

SARAH JABBOUR

Ph.D. Candidate

Computer Science and Engineering
University of Michigan

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RESEARCH INTERESTS

My research centers on developing multimodal AI tools to augment human decision making, inspired by problems in healthcare. I develop machine learning and computer vision techniques for improving AI generalization under distribution shift. In addition, I develop methods for improving human-AI collaboration (e.g., new generative AI-based explanation tools) and study how humans use such tools to make decisions through large-scale user studies. *Topics: Machine Learning, Computer Vision, Human-AI Collaboration, Healthcare*

EDUCATION

University of Michigan, College of Engineering Ph.D, Computer Science and Engineering Advisors: Prof. Jenna Wiens, Prof. David Fouhey	Sep 2020–May 2026 (anticipated)
University of Michigan, College of Engineering Bachelors of Science in Engineering, Computer Science and Engineering	Sep 2016–May 2019
University of Michigan, Ross School of Business Bachelors of Business Administration	Sep 2014–May 2019

RESEARCH EXPERIENCE

Microsoft Research Internship Mentor: Cliff Wong Project: Benchmark and development of computed tomography (CT) foundation model for cancer care	Redmond, WA, USA May 2025–Aug 2025
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AWARDS AND HONORS

1. Richard and Eleanor Towner Prize for Outstanding GSIs; University of Michigan College of Engineering; 2025
2. 2nd-Place Presentation in Graduate Student Honors Competition; University of Michigan CSE; 2023
3. HACKS Spirit Award: *aims to recognize the student who most embodies the HACKS Values within the CSE Community*; University of Michigan CSE; 2023
4. AISTATS 2023 Top Reviewer, ECCV 2024 Outstanding Reviewer

PEER-REVIEWED PUBLICATIONS & PREPRINTS

1. **Sarah Jabbour**, David Fouhey, Nikola Banovic, Stephanie Shepard, Ella A. Kazerooni, Michael W. Sjoding*, Jenna Wiens*. “On the Limits of Selective AI Prediction: A Case Study in Clinical Decision Making.” *Arxiv; Under Review*. 2025. *Co-senior authors of equal contribution.
2. **Sarah Jabbour**, Gregory Kondas, Ella A. Kazerooni, Michael W. Sjoding, David Fouhey*, Jenna Wiens*. “DE-PICT: Diffusion Enabled Permutation Importance for Image Classification Tasks.” *ECCV*. 2024. *Co-senior authors of equal contribution.
3. **Sarah Jabbour**, David Fouhey, Stephanie Shepard, Thomas S. Valley, Ella A. Kazerooni, Nikola Banovic, Jenna Wiens*, Michael W. Sjoding*. “Measuring the Impact of AI in the Diagnosis of Hospitalized Patients: A Randomized Survey Vignette Multicenter Study.” *Journal of the American Medical Association (JAMA)*. 2023. *Co-senior authors of equal contribution. (4.6% acceptance rate)
4. Jiaxuan Wang, **Sarah Jabbour**, Maggie Makar, Michael W. Sjoding, Jenna Wiens. “Learning Concept Credible Models for Mitigating Shortcuts.” *NeurIPS*. 2022.

5. **Sarah Jabbour**, David Fouhey, Ella Kazerooni, Jenna Wiens, Michael W. Sjoding. “Combining chest X-rays and electronic health record (EHR) data using machine learning to diagnose acute respiratory failure.” *Journal of the American Medical Informatics Association (JAMIA)*. 2022.
6. Emily Mu, **Sarah Jabbour**, Adrian V. Dalca, John Gutttag, Jenna Wiens, Michael W. Sjoding. “Augmenting existing deterioration indices with chest radiographs to predict clinical deterioration.” *Plos One*. 2022.
7. **Sarah Jabbour***, Kayte Spector-Bagdady*, Shengpu Tang*, W. Nicholson Price II, Ana Bracic, Melissa S. Creary, Sachin Kheterpal, Chad M. Brummett, Jenna Wiens. “Respecting Autonomy and Enabling Diversity: The Effect of Eligibility and Enrollment on Research Data Demographics.” *Health Affairs*. 2021. *Co-first authors of equal contribution.
8. **Sarah Jabbour**, David Fouhey, Ella Kazerooni, Michael W. Sjoding, Jenna Wiens. “Deep Learning Applied to Chest X-Rays: Exploiting and Preventing Shortcuts.” *Machine Learning for Healthcare (MLHC)*. 2020.

TEACHING

Graduate Student Instructor, EECS 442: Computer Vision 260+ students. Guest Lectures: (1) Neural Networks, (2) Diffusion	Sep 2023-Dec 2023
Lead Teaching Assistant, TO 502: Applied Business Statistics Lead TA for Dr. Mohamed Mostagir in MBA course at the Ross School of Business.	Sep 2017-Dec 2020
Teaching Assistant, TO 301: Business Analytics and Statistics TA for Dr. Mohamed Mostagir in BBA course at the Ross School of Business.	Sep 2016-Dec 2016

CONFERENCE AND SYMPOSIUM ORGANIZATION

ML4H Program Chair Program chair for ML4H Symposium.	Dec 2025
NYC Computer Vision Day Program Chair Program chair for the 2nd annual NYC Vision Day, bringing together the regional computer vision community to share ideas and collaborate. 318 person/20 university/75+ lab all day event.	Feb 2025
ML4H Outreach Chair Led organization of outreach activities for ML4H symposium.	Dec 2024
ML4H Outreach Subchair Organized research roundtables for the ML4H symposium co-located with NeurIPS.	Dec 2023
Michigan AI Symposium Poster Session Organizer Coordinated poster session featuring 50+ research posters and 200+ attendees.	Oct 2021
Women in Computer Science Seminar Series Organizer Organized a seminar series at the University of Michigan featuring researchers identifying as women from academia and industry.	Sept 2024

OUTREACH AND MENTORSHIP

Research Mentor Gregory Kondas. Now: PhD student, Columbia University.	May 2023-May2025
Lunch and Lab with a Grad Mentor Met with undergraduates to discuss graduate school pathways and the application process.	Jan 2020 & Jan 2021
Graduate Admissions Committee Reviewed graduate applications for the University of Michigan CSE department.	Dec 2021
Mentor, Give Merit, Inc. Led discussions for high school students on communication, problem-solving, and professional skills.	Dec 2021
AI4ALL Teaching Volunteer Taught introductory computer science and AI to high school students in a summer program.	Jul 2021, Jul 2022

INVITED TALKS & PRESENTATIONS

AI for Clinical Diagnostic Decision Making: What Could Go Wrong?

AI for Health Seminar at NYU Grossman School of Medicine	Jan 2025
Women in Data Science Worldwide, General Motors	May 2024
Vineet Raghu's group meeting, Massachusetts General and Harvard Medical	April 2024
Merharry Medical College	April 2024
Lebanese American University	March 2024
MIT EECS 6.S977 (Instructor: Marzyeh Ghassemi)	March 2024
Michigan Integrated Center for Health Analytics & Medical Prediction	Feb 2024
University of Michigan 7th Summer School on Computational Interaction	June 2023

Machine Learning for Aiding Clinicians in Diagnosing Acute Cardiopulmonary Conditions

University of Michigan EECS 183: Elementary Programming Concepts	March 2022
University of Michigan EECS 183: Elementary Programming Concepts	Oct 2019

A Robust Multi-Modal Approach to Diagnosing Acute Cardiopulmonary Conditions

Center for Healthcare Engineering and Patient Safety (CHEPS)	Nov 2019
Michigan Institute for Data Science (MIDAS) Symposium	Nov 2019
Michigan AI Symposium	Nov 2019

CONFERENCE AND JOURNAL REVIEWING

Conference Reviewing

AAAI, CVPR, ECCV, AISTATS, ML4H, MLHC, AAAI TAIH, NeurIPS, ICLR

Journal Reviewing

TMLR, Journal of the American Medical Association (JAMA)