**JONATHAN ROTH**
https://jonathandroth.github.io
jonathan_roth@brown.edu

## 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 |

## Education:

B.A., Economics, Harvard University, 2020
  Dissertation title: "Essays in Robust Inference"
  Dissertation committee: Isaiah Andrews (chair), Elie Tamer, Lawrence Katz

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, Machine learning and algorithmic fairness

## Honors, Scholarships, and Fellowships:

| 2021 | Arnold Zellner Thesis Award in Econometrics and Statistics – Honorable Mention |
|---|---|
| 2020 | David A. Wells Prize for best dissertation in economics (Harvard) |
| 2019 | Harvard Dissertation Completion Fellowship |
| 2016-2018 | National Science Foundation Graduate Research Fellowship |
| 2013 | Shanbaum Prize for Excellence in Undergraduate Economics (UPenn) |
| 2012 | Simon Kuznets Fellowship Award in Economics (UPenn) |

## Publications and forthcoming papers:

"Efficient Estimation for Staggered Rollout Designs" (with Pedro H.C. Sant'Anna)
Forthcoming, *Journal of Political Economy Microeconomics*

"What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature"
(with Pedro Sant'Anna, Alyssa Bilinski, and John Poe) Forthcoming, *Journal of Econometrics*

"A More Credible Approach to Parallel Trends" (with Ashesh Rambachan)
[Previously titled, "An Honest Approach to Parallel Trends"]
Forthcoming, *Review of Economic Studies*

"Inference for Linear Conditional Moment Inequalities" (with Isaiah Andrews and Ariel Pakes)
Forthcoming, *Review of Economic Studies*

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

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

"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)*.

"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*.

"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.

## **Working Papers:**

"Log-like? Identified ATEs defined with zero-valued outcomes are (arbitrarily) scale-dependent" (with Jiafeng Chen) Revision requested, *Quarterly Journal of Economics*

"Design-Based Uncertainty for Quasi-Experiments" (with Ashesh Rambachan)

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

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

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|---|---|
| 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) |
| 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*, *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*, *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

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

Discussant at SEA (2020, 2022), ASSA (2022, 2024), Bravo Center Workshop on the Economics of Algorithms (2022), Cowles Foundation (2023)

**Statistical Software:** (Co-)Developer of HonestDiD (R and Stata), pretrends (R, Stata, and Shiny), and staggered (R and Stata) packages

**Teaching Experience:**
| Spring 2022, Spring 2023 | Mathematical Econometrics I (1630), Brown University |
| Spring 2018 | The Econometrics of Machine Learning (teaching fellow), Harvard University |

Senior thesis advisor for Kunj Padh, Zach Reiss

**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 |