] Chinmay Kulkarni. Associate Professor at Emory University. Equally co-advised with Scott Klemmer, Computer Science. Thesis: "Structuring Peer Interactions for Learning at Scale". 2013–2015.

Postdoctoral Scholars: Current

[1] Tiziano Piccardi. 2022–present.

[2] Ziv Epstein. 2023–present.

[3] Quinn Waeiss. 2023–present.

Postdoctoral Scholars: Alumni

[1] Farnaz Jahanbakhsh. Assistant Professor at University of Michigan. 2023–2024.

[2] Chenyan Jia. Assistant Professor at Northeastern University. 2022–2023.

[3] Joseph Seering. Assistant Professor at KAIST: Korea Advanced Institute of Science & Technology. 2020–2022.

[4] Amy Zhang. Assistant Professor at the University of Washington. 2019–2020.

[5] Mark Whiting. Senior Computational Social Scientist at University of Pennsylvania. 2017–2019.

[6] Nicolas Kokkalis. Co-founder, Pi Network. 2013–2018.

Stanford Undergraduate Students Supervised (with Publications): Current

[1] Helena Vasconcelos. Symbolic Systems. Expected graduation: 2025.

[2] Janice Teoh. Computer Science. Expected graduation: 2025.

Stanford Undergraduate Students Supervised (with Publications): Alumni

[1] Manas Khadka. Computer Science. Graduation: 2024.

[2] Anne Li. Computer Science. Graduation: 2024.

[3]   Izequiel Freitas. Computer Science. Graduation: 2024.

[4]   Minh Chau Mai. Computer Science. Graduation: 2024.

[5]   Joey O'Brien. Computer Science. Graduation: 2024.

[6]   Zachary Xi. Computer Science. Graduation: 2024.

[7]   Zixian Ma. Computer Science and Biology. Graduation: 2022.
       PhD: University of Washington

[8]   Grant Hugh. Computer Science. Graduation: 2022.

[9]   Michelle Xing. Computer Science. Graduation: 2022.

[10]   Yu Jin Lee. Mathematics. Graduation: 2021.

[11]   Chloe Barreau. Computer Science. Graduation: 2021.

[12]   Lydia Stone. Computer Science. Graduation: 2020.

[13]   Irena Gao. Computer Science. Graduation: 2023.

[14]   Drew Mylander Gregory. Computer Science. Graduation: 2021.

[15]   Vivan Yang. Computer Science. Graduation: 2021.

[16]   Gwen Ray. Computer Science. Graduation: 2021.

[17]   Golrokh Emami. Computer Science. Graduation: 2021.

[18]   Nik Marda. Political Science. Graduation: 2021.

[19]   Xinlan Emily Hu. Computer Science. Graduation: 2020.
       PhD: Wharton Business School, University of Pennsylvania

[20]   Khaled Jedoui. Mathematics. Graduation: 2020.
       PhD: Stanford.

[21]   Austin Narcomey. Computer Science. Graduation: 2019.
       PhD: Yale

[22]   Julia Mendelsohn. Linguistics. Graduation: 2018.
       PhD: University of Michigan

[23]   Michelle Lam. Computer Science. Graduation: 2018
       PhD: Stanford

[24]   Tina Vachovsky. Computer Science. Graduation: 2017.

[25]   Allegra Cohen. Symbolic Systems. Graduation: 2017.
       PhD: University of Florida

[26]   Juan Carlos Marroquin. Computer Science. Graduation: 2017.

[27]   Andrew McCabe. Symbolic Systems. Graduation: 2017.

[28]   Pranav Rajpurkar. Computer Science. Graduation: 2016.
       PhD: Stanford

[29]   Catherine Mullings. Computer Science. Graduation: 2016.
       PhD: Stanford

[30]   Adam Ginzberg. Computer Science. Graduation: 2016.

[31]   Tulsee Doshi. Symbolic Systems. Graduation: 2015.

[32]   Keith Wyngarden. Computer Science. Graduation: 2015.

[33]   Julia Cambre. Symbolic Systems. Graduation: 2014.
       PhD: Carnegie Mellon

[34]   Evawere Ogbe. Computer Science. Graduation: 2014.

[35]   Jay Patel. Computer Science. Graduation: 2014.

[36]   Daniel Steffee. Computer Science. Graduation: 2014.

[37]   Alexandra To. Symbolic Systems. Graduation: 2014.
       PhD: Carnegie Mellon

Master's Student Supervised (with Publications): Current

[1]   Wanrong He. Computer Science. Expected graduation: 2025.

[2]   Yutong Zhang. Computer Science. Expected graduation: 2025.

Master's Student Supervised (with Publications): Alumni

[1]   Thomas Ma. Management Science & Engineering. Graduation: 2023.

[2]   Zixian Ma. Computer Science. Graduation: 2022.
      PhD: University of Washington

[3]   Victor Chen. Computer Science. Graduation: 2021.

[4]   Christina Pan. Computer Science. Graduation: 2019.

[5]   Sahil Yakhmi. Computer Science and Graduate School of Business. Graduation: 2020.

[6]   Tara P. Iyer. Computer Science. Graduation: 2020.

[7]   Austin Narcomey. Computer Science. Graduation: 2020.
      PhD: Yale

[8]   Xinlan Emily Hu. Symbolic Systems. Graduation: 2020.
      PhD: Wharton Business School, University of Pennsylvania

[9]   Junwon Park. Computer Science. Graduation: 2020.

[10] Michelle Lam. Computer Science. Graduation: 2019.
      PhD: Stanford

[11] Donsuk Lee. Computer Science. Graduation: 2018.
      PhD: Indiana

[12] Kenji Hata. Computer Science. Graduation: 2017.

[13] Sarah Sterman. Computer Science. Graduation: 2016.
      PhD: UC Berkeley

[14] Ranjay Krishna. Graduation: 2016.
      PhD: Stanford

[15] Jay Patel. Computer Science.
      Graduation: 2014

[16] Alexandra To. Symbolic Systems. Graduation: 2014.
      PhD: Carnegie Mellon

[17] Negar Rahmati. Electrical Engineering. Graduation: 2015.

[18] Jingshu Chen. Management Science & Engineering. Graduation: 2014.

[19] Sebástien (Robi) Robaszkiewicz. Computer Science. Graduation: 2013.