

MICHELLE LAM

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Stanford University

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INTERESTS

Human-Computer Interaction · Human-AI Interaction · Algorithmic Fairness · Social Computing

EDUCATION

- 2021–present* **Stanford University** *Ph.D. student, Computer Science*
GPA: 4.07 · Human-Computer Interaction Group
Advisors: Prof. Michael Bernstein & Prof. James Landay
- 2017–2019* **Stanford University** *M.S., Computer Science*
GPA: 4.01 · Artificial Intelligence & Human-Computer Interaction track
Relevant Coursework: HCI Research (CS 376), HCI Design Studio (CS 247), Convolutional Neural Networks for Visual Recognition (CS 231N), Data Visualization (CS 448B)
- 2014–2018* **Stanford University** *B.S. with Honors, Computer Science*
GPA: 3.83 · Artificial Intelligence track
Honors thesis: “Eevee: Transforming Images to Bridge High-level and Low-level Understanding”
Relevant Coursework: Natural Language Processing (CS 224N), Artificial Intelligence (CS 221), Analysis of Networks (CS 224W), Introduction to HCI (CS 147), Decision Making Under Uncertainty (CS 238)

AWARDS & HONORS

- 2022–present* Stanford Interdisciplinary Graduate Fellowship (SIGF)
Doctoral students are awarded this three-year fellowship based on academic excellence and potential for innovative research in an interdisciplinary area. Selected as one of 34 fellows university-wide.
- 2022* Best Paper award, ACM CHI
- 2022* Ford Foundation Predoctoral Fellowship, Honorable Mention
- 2021–2022* Stanford Human-Centered AI Seed Research Grant
- 2021–2022* Brown Institute for Media Innovation Magic Grant
- 2021–2022* Stanford Technology & Racial Equity Graduate Fellowship
- 2021–2022* Stanford Human-Centered AI Graduate Fellowship
- 2019* Siebel Scholar
Graduate students at the top of their class are awarded this \$35,000 scholarship based on outstanding academic performance and leadership. Selected as one of 96 scholars nationwide.
- 2018* Stanford Diversity Society Leadership Award

PUBLICATIONS

- [8] **Michelle S. Lam**, Ayush Pandit, Colin Kalicki, Rachit Gupta, Poonam Sahoo, Danaë Metaxa. 2023. Sociotechnical Audits: Broadening the Auditing Lens to Investigate Targeted Advertising. *Proc. ACM Hum.-Comput. Interact.* 7, CSCW2 (October 2023).
- [7] **Michelle S. Lam**, Zixian Ma, Anne Li, Izequiel Freitas, Dakuo Wang, James A. Landay, Michael S. Bernstein. 2023. Model Sketching: Centering Concepts in Early-Stage Machine Learning Model Design. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23)*.
- [6] **Michelle S. Lam**, Mitchell L. Gordon, Danaë Metaxa, Jeffrey T. Hancock, James A. Landay, Michael S. Bernstein. 2022. End-User Audits: A System Empowering Communities to Lead Large-Scale Investigations of Harmful Algorithmic Behavior. *Proc. ACM Hum.-Comput. Interact.* 6, CSCW2, Article 512 (November 2022).
- [5] Mitchell L. Gordon, **Michelle S. Lam**, Joon Sung Park, Kayur Patel, Jeffrey T. Hancock, Tatsunori Hashimoto, Michael S. Bernstein. 2022. Jury Learning: Integrating Dissenting Voices into Machine Learning Models. *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22)*. **Best Paper award**.
- [4] Chloé Bakalar, Renata Barreto, Stevie Bergman, Miranda Bogen, Bobbie Chern, Sam Corbett-Davies, Melissa Hall, Isabel Kloumann, **Michelle S. Lam**, Joaquin Quiñonero Candela, Manish Raghavan, Joshua Simons, Jonathan Tannen, Edmund Tong, Kate Vredenburgh, Jiejing Zhao. 2021. Fairness On The Ground: Applying Algorithmic Fairness Approaches to Production Systems. *arXiv preprint arXiv:2103.06172* (2021).
- [3] **Michelle S. Lam**, Grace B. Young, Catherine Y. Xu, Ranjay Krishna, and Michael S. Bernstein. 2019. Eevee: Transforming Images by Bridging High-level Goals and Low-level Edit Operations. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA '19)*.
- [2] **Michelle S. Lam**, Catherina Xu, Angela Kong, Vinodkumar Prabhakaran. 2018. Power Networks: A Novel Neural Architecture to Predict Power Relations. In *Proceedings of the Second Joint SIGHUM Workshop on Computational Linguistics for Cultural Heritage, Social Sciences, Humanities and Literature (COLING LaTeCH-CLJL '18)*.
- [1] Ryo Suzuki, Niloufar Salehi, **Michelle S. Lam**, Juan C. Marroquin, and Michael S. Bernstein. 2016. Atelier: Repurposing Expert Crowdsourcing Tasks as Micro-internships. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16)*.

LEADERSHIP

2021–present

Undergraduate Research Coordinator—Stanford Department of Computer Science
Serving as co-lead of the Stanford Undergraduate Research in CS (CURIS) program. This role involves facilitating the undergraduate research program throughout the summer and academic year, which includes launching programs to make research more accessible to students who have less prior research experience or who face financial barriers to research involvement. In this role, I also coordinate the project matching process, a weekly faculty speaker series, poster sessions, and socials as well as office hours and informational sessions to provide guidance to undergraduates new to research.

2015–2018 **Vice President—Stanford Society of Women Engineers**
Led the External branch of Stanford Society of Women Engineers as VP for two years. Coordinated weekly industry speakers (20+ companies per school year), hosted formal roundtables, launched an industry mentorship program, and secured corporate sponsorship to support Stanford SWE.
Served on the SWE Executive Board for three years (as Financial Officer and as VP).

INDUSTRY EXPERIENCE

2019–2020 **Facebook AI Applied Research, New York**
Software Engineer—Responsible AI, Fairness. Conducted research, design, and implementation work to perform ML model fairness analyses on complex Facebook and Instagram production systems. Led a successful deep-dive measurement project with the Ads team to perform the largest-scale fairness analysis that the team had conducted to date (owned system design, metric implementation, system scaling, and data analysis/validation).

2019 **Project C, Hong Kong**
Software Engineering Intern—Creative Coding for Change. Led the first data analysis workstream for an app-building platform designed to introduce computational thinking to middle schoolers from under-resourced schools.

2018 **Facebook, New York**
Software Engineering Intern—Dev Infra, Web Speed. Built a full-stack visualization platform and data pipeline for aggregate trace analysis for all JS code on Facebook Web.

2017 **Facebook, Menlo Park**
Software Engineering Intern—Applied Machine Learning, CV. Launched an assistant to guide employees across the company in improving the performance of their computer vision models, which are deployed for content understanding and ranking across Facebook and Instagram.

2017 **Google, Zurich**
Software Engineering Intern—Geo Growth & Analytics. Built a data exploration and visualization framework that enabled the Geo organization to uncover spatial and temporal trends.

MENTORSHIP

* indicates mentees who co-authored publications

- [9] Grace Zhou (Winter 2023–present)
- [8] Zachary Xi (Winter 2023–present)
- [7] Zixian Ma* (Summer 2022–present)
- [6] Poonam Sahoo* (Spring 2022–present)
- [5] Ulo Freitas* (Summer 2022–Fall 2022)
- [4] Anne Li* (Summer 2022–Fall 2022)
- [3] Megan Mou (Winter 2022–Spring 2022)
- [2] Rachit Gupta* (Summer 2021–Fall 2022)
- [1] Melanie Zhou (Spring 2021–Fall 2021)

SERVICE

- 2023* Reviewer, ACM CHI
2022–2023 Reviewer, ACM CSCW—Special Recognition for Outstanding Reviews, 2022
2021–2022 Webmaster, Stanford HCI
2021 Course Assistant, Stanford Human-Computer Interaction Seminar

ACTIVITIES

- 2014–2018* **Stanford Cardinal Ballet Company**
Company member (2014-18) and Publicity & Media Coordinator (2015-18) for Stanford's first and only ballet company.
- 2014–2017* **Stanford Bent Spoon Modern Dance Company**
Company member (2014-17) and Web & Design Chair (2015-17) for Stanford's only student-run modern dance company.

SKILLS

- Prog. Languages* Python · C++/C · Go · Java · Hack/PHP · JavaScript · HTML/CSS · SQL
- Libraries* PyTorch · TensorFlow · React · Django
- Software* Figma · Sketch · Adobe Illustrator
- Languages* English (native) · Mandarin (basic)
- Other Interests* Dance (ballet, modern) · Design (vector art, logo design, web design, print/poster design) · Visual Art (drawing, sketching, digital/multimedia art)