

Harmanpreet Kaur

Computer Science & Engineering
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Employment

- 09/2023 – **University of Minnesota - Twin Cities.** Minneapolis, MN
present Assistant Professor, Department of Computer Science & Engineering
- 05/2020 – **Allen Institute for Artificial Intelligence.** Seattle, WA
08/2020 Research Intern, Semantic Scholar Team
Mentors: Jonathan Bragg, Doug Downey, Dan Weld
- 05/2019 – **Microsoft Research.** New York City, NY
08/2019 Research Intern, Fairness, Accountability, Transparency and Ethics in AI Team
Mentors: Jenn Wortman Vaughan, Hanna Wallach, Rich Caruana
- 05/2018 – **Microsoft Research.** Redmond, WA
08/2018 Research Intern, Information and Data Sciences Group
Mentors: Shamsi Iqbal, Jaime Teevan
- 05/2017 – **Microsoft Research.** Redmond, WA
08/2017 Research Intern, Productivity Team
Mentors: Shamsi Iqbal, Jaime Teevan
- 05/2015 – **Epic Systems Corporation.** Verona, WI
08/2015 Software Development Intern

Education

- 07/2023 **University of Michigan.** Ann Arbor, MI
Ph.D. in Information and Computer Science & Engineering
Thesis: *Where are the Humans in Human-AI Interaction: The Missing Human-Centered Perspective on Interpretability Tools for Machine Learning*
Advisors: Cliff Lampe and Eric Gilbert
Committee: Mark Ackerman, Eytan Adar, Shamsi Iqbal, Jenn Wortman Vaughan
- 12/2019 **University of Michigan.** Ann Arbor, MI
M.S. in Computer Science & Engineering
- 05/2016 **University of Minnesota - Twin Cities.** Minneapolis, MN
B.S. in Computer Science (*summa cum laude*)
Thesis Advisors: Loren Terveen and Brent Hecht
- 05/2013 **Indiana University - Purdue University Indianapolis.** Indianapolis, IN
Worked towards a B.S. in Computer Engineering; transferred out after 1st year

Awards & Honors

2022	Rising Star in EECS
2022	FAccT Doctoral Consortium Funding
2021–2023	Google PhD Fellowship in HCI
2021	University of Michigan Teh-Hsun Lee Award
2020	Best Paper Honorable Mention, CHI 2020 for [c9]
2020	Best Paper Honorable Mention, IUI 2020 for [c10]
2018	HCOMP Doctoral Consortium Funding
2015–2016	University of Minnesota Hopper-Dean Scholarship
2012–2013	IUPUI Dean’s Recognition Scholarship

Publications

Heavily Refereed Conference and Journal Papers

- [c17] Syeda Masooma Naqvi, Ruichen He, and **Harmanpreet Kaur**. Catalyst for Creativity or a Hollow Trend?: A Cross-Level Perspective on The Role of Generative AI in Design. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2025)*

- [c16] **Harmanpreet Kaur**, Matthew Conrad, Davis Rule, Cliff Lampe, and Eric Gilbert. Interpretability Gone Bad: The Role of Bounded Rationality in How Practitioners Understand Machine Learning. *To appear in Proceedings of the ACM - Human Computer Interaction (PACM-HCI), presented at CSCW 2024*

- [c15] **Harmanpreet Kaur**, Doug Downey, Amanpreet Singh, Evie Yu-Yen Cheng, Daniel Weld, and Jonathan Bragg. FeedLens: Polymorphic Lenses for Personalizing Exploratory Search over Knowledge Graphs. *In Proceedings of the ACM Conference on User Interface Software and Technology (UIST 2022)*

- [c14] **Harmanpreet Kaur**, Eytan Adar, Eric Gilbert, and Cliff Lampe. Sensible AI: Re-imagining Interpretability and Explainability using Sensemaking Theory. *In Proceedings of the ACM Conference on Fairness, Accountability, and Transparency (FAccT 2022)*

- [c13] **Harmanpreet Kaur**, Daniel McDuff, Alex Williams, Jaime Teevan, and Shamsi Iqbal. “I Didn’t Know I Looked Angry”: Characterizing Observed Emotion and Reported Affect at Work. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2022)*

- [c12] Oana Inel, Tomislav Duricic, **Harmanpreet Kaur**, Elisabeth Lex, and Nina Tintarev. Design Implications for Explanations: Supporting Reflective Assessment of Videos on Controversial Topics. *Frontiers in Artificial Intelligence 2021*

- [c11] David Alvarez Melis, **Harmanpreet Kaur**, Hal Daumé, Hanna Wallach, and Jenn Wortman Vaughan. A Human-Centered Approach to Interpretability Using Weight of Evidence. *In Proceedings of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2021)*

- [c10] **Harmanpreet Kaur**, Cliff Lampe, and Walter Lasecki. Using Affordances to Improve AI Support of Social Media Posting Decisions. *In Proceedings of the 25th ACM International Conference on Intelligent User Interfaces (IUI 2020)*
[Best Paper Honorable Mention]
- [c9] **Harmanpreet Kaur**, Harsha Nori, Samuel Jenkins, Rich Caruana, Hanna Wallach, and Jenn Wortman Vaughan. Interpreting Interpretability: Understanding Data Scientists' Use of Interpretability Tools for Machine Learning. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2020)*
[Best Paper Honorable Mention]
- [c8] **Harmanpreet Kaur**, Alex Williams, Daniel McDuff, Mary Czerwinski, Jaime Teevan, and Shamsi Iqbal. Optimizing for Happiness and Productivity: Modeling Opportune Moments for Task Transitions and Breaks at Work. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2020)*
- [c7] Alex Williams, **Harmanpreet Kaur**, Jaime Teevan, Ryen White, Shamsi Iqbal, and Adam Fourney. Mercury: Empowering Programmers' Mobile Work Practices with Microproductivity. *In Proceedings of the 32nd ACM User Interface Software and Technology Symposium (UIST 2019)*
- [c6] **Harmanpreet Kaur**, Alex Williams, Anne Loomis Thompson, Walter Lasecki, Shamsi Iqbal, and Jaime Teevan. Creating Better Action Plans for Writing Tasks via Vocabulary-Based Planning. *In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2018)*
- [c5] Raymond Fok, **Harmanpreet Kaur**, Skanda Palani, Martez Mott, and Walter Lasecki. Towards More Robust Speech Interactions for Deaf and Hard of Hearing Users. *In Proceedings of the 20th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2018)*
- [c4] Akshay Rao, **Harmanpreet Kaur**, Walter Lasecki. Plexiglass: Multiplexing Passive and Active Tasks for More Efficient Crowdsourcing. *In Proceedings of the AAI Conference on Human Computation and Crowdsourcing (HCOMP 2018)*
- [c3] Alex Williams, **Harmanpreet Kaur**, Gloria Mark, Anne Loomis Thompson, Shamsi Iqbal, and Jaime Teevan. Supporting Workplace Detachment and Reattachment with Conversational Intelligence. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2018)*
- [c2] **Harmanpreet Kaur**, Mitchell Gordon, Yiwei Yang, Jeffrey Bigham, Jaime Teevan, Ece Kamar, Walter Lasecki. CrowdMask: Using Crowds to Preserve Privacy in Crowd-Powered Systems via Progressive Filtering. *In Proceedings of the 5th AAI Conference on Human Computation and Crowdsourcing (HCOMP 2017)*
- [c1] F. Maxwell Harper, Funing Xu, **Harmanpreet Kaur**, Kyle Condiff, Shuo Chang, and Loren Terveen. Putting users in control of their recommendations. *In Proceedings of the 9th ACM Conference on Recommender Systems (RecSys 2015)*

Refereed Short Papers, Late-Breaking Works, and Posters

- [s2] **Harmanpreet Kaur**, Alex Williams, Anne Loomis Thompson, Walter Lasecki, Shamsi Iqbal, and Jaime Teevan. Using Vocabularies to Collaboratively Create Better Plans for Writing Tasks. *In Proceedings of 2018 Extended CHI Conference on Human Factors in Computing Systems - Late Breaking Works Track. (CHI 2018)*
- [s1] **Harmanpreet Kaur**, Isaac Johnson, Hannah Miller, Loren Terveen, Cliff Lampe, Brent Hecht, and Walter Lasecki. Oh The Places You'll Share: An Affordances-Based Model of Social Media Posting Behaviors. *In Proceedings of 2018 Extended CHI Conference on Human Factors in Computing Systems - Late Breaking Works Track. (CHI 2018)*

Refereed Workshop Submissions

- [w7] **Harmanpreet Kaur**. The Role of Bounded Rationality in Human-AI Collaboration. *In the Understanding and Mitigating Cognitive Biases in Human-AI Collaboration Workshop at the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2023)*
- [w6] **Harmanpreet Kaur**, Harsha Nori, Samuel Jenkins, Rich Caruana, Hanna Wallach, and Jenn Wortman Vaughan. Interpreting Interpretability: Understanding Data Scientists' Use of Interpretability Tools for Machine Learning. *In the Data Science with Human in the Loop Workshop at the ACM Conference on Knowledge Discovery and Data Mining (KDD 2021)*
- [w5] Davis Alvarez Melis, **Harmanpreet Kaur**, Hal Daumé, Hanna Wallach, and Jenn Wortman Vaughan. A Human-Centered Interpretability Framework Based on Weight of Evidence. *In the Human-Centered Perspectives in Explainable AI Workshop at the ACM Conference on Human Factors in Computing Systems (CHI 2021)*
- [w4] **Harmanpreet Kaur**, Alex Williams and Walter Lasecki. Building Shared Mental Models Between Humans and AI for Effective Collaboration. *In the Where is the Human? Bridging the Gap Between AI and HCI Workshop at the ACM Conference on Human Factors in Computing Systems (CHI 2019)*
- [w3] Alex Williams, **Harmanpreet Kaur**, Edith Law, and Ed Lank. Guiding Attention with Tasks and Emotions in Conversational Agents. *In the Conversational Agents: Acting on the Wave of Research and Development Workshop at the ACM Conference on Human Factors in Computing Systems (CHI 2019)*
- [w2] Sai Gouravajhala, **Harmanpreet Kaur**, Raymond Fok, and Walter Lasecki. Challenges in Making Situated Interactions Accessible to Motor-Impaired Users. *In the Accessible Voice Interfaces Workshop at the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2018)*
- [w1] **Harmanpreet Kaur**, Cliff Lampe, and Walter Lasecki. Crowdsourcing Law and Policy via Crowd-Civic Systems. *In the Crowdsourcing Law and Policy: A Design-Thinking Approach to Crowd-Civic Systems Workshop at the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2017)*

Invited Posters

- [p5] **Harmanpreet Kaur**. Leveraging Human Cognition for AI Interaction. *EECS Rising Stars, Austin TX, 2023*

- [p4] **Harmanpreet Kaur.** Designing to Support Cognitive and Social Heuristics in Human-AI Interaction. *Microsoft Research AI Breakthroughs Workshop*, Redmond WA, 2020
- [p3] **Harmanpreet Kaur.** Characterizing Shared Mental Models for Human-AI Collaboration. *Microsoft Research AI Breakthroughs Workshop*, Redmond WA, 2019
- [p2] **Harmanpreet Kaur**, Brent Hecht, Cliff Lampe, and Walter Lasecki. To Share or Not to Share: An Affordances-Based Modeling of Social Media Usage For Posting Content. *CRA-W Grad Cohort*, Washington DC, 2017
- [p1] **Harmanpreet Kaur**, Hannah Miller, and Loren Terveen. Building Feeds Without Friends. *University of Minnesota Undergraduate Research Symposium*, Minneapolis, MN. April 2016

Refereed Workshop, SIGs, Panels Organized

- [o1] Wesley Hanwen Deng, Glen Berman, **Harmanpreet Kaur**, Reva Schwartz, Memunat A. Ibrahim, Motahhare Eslami, Kenneth Holstein, and Michael Madaio. Collaboratively Designing and Evaluating Responsible AI Interventions. *Special Interest Group organized at the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2024)*

Doctoral Consortia

- [d2] **Harmanpreet Kaur.** The Role of Human Cognition in Interpretability and Explainability. *Doctoral Consortium at the ACM Conference on Fairness, Accountability, and Transparency (FAccT 2022)*
- [d1] **Harmanpreet Kaur.** Hybrid Intelligence Organizations. *Doctoral Consortium at the AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2018)*

Misc Posters and Presentations

- [m1] Maryam Bacchus and **Harmanpreet Kaur.** Understanding the Impact of Generative AI Assistance in Writing-Based Tasks. *University of Minnesota Research Showcase (2024)*

Grants and Research Awards

- 2024 **PI:** Google Academic Research Award (co-PI: Loren Terveen), unrestricted gift. \$100,000.
- 2024 **PI:** Microsoft AI and the New Future of Work Award, unrestricted gift. \$50,000.
- 2024 **PI:** TikTok Academic Research Award, unrestricted gift. \$100,000.

Invited Talks

Seminar Talks

- 12/2024 Learning Informatics Lab, CEHD, University of Minnesota
- 05/2024 CSE 50th and Golden Medallion Society Reunion, University of Minnesota
- 04/2024 Twin Cities Software Process Improvement Network (TwinSPIN)
- 09/2023 Human-Computer Interaction Seminar, Stanford University
- 03/2023 Computer Science Seminar, University of Maryland
- 03/2023 Computer Science Seminar, Northeastern University
- 03/2023 Computer Science Seminar, Brown University
- 02/2023 Computer Science Seminar, University of Illinois - Urbana Champaign
- 02/2023 Computer Science Seminar, University of Minnesota - Twin Cities
- 02/2023 People + AI Research Group, Google
- 02/2023 Computer Science Seminar, Emory University
- 01/2023 Computer Science Seminar, University of California - Los Angeles
- 12/2022 Data Science / Computational Social Science Seminar, University of Michigan
- 08/2021 Deep Learning Day at KDD 2021
- 12/2020 AI Seminar, Ohio State University
- 09/2020 Microsoft Research AI Breakthroughs Workshop

Other Talks and Panels

- 10/2024 **Perceptions of Higher Education in an Era of Artificial Intelligence [Panelist]**
Academy of Distinguished Teachers Retreat, University of Minnesota
- 04/2024 **Artificial Intelligence: What is it and what will it mean to us? [Panelist]**
America's Service Commissions (ASC) National Service Training Conference
- 04/2024 **In Your PhD Era?: A PhD Panel for Honors Students [Panelist]**
University Honors Program, University of Minnesota
- 12/2023 **Job Market Information Panel [Organizer]**
Computer Science & Engineering, University of Minnesota
- 10/2023 **A Human-Centered Approach to AI [Panelist]**
Thirst for Knowledge, University of Minnesota

Teaching

University of Minnesota

- Fall 2023 CSci 8980 - Human-Centered AI
- Fall 2024 CSci 8115 - Theoretical Foundations of Human-Centered Computing
- Spring 2025 CSci 5125 - Collaborative and Social Computing

Guest Lectures

- 04/2024 **COMP 440 – Collective Intelligence, Macalester College**
Designing Human-Centered Explainable AI
- 04/2024 **CSci 3901 – Intro to Research for Undergraduates, University of Minnesota**

Designing Human-Centered Artificial Intelligence

09/2022 **CS 279R – Human-AI Interaction Seminar, Harvard University**
Leveraging Human Cognition in AI Interaction

02/2021 **CSci 8115 – Graduate Research Methods in HCI, University of Minnesota**
Experimental Design Methods for Human-AI Interaction

10/2019 **EECS 598 – Human-AI Interaction Seminar, University of Michigan**
Shared and Team Mental Models for Human-AI Collaboration

Certificates

05/2022 – **Center for Research on Learning and Teaching (CRLT) Certificate**
06/2022 Preparing Future Faculty Seminar, University of Michigan
Certificate designed to teach future faculty about higher education opportunities, course design and assessment, and equity-focused teaching.

Teaching Assistantships

Winter 2019 **SI 106 - Programs, Information, People (Introduction to Programming)**
University of Michigan
Graduate Student Instructor

Winter 2018 **EECS 498/598 – Social Computing**
University of Michigan
Graduate Student Instructor

Fall 2015 **CSci 1901H – Introduction to Python Programming for Honors Students**
University of Minnesota - Twin Cities
Undergraduate Teaching Assistant

Winter 2013 **CHEM-C 105 - Principles of Chemistry I**
Indiana University - Purdue University Indianapolis
Peer-Led Team Learning Mentor

Student Advising and Mentorship

PhD Student Advising

Anna Martin-Boyle

Malik Khadar

Syeda Masooma Naqvi

PhD Oral and Written Exam Committees

Vishal Kuvar (Educational Psychology), 2025

Nuredin Ali, 2024

Jenny Bauer (Nursing), 2024

Anna Martin-Boyle, 2024

Moyan Zhou, 2023

Undergraduate Honors Thesis Committees

Omar Elgohary, 2025

Gunnar Jagodzinske (Thesis Advisor), 2024

Harshini Bellamkonda, 2024

Master's Students

Gayathri Balaji, 2024-2025

Ruichen He, 2024

Luka Ludden, 2024

Undergraduate Research Assistants

University of Minnesota

Will Beaumaster, 2025

Angelique Laju, 2024-2025

Amoligha Timma, 2024-2025

Gunnar Jagodzinske, 2024

Maryam Bacchus (REU student from Vassar College), 2024

University of Michigan

Davis Rule [c16]

Matthew Conrad [c16]

Anne Lin

Kayla Wiggins

Kayleigh Merz

Shaily Fozdar

Akshay Rao [c4]

Emmie Zhang

Raymond Fok [c5, w2]

Spencer Hanson

Professional Activities and Service

Conference Chair Roles

Tutorials Co-Chair, FAccT 2025

Works-in-Progress and Demos Co-Chair, HCOMP 2024

Publicity Co-Chair, HCOMP 2020

Documentation Chair, UIST 2020

CrowdCamp Co-Chair, HCOMP 2019

Program Committee/Associate Editor

Associate Chair, CHI 2024-2025 – Understanding People (Statistical and Quantitative Methods)

Area Chair, FAccT 2025 – HCI

Formal Reviewer, FAccT 2022-2024 – HCI

Formal Reviewer, HCOMP 2024

Conference and Journal Reviewing

CHI 2018-2025 (*Special Recognition for Outstanding Reviews: 2023x2, 2024, 2025*)
UIST 2019-2020, 2022-2023 (*Special Recognition for Outstanding Reviews: 2023*)
International Journal of Human-Computer Studies 2023
CSCW 2017-2020, 2022-2025 (*Special Recognition for Outstanding Reviews: 2020, 2024, 2025*)
ECSCW 2024
CHI Late Breaking Works 2020-2022
ACM Transactions on Computer-Human Interaction (ToCHI) 2020, 2022
Human-Computer Interaction Journal 2022
DIS 2021, 2025
HCOMP 2017-2020
CIKM 2020
IMWUT 2019

Other Service

Assistant to Subcommittee Chairs – Specific Application Areas, CHI 2023
Assistant to General Chairs, CHI 2017
Student Volunteer, CHI 2017-2018

Service to University of Minnesota

Co-Organizer, Human-Centered Computing Seminar Series, 2024
Bystander Intervention Training Planning Committee, 2024
Written Preliminary Examinations and PhD Evaluations Committee, 2024
Computer Science Inclusiveness, Diversity, Equity, and Advocacy (CS-IDEA) Committee, 2023

Service to University of Michigan

Student Organizer, Michigan Interactive and Social Computing (MISC) Seminar Series, 2019-2020
PhD Student Mentor, 2018-2019
Student Liaison, CSE and School of Information, 2017-2018
Student Host, HCI Faculty Recruitment in CSE, 2017-2018

Research Experience

11/2019 – **University of Michigan.** Ann Arbor, MI
08/2023 Interactive Systems Lab (CSE) and comp.social lab (SI)
Graduate Student Research Assistant

09/2016 – **University of Michigan.** Ann Arbor, MI
10/2019 CROMA (Crowds + Machines) Lab
Graduate Student Research Assistant

08/2014 – **University of Minnesota - Twin Cities.** Minneapolis, MN
08/2016 GroupLens Research Lab
Undergraduate Researcher