

Emma Pierson

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ACADEMIC POSITIONS

<i>Andrew H. and Ann R. Tisch Assistant Professor at Cornell Tech</i>	2024-
<i>Assistant Professor of Computer Science, Jacobs Technion-Cornell Institute</i>	2021-
Cornell Tech and Technion – IIT; Field member in Computer Science, Cornell University; Assistant Professor of Population Health Sciences, Weill Cornell Medical College (secondary joint appt)	
<i>Senior Researcher, Microsoft Research New England</i>	2020 - 2021
<i>PhD, Computer Science, Stanford University</i>	2015 - 2020
<i>MS by Research, Statistics, Oxford University</i>	2014 - 2015
<i>MS, Computer Science, Stanford University</i>	Winter 2013 - Spring 2013
Concentrations in Artificial Intelligence and Biocomputation	
<i>BS, Physics (with distinction), Stanford University</i>	Fall 2009 - Spring 2013
Concentration in Theoretical Physics	

HONORS

Schmidt Futures AI2050 Early Career Fellow	2024
City & State Trailblazer in Higher Education	2024
Samsung AI Researcher of the Year (awarded to 5 early-career faculty worldwide)	2023
NSF CAREER Award	2022
Cornell Tech Faculty Teaching Award of the Year (awarded to one faculty member by students)	2022
CIFAR Azrieli Global Scholar	2022
Kavli Fellow	2022
LinkedIn Faculty Research Award	2022
MIT Technology Review 35 Innovators Under 35	2021
Best Paper Award in Applied Data Science Track, KDD	2021
Google Research Scholar	2021
Best On Theme paper award, NeurIPS ML4H Workshop	2020
Forbes 30 Under 30 in Science	2019
Most impactful to society poster award, University of Michigan AI Symposium	2019
EECS Rising Star	2018
Best paper award, AISTATS	2018
Top 10 Papers of 2016-2017 in Regulatory and Systems Genomics (RECOMB/ISCB)	2017
Best poster award, ICML Workshop on Computational Biology	2016
Best talk award, ISMB High Throughput Sequencing SIG	2015
Rhodes Scholar	2014
Hertz Fellow	2014
NDSEG Fellow	2014
Deans' Award, Stanford University	2013
2nd place, US National Debate Championships	2013

ACADEMIC PAPERS

† indicates alphabetical authors, * indicates co-first authorship, ‡ indicates co-last authorship.

- [2024w] **Emma Pierson**. [Accuracy and equity in clinical risk prediction](#). *New England Journal of Medicine*, 2024.
- [2024u] Sidhika Balachandar, Nikhil Garg, and **Emma Pierson**. [Domain constraints improve risk prediction when outcome data is missing](#). ICLR, 2024; **spotlight presentation**, NeurIPS DistShift 2023; NeurIPS ML4H Symposium 2023.
- [2024t] Rajiv Movva*, Sidhika Balachandar*, Kenny Peng*, Gabriel Agostini*, Nikhil Garg‡, and **Emma Pierson**‡. [Topics, Authors, and Networks in Large Language Model Research: Trends from a Survey of 17K arXiv Papers](#). NAACL 2024; *New Directions in Analyzing Text as Data Meeting (TADA)*, 2023; featured on [Data Skeptic](#) podcast.
- [2024s] Gabriel Agostini, **Emma Pierson***, and Nikhil Garg*. [A Bayesian Spatial Model to Correct Under-Reporting in Urban Crowdsourcing](#). AAAI 2024 (**oral presentation**); ICML Workshop on Structured Probabilistic Inference and Generative Modeling.
- [2024r] Anna Zink, Ziad Obermeyer, and **Emma Pierson**. [Race Corrections in Clinical Algorithms Can Help Correct for Racial Disparities in Data Quality](#). Conditionally accepted, *PNAS*, 2024.
- [2024q] Divya Shanmugam, Kaihua Hou, and **Emma Pierson**. Quantifying disparities in intimate partner violence: a machine learning method to correct for underreporting. *npj Women's Health*, 2024; [Cornell News coverage](#).
- [2024p] Kenny Peng, Manish Raghavan, **Emma Pierson**, Jon Kleinberg, and Nikhil Garg. [Reconciling the accuracy-diversity trade-off in recommendations](#). TheWebConf, 2024 (**oral presentation**).
- [2024o] James A Diao, Luke Melas-Kyriazi, Yixuan He, Jonathan Witonsky, Rohan Khazanchi, Max Jordan Nguemini Tiako, **Emma Pierson**, Pranav Rajpurkar, Jennifer R Elhawary, Albert Yen, Alicia R. Martin, Luisa N. Borrell, Sean Levy, Chirag J. Patel, Maha Farhat, Michael H. Cho, Edwin K. Silverman, Esteban G. Burchard, and Arjun K. Manrai. Race Adjustment in Lung Function Equations. *New England Journal of Medicine*, 2024.
- [2024n] Annabel Wang, Divya Shanmugam, Sanjay Divakaran, **Emma Pierson**, and Michael Barnett. Identifying mechanisms of disparities within cascades of cardiovascular care after an emergency department visit. Abstract accepted for **plenary talk**, Society of General Internal Medicine, 2024.
- [2024m] Harini Suresh*, Emily Tseng*, Meg Young*, Mary Gray, **Emma Pierson**, and Karen Levy. Participation in the age of foundation models. FAccT, 2024.
- [2024l] Keegan Harris, Leqi Liu, and **Emma Pierson**. Marketplace design for llm-based sales. Working paper; **oral presentation** at EC Workshop on Foundation Models and Game Theory, 2024.
- [2024k] Rajiv Movva, Pang Wei Koh, and **Emma Pierson**. Comparing llm ratings of conversational safety with human annotators. NAACL Workshop on Online Abuse and Harms (extended abstract), 2024.
- [2024j] James Diao, Ivy Shi, Venkatesh Murthy, Thomas Buckley, Chirag Patel, **Emma Pierson**, Robert Yeh, Dhruv Kazi, Rishi Wadhera, and Arjun Manrai. Projected Changes in Statin and Antihypertensive Eligibility with the 2023 AHA PREVENT Cardiovascular Risk Equations. Conditionally accepted, *JAMA*, 2024.
- [2024i] Sneha Jain*, Pierre Elias*, Timothy Poterucha, Michael Randazzo, Francisco Lopez Jimenez, Rohan Khera, Marco Perez, David Ouyang, James Pirruccello, Michael Salerno, Andrew Einstein, Robert Avram, Geoff Tison, Girish Nadkarni, Vivek Natarajan, **Emma Pierson**, Ashley Beecy, Deepa Kumaraiah, Chris Haggerty, Jennifer N. Avari Silva**, and Thomas M. Maddox**. [Advances in Artificial Intelligence for Cardiovascular Care—Part 2: Latest Developments and Deployment in Clinical Care](#). *Journal of the American College of Cardiology*, 2024.
- [2024h] Pierre Elias*, Sneha Jain*, Timothy Poterucha, Michael Randazzo, Francisco Lopez Jimenez, Rohan Khera, Marco Perez, David Ouyang, James Pirruccello, Michael Salerno, Andrew Einstein, Robert Avram, Geoff Tison, Girish Nadkarni, Vivek Natarajan, **Emma Pierson**, Ashley Beecy, Deepa

- Kumaraiah, Chris Haggerty, Jennifer N. Avari Silva**, and Thomas M. Maddox**. [Advances in Artificial Intelligence for Cardiovascular Care Part 1 - Recent Breakthroughs](#). *Journal of the American College of Cardiology*, 2024.
- [2024g] Charvi Rastogi, Ivan Stelmakh, Alina Beygelzimer, Yann N. Dauphin, Percy Liang, Jennifer Wortman Vaughan, Zhenyu Xue, Hal Daumé III, **Emma Pierson**, and Nihar B. Shah. [How do Authors' Perceptions of their Papers Compare with Co-authors' Perceptions and Peer-review Decisions?](#) To appear, PLOS One, 2024; featured on [Communications of the ACM blog](#), [NeurIPS blog](#), and [CMU ML blog](#).
- [2024f] Sneha S. Jain, Tony Sun, **Emma Pierson**, Joshua Finer, Katie L. Brown, Vijendra Ramlall, Nicholas Tatonetti, Noemie Elhadad, Fatima Rodriguez, Ronald Witteles, Parag Goyal, Mathew S. Maurer, Timothy J. Poterucha, and Pierre Elias. Antiracist AI: Use of Machine Learning to Detect Transthyretin Cardiac Amyloidosis and Decrease Biased Care. Working paper, 2024.
- [2024e] Erica Chiang, Ashley N. Beecy, Gabriel Sayer, Nir Uriel, Deborah Estrin, Nikhil Garg, and **Emma Pierson**. Bayesian Disease Progression Modeling That Captures And Accounts For Health Disparities. Working paper, 2024; to appear, ICML Workshop on Structured Probabilistic Inference and Generative Modeling.
- [2024d] Sidhika Balachandar, Shuvom Sadhuka, Bonnie Berger, **Emma Pierson**, and Nikhil Garg. Learning Graph Neural Networks from Biased Outcome Data. Working paper, 2024; to appear, ICML Workshop on Structured Probabilistic Inference and Generative Modeling.
- [2024c] Shuyue Stella Li, Vidhisha Balachandran, Shangbin Feng, **Emma Pierson**, Pang Wei Koh, and Yulia Tsvetkov. Beyond the Stethoscope: Operationalizing Interactive Clinical Reasoning in Large Language Models via Proactive Information Seeking. Working paper, 2024.
- [2024b] Alicja Chaszczewicz, Serina Chang, Emma Wang, Maya Josifovska, **Emma Pierson**, and Jure Leskovec. Generating social networks with LLMs. Extended abstract, IC2S2 (**plenary talk**), 2024.
- [2024a] Divya Shanmugam, Shuvom Sadhuka, Manish Raghavan, John Gutttag, Bonnie Berger, and **Emma Pierson**. Multi-model evaluation with labeled and unlabeled data. Working paper, 2024; to appear, ICLR DMLR workshop.
- [2023g] Rajiv Movva*, Divya Shanmugam*, Kaihua Hou, Priya Pathak, John Gutttag, Nikhil Garg, and **Emma Pierson**. [Coarse race data conceals disparities in clinical risk score performance](#). *Machine Learning for Healthcare Conference*, 2023; **honorable mention for best findings paper**, ML4H Symposium; coverage in [The New York Times](#) and [Cornell News](#).
- [2023f] Hamed Nilforoshan*, Wenli Looi*, **Emma Pierson***, Blanca Villanueva, Nic Fishman, Yiling Chen, John Sholar, Beth Redbird, David Grusky, and Jure Leskovec. [Human mobility networks reveal increased segregation in large cities](#). *Nature*, 2023; [research briefing](#) and [project website](#).
- [2023e] **Emma Pierson***, Divya Shanmugam*, Rajiv Movva*, Jon Kleinberg*, Monica Agrawal, Mark Dredze, Kadija Ferryman, Judy Wawira Gichoya, Dan Jurafsky, Pang Wei Koh, Karen Levy, Sendhil Mullainathan, Ziad Obermeyer, Harini Suresh, and Keyon Vafa. [Use large language models to promote equity](#). Working paper, 2023.
- [2023d] Matt Franchi, J.D. Zamfirescu-Pereira, Wendy Ju, and **Emma Pierson**. [Detecting disparities in police deployments using dashcam data](#). *FAccT*, 2023; invited presentation, 2024 APS Symposium: An Overview of Methodological Approaches to Studying Police; coverage from [WNYC/Gothamist](#) and [Cornell News](#).
- [2023c] Smitha Milli, **Emma Pierson**, and Nikhil Garg. [Choosing the Right Weights: Balancing Value, Strategy, and Noise in Recommender Systems](#). Working paper, 2023.
- [2023b] Richa Rastogi, Michela Meister, Ziad Obermeyer, Jon Kleinberg, Pang Wei Koh, and **Emma Pierson**. Learn from the patient, not the doctor: Predicting downstream outcomes versus specialist labels. Working paper, 2023.

- [2023a] Benjamin Laufer, **Emma Pierson**, and Nikhil Garg. Detecting Disparities in Capacity-Constrained Service Allocations. Working paper, 2023; ICML Workshop on Responsible Decision Making in Dynamic Environments, 2022.
- [2022c] J.D. Zamfirescu-Pereira, Jerry Chen, Emily Wen, Allison Koenecke, Nikhil Garg, and **Emma Pierson**. [Trucks Don't Mean Trump: Diagnosing Human Error in Image Analysis](#). *FAccT 2022*; NeurIPS Workshop on Human and Machine Decisions, 2021.
- [2022b] Ting-Wei Chiang, Yujie Shao, and **Emma Pierson**. [Quantifying the impact of mass shootings on daily life using large-scale mobility data](#). Extended abstract, *IC2S2 2022*.
- [2022a] Leah Pierson and **Emma Pierson**. [Patients cannot consent to care unless they know how much it costs](#). *British Medical Journal*, 2022.
- [2021g] **Emma Pierson**, David Cutler[†], Jure Leskovec[†], Sendhil Mullainathan[†], and Ziad Obermeyer[†]. [An algorithmic approach to reducing unexplained pain disparities in underserved populations](#). *Nature Medicine*, 2021; accompanying *Nature Medicine News and Views*, coverage from *MIT Technology Review*, *Wired*, *STAT*, *Science Friday*, *World Bank blog*, *BBC Futures*.
- [2021f] Serina Y Chang*, **Emma Pierson***, Pang Wei Koh*, Jaline Gerardin, Beth Redbird, David Grusky, and Jure Leskovec. [Mobility network modeling explains higher SARS-CoV-2 infection rates among disadvantaged groups and informs reopening strategies](#). *Nature*, 2021; accompanying *Nature News and Views*, coverage from *The New York Times*, *The Washington Post*, *MIT Technology Review*, *CNN*, *STAT*, and *Bloomberg*; see [project website](#) for data and more press coverage.
- [2021e] **Emma Pierson**, Tim Althoff, Daniel Thomas, Paula Hillard, and Jure Leskovec. [Daily, weekly, seasonal and menstrual cycles in women's mood, behaviour and vital signs](#). *Nature Human Behaviour*, 2021; coverage from [Stanford Medicine blog](#).
- [2021d] Serina Y Chang, Mandy L Wilson, Bryan Lewis, Zakaria Mehrab, Komal K Dudakiya, **Emma Pierson**, Pang Wei Koh, Jaline Gerardin, Beth Redbird, David Grusky, et al. [Supporting COVID-19 policy response with large-scale mobility-based modeling](#). *KDD* (Applied Data Science Track), 2021; **Best Paper Award in the Applied Data Science Track**.
- [2021c] Irene Y. Chen, **Emma Pierson**, Sherri Rose, Shalmali Joshi, Kadija Ferryman, and Marzyeh Ghassemi. [Ethical Machine Learning in Healthcare](#). *Annual Reviews in Biomedical Data Science*, 2021.
- [2021b] Pang Wei Koh, Shiori Sagawa, Henrik Marklund, Sang Michael Xie, Marvin Zhang, Akshay Bal-subramani, Weihua Hu, Michihiro Yasunaga, Richard Lanus Phillips, Sara Beery, Jure Leskovec, Anshul Kundaje, **Emma Pierson**, Sergey Levine, Chelsea Finn, and Percy Liang. [WILDS: A Benchmark of in-the-Wild Distribution Shifts](#). *ICML*, 2021.
- [2021a] Leah Pierson, Miriam Pierson, Jacob Steinhardt, and **Emma Pierson**. [Incarceration and COVID-19](#). *Health Affairs*, letter to the editor; longer version published on the [Andrew Gelman blog](#), 2021.
- [2020d] **Emma Pierson**, Camelia Simoiu, Jan Overgoor, Sam Corbett-Davies, Daniel Jenson, Amy Shoemaker, Vignesh Ramachandran, Phoebe Barghouty, Cheryl Phillips, Ravi Shroff, and Sharad Goel (all authors contributed equally). [A large-scale analysis of racial disparities in police stops across the United States](#). *Nature Human Behaviour*, 2020; coverage from *The New York Times*, *The Economist*, *NBC News*, *The Daily Show*, *CNN*; see [project website](#) for data and more press coverage.
- [2020c] Pang Wei Koh*, Thao Nguyen*, Yew Siang Tang*, Steve Mussmann, **Emma Pierson**, Been Kim, and Percy Liang. [Concept bottleneck models](#). *ICML*, 2020.
- [2020b] **Emma Pierson**. [Assessing racial inequality in COVID-19 testing with Bayesian threshold tests](#). NeurIPS Machine Learning for Health Workshop (**Best on theme paper award; spotlight presentation**), 2020.

- [2020a] Heidi Chen, **Emma Pierson**, Sonja Schmer-Galunder, Jonathan Altamirano, Dan Jurafsky, Jure Leskovec, Magali Fassiotto, and Nishita Kothary. [Gender differences in patient perceptions of physicians' communal traits and the impact on physician evaluations](#). *Journal of Women's Health*, 2020.
- [2019b] Bo Liu*, Shuyang Shi*, Yongshang Wu*, Daniel Thomas, Laura Symul, **Emma Pierson**, and Jure Leskovec. [Predicting pregnancy using large-scale data from a women's health tracking mobile application](#). The Web Conf, 2019 (Health on the Web Short Paper Track); NeurIPS ML For Health Workshop, 2018.
- [2019a] **Emma Pierson***, Pang Wei Koh*, Tatsunori Hashimoto*, Daphne Koller, Jure Leskovec, Nick Eriksson, and Percy Liang. [Inferring multidimensional rates of aging from cross-sectional data](#). AISTATS 2019; NeurIPS ML For Health Workshop, 2018 (**spotlight talk**); ICML Workshop on Computational Biology (**oral presentation**), 2018.
- [2018e] Bo Wang*, Daniele Ramazzotti*, Luca De Sano, Junjie Zhu, **Emma Pierson**, and Serafim Batzoglou. [SIMLR: A tool for large-scale genomic analyses by multi-kernel learning](#). *Proteomics*, 2018.
- [2018d] **Emma Pierson**. [Demographics and discussion influence views on algorithmic fairness](#). Working paper, 2018.
- [2018c] Anosheh Afghahi, Natasha Purington, Summer S Han, Manisha Desai, **Emma Pierson**, Maya B Mathur, Tina Seto, Caroline A Thompson, Joseph Rigdon, Melinda L Telli, et al. [Higher absolute lymphocyte counts predict lower mortality from early-stage triple-negative breast cancer](#). *Clinical Cancer Research*, 2018.
- [2018b] **Emma Pierson**, Sam Corbett-Davies, and Sharad Goel. [Fast Threshold Tests for Detecting Discrimination](#). AISTATS, 2018 (**best paper award**).
- [2018a] **Emma Pierson**, Tim Althoff, and Jure Leskovec. [Modeling Individual Cyclic Variation in Human Behavior](#). WWW, 2018 (featured in *Nature Medicine*: "Discovery cycle", Shraddha Chakradhar).
- [2017c] Bo Wang, Junjie Zhu, **Emma Pierson**, Daniele Ramazzotti, and Serafim Batzoglou. [Visualization and analysis of single-cell RNA-seq data by kernel-based similarity learning](#). *Nature Methods*, 2017.
- [2017b] Pang Wei Koh*, **Emma Pierson***, and Anshul Kundaje. [Denoising genome-wide histone ChIP-seq with convolutional neural networks](#). *Bioinformatics/ISMB* 2017; ICML Workshop on Computational Biology (**spotlight talk; best poster award**).
- [2017a] Sam Corbett-Davies, **Emma Pierson**, Avi Feller, Sharad Goel, and Aziz Huq. [Algorithmic decision making and the cost of fairness](#). KDD, 2017. **Taught at Stanford, Berkeley, and Caltech, among others.**
- [2016a] **Emma Pierson**. [Detecting and predicting beautiful sunsets with social media data](#). Climate Informatics Workshop, 2016 (**spotlight talk**).
- [2015c] **Emma Pierson**. [Outnumbered but well-spoken: female commentators in the New York Times](#). CSCW, 2015.
- [2015b] **Emma Pierson**, the GTEx Consortium, Daphne Koller, Alexis Battle*, and Sara Mostafavi*. [Sharing and specificity of co-expression networks across 35 human tissues](#). *PLoS Computational Biology*, 2015.
- [2015a] **Emma Pierson** and Christopher Yau. [ZIFA: Dimensionality reduction for zero-inflated single-cell gene expression analysis](#). *Genome Biology*, 2015; **best talk award** at HitSeq 2015 (SIG of ISMB/ECCB).
- [2014a] **Emma Pierson** and Noah Goodman. [Uncertainty and denial: a resource-rational model of the value of information](#). *PLoS One*, 2014.

SELECTED NON-ACADEMIC PUBLICATIONS

Click on titles to read publications.

- [S2024a] Raj Movva, Pang Wei Koh, and **Emma Pierson**. [Using unlabeled data to enhance fairness of medical AI](#). *Nature Medicine*, 2024.
- [S2021c] Leah Pierson and **Emma Pierson**. [Genetic Risks for Cancer Should Not Mean Financial Hardship](#). *The New York Times*, 2021.
- [S2021b] **Emma Pierson**, Jaline Gerardin, and Nathaniel Lash. [The lives lost to undervaccination, in charts](#). *The New York Times*, 2021.
- [S2021a] **Emma Pierson**. [Studying the menstrual cycle in a male-dominated field](#). *Nature Research Behavioural & Social Sciences Blog*, 2021.
- [S2020b] **Emma Pierson**, Elissa M Redmiles, Leilani Battle, and Jessica Hullman. [If you want more women in your workforce, here's how to recruit](#). *Nature*, 2020.
- [S2020a] **Emma Pierson**. [Barr says there's no systemic racism in policing. Our data says the attorney general is wrong](#). *The Washington Post*, 2020.
- [S2019a] **Emma Pierson**. [PhDs without tears: how academics can help ease students' minds](#). *Times Higher Education*, 2019. **Taught in UW Human Well-Being seminar.**
- [S2017a] **Emma Pierson**. [Hey, computer scientists! Stop hating on the humanities](#). *Wired*, 2017.
- [S2016d] **Emma Pierson**. [Of mansplaining and mastectomies](#). *The New York Times*, 2016.
- [S2016c] **Emma Pierson**. [Is sexist rhetoric a total frat move?](#) *The New York Times*, 2016.
- [S2016b] Sam Corbett-Davies, **Emma Pierson**, Avi Feller, and Sharad Goel. [A computer program used for bail and sentencing decisions was labeled biased against blacks. It's actually not that clear](#). *The Washington Post*, 2016. **Taught at MIT, Stanford, Berkeley, Harvard, UW, Yale, and Cornell, among others.**
- [S2016a] Mary Nugent and **Emma Pierson**. [Here's what people say when they attack Hillary Clinton on Twitter](#). *The Washington Post*, 2016.
- [S2015g] **Emma Pierson**. [Seeking a cancer-free world](#). *The New York Times*, 2015.
- [S2015f] **Emma Pierson**. [How to get more women to join the debate](#). *The New York Times*, 2015.
- [S2015e] Brian Clifton, **Emma Pierson**, and Gilad Lotan. [How to tell if a Twitter user is pro-choice or pro-life – without reading any of their tweets](#). *Quartz*, 2015.
- [S2015d] **Emma Pierson**. [Re: our relationship](#). *The Atlantic*, 2015.
- [S2015c] **Emma Pierson** and Leah Pierson. [What do campus protesters really want?](#) *The New York Times*, 2015.
- [S2015b] **Emma Pierson** and Shengwu Li. [A better way to gauge how common sexual assault is on college campuses](#). *The Washington Post*, 2015.
- [S2015a] **Emma Pierson**. [College students aren't the only ones abusing Adderall](#). *FiveThirtyEight*, 2015.
- [S2014c] **Emma Pierson** and Chuong Do. [What about the women?](#) *Coursera Blog*, 2014.
- [S2014b] **Emma Pierson**. [In science, it matters that women come last](#). *FiveThirtyEight*, 2014.
- [S2014a] **Emma Pierson**. [See how red tweeters and blue tweeters ignore each other on Ferguson](#). *Quartz*, 2014.
- [S2012a] **Emma Pierson**. [Knowing you carry a cancer gene](#). *The New York Times*, 2012. **(Awarded "Best Blog Post of 2012" by Cancer101; taught in MIT bioethics class).**

INVITED TALKS/PANELS/PODCASTS

Keynote, Johns Hopkins Responsible AI for Health Symposium	2024 (scheduled)
AI and Health Disparities, National Cancer Institute Cancer AI Conversations	2024 (scheduled)
Harvard Opportunity Insights, PREDOC Guest Lecture	2024 (scheduled)
Microsoft Research NYC Seminar	2024 (scheduled)
Cornell University Intercampus Symposium on Hereditary Cancer	2024 (scheduled)
University of Florida	2024 (scheduled)
Keynote, RECOMB Satellite Conference on Biomedical Data Privacy and Equity	2024
Keynote, Cornell Engineering and the Hospital for Special Surgery Retreat	2024
Federal Reserve Board	2024
Harvard Opportunity Insights Guest Lecture	2024
MIT EECS Guest Lecture, “Ethical Machine Learning in Human Deployments” course	2024
Princeton Quantitative Social Science Colloquium	2024
Center for Artificial Intelligence Research, Wake Forest University School of Medicine	2024
Yale School of Medicine: Genetics Seminar Series	2024
Allen School of Computer Science and Engineering seminar	2024
Berkeley EECS Seminar	2024
Stanford Department of Biomedical Data Science seminar	2024
Stanford Department of Statistics Seminar	2024
AI Community of Practice Seminar, U.S. Securities and Exchange Commission (SEC)	2023
MIT Bioinformatics Seminar	2023
Machine Learning for Health (ML4H)	2023
Keynote, epiDAMIK workshop at KDD	2023
Keynote, American Association of Medical Colleges MedBiquitous Conference	2023
Keynote, Thomas Jefferson High School for Science and Technology Graduation	2023
Keynote, Conference on Health, Inference, and Learning (CHIL)	2023
Big Data and AI seminar, Tufts-Mayo-UMichigan-Duke joint meeting	2023
Johns Hopkins Research Symposium on Engineering in Healthcare	2023
Grand Rounds, Children’s Hospital Los Angeles Pain Medicine	2023
Lupus 21st Century Conference	2023
PhilML2023; University of Tübingen	2023
Swissmedic	2023
NYC AI Hackathon: AI for Public Good NY	2023
Responsible AI seminar, Nokia Bell Labs	2023
American College of Physicians, NY Chapter Board of Directors Meeting	2023
Applied ML seminar series, MIT CSAIL	2023
NSF-NIH Workshop on Foundational AI in Biology	2023
IBM Research - Zurich’s AI for Scientific Discovery Seminar	2023
Machine Learning in Economics Summer Institute, UChicago	2023
Yale-Cowles Conference on Discrimination and Algorithmic Fairness	2023
AI and Decision Making Workshop, UC Santa Barbara	2023
Harvard Catalyst Biostatistics Symposium on Data Science and Health Disparities	2023
National Academies of Sciences, Engineering, and Medicine panel, AAAS Annual Meeting	2023
Centre de Recherche Mathématique	2023
PDT Partners	2023
Chicago Human and AI Lab	2023
Interview, Stat News	2023
Simons Foundation	2023
Virtual Roundtable on Algorithmic Fairness, Weill Cornell	2023
Clinical Research Forum, IT Roundtable	2022
Rogers Colloquium	2022
Health AI Partnership interview, Duke University	2022
Google NYC Tech Days	2022

Rhodes Trust, University of Oxford, Forum on Technology and Society	2022
Statistical Methods for Health Equity seminar, University College London	2022
Flatiron Institute, Machine Learning in New York City (ML-NYC) Speaker Series	2022
Columbia Department of Biomedical Informatics	2022
Panel, A Species Between Worlds, Skylight Modern	2022
Platform for Advanced Scientific Computing (PASC) Conference	2022
CMMRS, Max Planck Institute for Software Systems	2022
AI for Health Equity Virtual Symposium	2022
UCLA, Sex and Gender Bias in Data Workshop	2022
Machine Learning in Medicine symposium, Weill Cornell	2022
National Cancer Institute, ML and Health Outcomes in Cancer Care Delivery Panel	2022
Purdue, Leading Ethically in an Age of AI	2022
Artificial Intelligence for Good - New York	2022
Civil Legal Aid Technology Conference	2022
Health AI Ecosystems Seminar, Google	2022
Panelist, Conference on Algorithmic Bias: Responsible AI in Healthcare	2022
Memorial Sloan Kettering Cancer Center Machine Learning Seminar	2022
MS2Discovery Institute	2022
UCSF Guest Lecture, Biology of Health	2022
HWS Round Robin Keynote	2022
MIT, Guest Lecture for Ethical ML in Human Deployments	2022
University of Michigan, Data Science/Computational Social Science seminar	2022
Mt Sinai, AI in Medicine Course Guest Lecture	2022
Stanford Biomedical Informatics Research colloquium	2022
Duke-Margolis Virtual Public Meeting, Understanding Bias and Fairness in AI	2021
Weill Cornell Health Informatics Research Seminar	2021
Tufts Medical Center, Center for Quantitative Methods and Data Science	2021
Workshop on Human and Machine Decisions Keynote, NeurIPS	2021
NeurIPS 2021 panel, Data opportunities: unsolved medical problems and where new data can help	2021
NYU, Applied Statistics Seminar Series	2021
Cornell, Guest Lecture for Applied Machine Learning	2021
MIT, Guest Lecture for HST 953: Collaborative Data Science in Medicine	2021
Harvard Medical School, Panel on Fairness, Bias and Race in an Algorithmic World	2021
Boston University, AI in Healthcare: Mitigating Disparities, Biases & Misinformation Symposium	2021
ISMB Machine learning in Computational and Systems Biology COSI Keynote	2021
Arab Health Dubai, Imaging and Diagnostics Keynote	2021
AI for Good Seminar, Microsoft	2021
Diaries of Social Data Research podcast	2021
Carnegie Mellon AI for Social Good Panel	2021
Davis Institute for Artificial Intelligence	2021
Columbia Precision Medicine and Society conference	2021
Health Intelligence Seminar, MSR Cambridge	2021
Opportunity Insights	2021
Penn State AI for Social Impact Seminar	2021
Rochester Institute of Technology Mathematical Modeling Seminar	2021
R-Ladies DC	2021
Harvard, Institute for Applied Computational Science Seminar	2021
Williams, Institute for Computational and Experimental Research in Mathematics	2021
Outlier Detectives Podcast	2021
Yale Journal of Biology and Medicine Podcast	2021
Stanford, Algorithmic Fairness Panel, CS182	2021
MSR Public Panel, Conversations in STEM, Medical, and Health Technology	2021
UCLA, Big Data and ML seminar	2021
U. Mannheim, Policies to Cope with the COVID-19 Crisis	2021

AI Health Podcast	2021
RAND Corporation	2021
NeurIPS Workshop on Machine Learning for Economic Policy, Panel on Methodology and Algorithms	2020
NeurIPS COVID-19 Symposium	2020
MITxHarvard Women in AI	2020
Forum on Ethics and Fairness in AI, Harvard Medical School	2020
Cornell, Digital Life Initiative	2020
University of Chicago, Panel on Conceptualization and Measurement of Discrimination	2020
Stanford, Guest Lecture for CS221: Artificial Intelligence	2020
Berkeley, Guest Lecture for PH196: Artificial Intelligence in Medicine and Health Policy	2020
Cornell, Departments of Computer Science and Information Science	2020
USC, Department of Computer Science	2020
UCLA, Departments of Computer Science and Computational Medicine	2020
Caltech, Computing and Mathematical Sciences	2020
Brown, Department of Computer Science and Data Science Initiative	2020
Yale, Departments of Computer Science and Statistics/Data Science	2020
Johns Hopkins, Department of Computer Science	2020
University of Chicago, Department of Computer Science	2020
University of Chicago, Harris School of Public Policy	2020
Harvard, Department of Biomedical Informatics	2020
Harvard T.H. Chan School of Public Health	2020
Carnegie Mellon, Departments of Machine Learning, Computer Science, and Statistics/Data Science	2020
Columbia, Department of Biomedical Informatics	2020
MIT Sloan School of Management	2020
University of Toronto, Department of Statistical Sciences and Faculty of Information	2020
Harvard Business School	2020
Microsoft Research New England	2020
Johns Hopkins, Department of Biostatistics	2020
University of Washington, Department of Statistics	2020
NeurIPS Social Invited Talk: “Well-being in ML”	2019
USC AI Rising Stars Symposium	2019
Stanford Biostatistics Workshop	2019
National Academy of Sciences Workshop (Social Science Modeling for Big Data)	2019
University of Michigan AI Symposium	2019
Data and Society Meeting on Fair Machine Learning in Health	2019
Stanford Data Science for Social Good Summer Program	2019
Twitter FairML Speaker Series	2019
Evidation Health	2019
Johns Hopkins Data Science Lab	2019
NBER Machine Learning and Healthcare Conference	2019
Salesforce Research	2019
Microsoft Research AI Breakthroughs Workshop	2018
Facebook Computation Social Science Group	2018
Hertz Foundation Summer Workshop	2018
AlterConf San Francisco	2017
JSM, “Essential Skills for Communicating Statistics”	2017

REVIEWING AND SERVICE

Mentor, Women in Machine Learning (WiML) Symposium	2024
Reviewer, Nature Communications	2024
Reviewer, Science	2024
Ethical Reviewer, NeurIPS	2024

Co-organizer, Workshop on Applying LLMs in LMICs for Healthcare Solutions, ICHI	2024
Session co-chair, Pacific Symposium of Biocomputing	2024
Area Chair, FAccT	2024
Reviewer, Nature	2023
Judge, MIT Tech Review 35 Innovators under 35 competition	2023
Senior chair, Research Roundtable on Bias/Fairness in Health AI, ML4H Symposium	2023
Ethical Reviewer, NeurIPS	2023
Reviewer, Journal of the American Medical Informatics Association	2023
Mentor, NeurIPS ML4H symposium	2023
Women in Machine Learning Research Statement Panel	2023
Invited talk, CS 6006: Succeeding in the Graduate Environment	2023
Committee Member of the Special Issue on Generative AI and Large Language Models in Biomedicine	2023
Reviewer, Health Affairs	2023
Moderator, Health Next Summit Panel	2023
Area Chair, FaaCT (Conference on Fairness, Accountability, and Transparency)	2023
Reviewer, Nature Medicine	2023
Reviewer, Nature Communications	2023
National Science Foundation (NSF) panelist	2022
Reviewer, Political Analysis	2022
Invited talk, Academic Mentoring Workshop, Learning Theory Alliance	2022
Ethical Reviewer, NeurIPS	2022
Reviewer, ICML Workshop on Human-Machine Collaboration and Teaming	2022
Reviewer, Nature Human Behaviour	2022
Reviewer, Nature Communications	2022
Reviewer, Journal of the American Medical Informatics Association	2022
Senior program committee member, International Conference on Healthcare Informatics	2022
Reviewer, International Workshop on Algorithmic Bias in Search and Recommendation	2022
Reviewer, The Web Conference	2022
Area Chair, Applications Track, FaaCT (Conference on Fairness, Accountability, and Transparency)	2022
Co-organizer, Machine Learning from Ground Truth Workshop, NeurIPS	2021
Reviewer, Machine Learning for Public Policy Workshop, NeurIPS	2021
Richard Tapia Celebration of Diversity in Computing Virtual Conference, Virtual Booth	2021
Ethical Reviewer, NeurIPS	2021
Reviewer, PNAS	2021
Reviewer, Science Advances	2021
Reviewer, Health Affairs	2021
Reviewer, Nature Communications	2021
Co-organizer, AI for Public Health Workshop, ICLR	2021
Organizing Committee (program co-chair), Conference on Health, Inference, and Learning	2021
Reviewer, Conference on Fairness, Accountability, and Transparency	2021
Reviewer, The Web Conference	2021
Reviewer, AAAI	2021
Reviewer, Management Science	2020
Mentor, NeurIPS Women in Machine Learning Workshop	2020
Reviewer, International Workshop on Algorithmic Bias in Search and Recommendation	2020
Reviewer, The Web Conference	2020
Reviewer, Nature Medicine	2019
Reviewer, NeurIPS Workshop on Fair ML for Health	2019
Reviewer, ICLR Workshop on Debugging Machine Learning Models	2019
Reviewer, The Web Conference	2019
Reviewer, Conference on Fairness, Accountability, and Transparency (FAT*)	2018
Reviewer, JMLR	2018
Reviewer, CSCW	2018
Reviewer, IJCAI	2018

Reviewer, Biostatistics
Reviewer, ICML
Reviewer, ECCB
Reviewer, Bioinformatics

2017
2015
2014
2013