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### **ASHESH RAMBACHAN**

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## **Employment**

2022-2023	Postdoctoral Researcher, Microsoft Research New England.
2023-	Assistant Professor, Department of Economics, M.I.T.

### Education

2017-2022	Ph.D. in Economics, Harvard University.
2013-2017	A.B., Economics, Princeton University, Summa Cum Laude.

#### **Research Interests**

Econometrics, Machine Learning

# Fellowships and Awards

2022	David A. Wells Prize for Best Dissertation in Economics.
2022	Review of Economic Studies European Tour.
2022	China Star Tour.
2017-2020	National Science Foundation Graduate Research Fellowship.

## **Working Papers**

"From Predictive Algorithms to Automatic Generation of Anomalies" (with Sendhil Mullainathan). Working paper.

"Identifying Prediction Mistakes in Observational Data." Working paper. Revise and resubmit, The Quarterly Journal of Economics.

"Robust Design and Evaluation of Predictive Algorithms under Unmeasured Confounding" (with Amanda Coston and Edward Kennedy). Working paper.

"Design-based Uncertainty in Quasi-Experiments" (with Jonathan Roth). Working paper.

"Included and Excluded Instruments in Structural Estimation" (with Isaiah Andrews, Nano Barahona, Matthew Gentzkow and Jesse Shapiro).

"An Economic Approach to Regulating Algorithms" (with Jon Kleinberg, Jens Ludwig, and Sendhil Mullainathan). NBER Working Paper No. 27111.

"When do Common Time Series Estimands have Nonparametric Causal Meaning?" (with Neil Shephard). Working paper.

### **Publications**

"A More Credible Approach to Parallel Trends" (with Jonathan Roth). Working paper. Forthcoming at *The Review of Economic Studies*.

"Panel Experiments and Dynamic Causal Effects: A Finite Population Perspective" (with Iavor Bojinov and Neil Shephard). 2021. *Quantitative Economics*, 12 (4), Pp. 1171-1196.

"Characterizing Fairness over the Set of Good Models under Selective Labels" (with Amanda Coston and Alexandra Chouldechova). 2021. Proceedings of the 38th International Conference on Machine Learning (ICML), 139, Pp. 2144-2155.

"An Economic Perspective on Algorithmic Fairness" (with Jon Kleinberg, Jens Ludwig, and Sendhil Mullainathan). 2020. AEA Papers and Proceedings, 110, Pp. 91-95.

"Bias In, Bias Out? Evaluating the Folk Wisdom" (with Jonathan Roth). 2020. 1st Symposium on the Foundations of Responsible Computing (FORC), LIPIcs, 156, Pp. 6:1-6:15.

"Algorithmic Fairness" (with Jon Kleinberg, Jens Ludwig, and Sendhil Mullainathan). 2018. AEA Papers and Proceedings, 108, Pp. 22-27.

### **Invited Seminars**

Scheduled Georgetown (Economics); Yale (Political Science/Statistics); Philadelphia

Federal Reserve; Harvard (Applied Statistics); Warwick (Economics);

Northwestern (Economics); University College London (Economics); Bristol

(Economics); Paris School of Economics (Economics).

2023 Stanford University (Economics); Boston College (Economics).

2022 Princeton (Economics); Microsoft Research New England; Harvard Business

School (TOM); MIT (Economics); University of Chicago Booth School of Business (Microeconomics); Northwestern Kellogg School of Management

(MEDS); Microsoft Office of the Chief Economist; University of Pennsylvania (Economics); University of California – Berkeley (ARE);

Columbia University (Economics); Yale University (Statistics and Data Science); Columbia Business School (DRO Division); Carnegio Mellon Ho

Science); Columbia Business School (DRO Division); Carnegie Mellon Heinz

College of Information Systems and Public Policy; Stanford University (MS&E); University of California – Berkeley (Economics); Chamberlain Online Seminar in Econometrics; Brown University (Economics); Duke University (Economics); Caltech (Economics); Penn State (Economics);

Rutgers University (Economics); Michigan State University (Economics); Mannheim, Bonn, Frankfurt, Heidelberg, and Karlsruhe Online

Econometrics Seminar (Economics); University of Toronto (Economics);

Yale University (Economics); Boston University (Economics); Virtual Digital

Economy Online Seminar.

### **Conference Presentations**

Scheduled American Economic Association Annual Meeting.

2023 IAAE Annual Conference; Cowles/Yale Econometrics Conference;

American Economic Association Annual Meeting; University of Chicago Conference on Econometrics in the Era of Machine Learning; CIREQ

Econometrics Conference; NBER Summer Institute Digital Economics and AI.

2022 American Economic Association Annual Meeting; ACM SIGEcom Winter Meeting; Society for Economic Dynamics Annual Meeting; NBER

Economics of Artificial Intelligence Conference; INFORMS Annual Meeting; Southern Economic Association Annual Meeting.

2021 Econometric Society North American Winter Meeting; Brookings

Institution's Artificial Intelligence Conference; ACM FAccT 2021 Tutorial on Algorithmic Fairness and Economics; ETH Online Seminar in Economics + Data Science; ZEW Conference on the Economics of Information and Communication Technologies; NBER Summer Institute (Forecasting and Empirical Methods); Southern Economic Association Annual Meeting.

2020 American Economic Association Annual Meeting; NBER Economics of Artificial Intelligence Conference; Carnegie Mellon Fairness, Accountability,

and Transparency in Machine Learning Reading Group.

2019 NBER-NSF Time Series Conference; CEMMAP Workshop on Causal

Inference with Interactions; European Conference of the Econometrics

Community (EC)<sup>2</sup>.

#### **Professional Service**

Referee

American Economic Review; Econometrica; Journal of Applied Econometrics; Journal of Business and Economic Statistics; Journal of Econometrics; Journal of Money, Credit and Banking; Journal of Political Economy; Journal of Political Economy Microeconomics; The Econometrics Journal; The Review of Economics and Statistics; The Review of Economic Studies; The Quarterly Journal of Economic; Quantitative Economics.

Biostatistics; Epidemiology.

35th Conference on Neural Information Processing Systems (NeurIPS) 2021; The International Conference on Machine Learning (ICML) 2022; 36th Conference on Neural Information Processing Systems (NeurIPS) 2022; Transactions on Machine Learning Research; The International Conference on Machine Learning (ICML) 2023.

Awards Best Reviewer -- ACM Conference on Fairness, Accountability, and

Transparency (FAccT) 2022;

Outstanding Reviewer – The International Conference on Machine

Learning (ICML) 2022.

Program Committee NeurIPS 2021 Workshop on Machine Learning Meets

Econometrics; ACM Conference on Fairness, Accountability, and

Transparency (FAccT) 2022; International Conference on

Computational Social Science (IC2S2) 2022; International Conference on Computational Social Science (IC2S2) 2023; ACM Conference on Fairness, Accountability, and Transparency (FAccT) 2023.

Discussant

Southern Economic Association Annual Meeting 2020; American Economic Association Annual Meeting 2022; Becker Friedman Institute 2022 Conference on Discrimination in the 21<sup>st</sup> Century; Southern Economic Association Annual Meeting 2022, American Economic Association Annual Meeting 2023; NBER Behavioral Finance Meetings 2023; NBER Summer Institute Crime 2023.

Organizer

Machine Learning in Economics Summer Institute (MLESI) 2022. Yale/Cowles Econometrics Summer Conference 2023. Machine Learning in Economics Summer Institute (MLESI) 2023.