## JONATHAN ROTH

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# **Employment:**

Brown University, Department of Economics

2023- Groos Family Assistant Professor of Economics

2021-2023 Assistant Professor

2020-2021 Senior Researcher, Microsoft Office of the Chief Economist

## **Visiting Positions:**

Sept 2024 Visitor, Cowles Foundation Program in Econometrics, Yale University

Jan-Feb 2025 Visitor, Becker Friedman Institute and Booth School of Business, University of

Chicago

Spring 2025 Visiting Scholar, Economics Department, MIT

## **Education:**

Ph.D, Economics, Harvard University, 2020

Dissertation title: "Essays in Robust Inference"

Dissertation committee: Isaiah Andrews (chair), Elie Tamer, Lawrence Katz

B.A., Economics and Mathematics, University of Pennsylvania, summa cum laude, 2013

# **Teaching and Research Fields:**

Primary fields: Econometrics

Secondary fields: Labor Economics, Algorithmic fairness

# Honors, Scholarships, and Fellowships:

2021 Arnold Zellner Thesis Award in Econon	netrics and Statistics – Honorable Mention
2020 David A. Wells Prize for best dissertation	on in economics (Harvard)
2019 Harvard Dissertation Completion Fellow	vship
2016-2020 National Science Foundation Graduate I	Research Fellowship
2013 Shanbaum Prize for Excellence in Unde	rgraduate Economics (UPenn)
2012 Simon Kuznets Fellowship Award in Ec	conomics (UPenn)

#### **Publications and forthcoming papers:**

"(Empirical) Bayes Approaches to Parallel Trends" (with Soonwoo Kwon). *AEA Papers and Proceedings* 2024, 114: 606-609. (Non peer-reviewed) [PDF] [Publisher's version]

"Logs with zeros? Some problems and solutions" (with Jiafeng Chen) [Previously titled, "Log-like? Identified ATEs defined with zero-valued outcomes are (arbitrarily) scale-dependent"] *Quarterly Journal of Economics* 2024, 139(2): 891:936. [PDF] [Publisher's version]

"Inference for Linear Conditional Moment Inequalities" (with Isaiah Andrews and Ariel Pakes) *Review of Economic Studies* 2023, 90(6): 2763-2791. [PDF] [Publisher's version]

"Efficient Estimation for Staggered Rollout Designs" (with Pedro H.C. Sant'Anna)

Journal of Political Economy Microeconomics 2023, 1(4): 669-709. [PDF] [Publisher's version]

"A More Credible Approach to Parallel Trends" (with Ashesh Rambachan)
[Previously titled, "An Honest Approach to Parallel Trends"]

Review of Economic Studies 2023, 90(5): 2555–2591 (Featured Article). [PDF] [Publisher's version]

"What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature" (with Pedro Sant'Anna, Alyssa Bilinski, and John Poe) *Journal of Econometrics* 2023, 235(2): 2218-2244. [PDF] [Publisher's version]

"When Is Parallel Trends Sensitive to Functional Form?" (with Pedro H.C. Sant'Anna), *Econometrica* 2023, 91(2): 737-747. [PDF] [Publisher's version]

"Pre-test with Caution: Event-study Estimates After Testing for Parallel Trends" *American Economic Review: Insights 2022, 4(3): 305-322.* [PDF] [Publisher's version]

"An Outcome Test of Discrimination for Ranked Lists" (with Guillaume Saint-Jacques and YinYin Yu), 2022 ACM Conference on Fairness, Accountability, and Transparency (FAccT 2022).

[PDF] [Publisher's version]

"Why Do Sectoral Employment Programs Work? Evidence from WorkAdvance?" (with Lawrence F. Katz, Richard Hendra, and Kelsey Schaberg), *Journal of Labor Economics* 2022, 40(S1): S249-S291. [PDF] [Publisher's version]

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

[PDF] [Publisher's version]

# **Working Papers:**

Testing Mechanisms (with Soonwoo Kwon) [PDF] Revise and resubmit, Review of Economic Studies

Interpreting Event-Studies from Recent Difference-in-Differences Methods [PDF]

"Design-Based Uncertainty for Quasi-Experiments" (with Ashesh Rambachan) [PDF] Reject and resubmit, Journal of the American Statistical Association

"Union Reform and Teacher Turnover: Evidence from Wisconsin's Act 10" [PDF]

# **Conferences, Seminars, and Invited Presentations (including upcoming):**

2025	Brandeis
2024	ASSA Annual Conference, UCL, LSE, University of Amsterdam, Labour Econometrics Workshop (keynote speaker), University of Pittsburgh, Yale, Rice
2023	ASSA Annual Conference, Harvard/MIT, Stanford GSB, University of Zurich, UC – Irvine, UC – San Diego, UCLA, University of Exeter, International Seminar on Selective Inference, Penn State, University of Chicago (Booth), Boston College, Princeton, Chamberlain Seminar

2022

ASSA Annual Conference, University of Chicago, Cornell, Northwestern, Ohio State, Sciences Po, Toulouse, Hebrew University, Tel Aviv University, North American Summer Meeting of the Econometric Society, FTC, University of Southern Denmark, CEME Conference for Young Econometricians, University of Glasgow, Electronic Health Economics Colloquium, Boston University (Economics), Boston University (Questrom), Interactions: Bringing Together Econometrics and Applied Economics, Vanderbilt, Georgetown, Southern Economic Association (SEA) Annual Conference, ACM FAccT, Bravo Center Workshop on the Economics of Algorithms

2021

Gary Chamberlain Online Seminar in Econometrics, Berkeley Causal Inference Reading Group, Society of Labor Economics Annual Conference, University of Ottawa (DiD Reading Group), University of Washington (CHOICE), International Association for Applied Econometrics Annual Conference, Cowles Foundation Econometrics Conference, North American Summer Meetings of the Econometric Society, University of Pennsylvania, University of California – Berkeley (Economics), University of Maryland, Columbia University, University of Strathclyde, University of Manheim, CREST/PSE, Neurips MLECON, One World YoungStatS

2020

University of Chicago (Booth), Princeton University, Philadelphia Federal Reserve Bank, Brown University, Dartmouth University, University of Michigan, Microsoft, Yale University, Brandeis University, University College London, University of Rochester, UC-Davis, Southern Economic Association (SEA) Annual Conference

2019

Econometrics International PhD Conference (Erasmus University of Rotterdam), American Educational Research Association Annual Conference, Quantco

## **Professional Service:**

Referee for Annals of Statistics, American Economic Journal: Economic Policy, American Economic Review, American Economic Review: Insights, American Political Science Review, Biometrika, Econometrica, Educational Policy, International Economic Review, Journal of Applied Econometrics, Journal of Business & Economics Statistics, Journal of Econometrics, Journal of Labor Economics, Journal of Policy Analysis and Management, Journal of Political Economy, Journal of the American Statistical Association, Journal of the Association of Environmental and Resource Economists, Journal of the European Economic Association, Journal of Public Economics, Journal of Urban Economics, Proceedings of the National Academy of Sciences, Review of Economic Studies, Review of Economics and Statistics, Quantitative Economics, Quarterly Journal of Economics

Editorial board, Institute for Replication

Co-organizer, Bravo Center Workshop on the Economics of Algorithms (2022)

Organizer, Replication Games at Brown (2024)

Program committee for SOLE Annual Conference (2021); NeurIPS 2021 Workshop on Machine Learning Meets Econometrics (MLECON)

Discussant at ASSA (2022, 2024), Bravo Center Workshop on the Economics of Algorithms (2022), Cowles Foundation (2023), Online Causal Inference Seminar (2023), NBER CRIW Conference on Race, Ethnicity,

and Economic Statistics for the 21st Century (2024), NBER Summer Institute Labor Studies (2024), SEA (2020, 2022)

<u>Statistical Software:</u> (Co-)Developer of HonestDiD (R and Stata), pretrends (R, Stata, and Shiny), and staggered (R and Stata) packages

## **Teaching and Advising:**

S'22, S'23, Mathematical Econometrics I (1630), Brown University

F'23

S'2018 The Econometrics of Machine Learning (teaching fellow), Harvard University

Undergraduate thesis advisor for: Kunj Padh, Zach Reiss, Anabelle Roth

Dissertation committee member (\* indicates chair; initial placements in parentheses): Vincent Starck (KU Leuven); Patrick Vu\* (UNSW); Tommaso Coen (Bocconi post-doc)

# **Other Experience:**

2016-2018 Research Assistant for Professor Isaiah Andrews

2015 Research Assistant for Professors Lawrence Katz and Claudia Goldin

2013-2014 Analyst, Cornerstone Research