

Amar Venugopal

PHD CANDIDATE · ECONOMICS

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Education

Stanford University

Stanford, CA

PHD ECONOMICS; PHD MINOR COMPUTER SCIENCE

September 2021 - Present

- Primary Advisor: Dr. Guido Imbens
- Primary Fields: econometrics, causal inference, machine learning

Rutgers University

New Brunswick, NJ

BS PHYSICS, MINORS IN ECONOMICS AND MATHEMATICS

September 2015 - May 2019

- Primary Field: experimental particle physics
- Thesis: A Search for Charge-1/3 Vector-Like Quark Pair Production in the Fully Hadronic Mode in 13TeV pp Collisions Using CMS Data from the Large Hadron Collider

Professional Experience

- 2022- **Research Assistant**, Advisor: Dr. Guido Imbens, Econometrics, Stanford University
- 2019-2021 **Analyst, Advanced Data Analytics**, BlackRock, Inc.
- 2016-2019 **Undergraduate Research Assistant**, Advisor: Dr. Stephen Schnetzer, Particle Physics, Rutgers University
- 2016-2017 **Undergraduate Research Assistant**, Advisor: Dr. Thomas Prusa, International Economics, Rutgers University

Papers

PUBLISHED

Jann Spiess, Guido Imbens, and **Amar Venugopal**. 2023. Double and Single Descent in Causal Inference with an Application to High-Dimensional Synthetic Control. *Advances in Neural Information Processing Systems*. Vol. 36 (NeurIPS 2023). NBER Working Paper 31802.

The CMS Collaboration. 2020. Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. *Physical Review D*. Vol. 102, Iss.11.

WORKING PAPERS

Amar Venugopal. Text Data & Causal Inference: Topics as Treatment. (Second Year Paper)

Awards & Fellowships

- 2023 **Best Second Year Research Paper**, Department of Economics, Stanford University
- 2023 **Machine Learning in Economics Summer Institute 2023 - Admitted Attendee**, Center for Applied Artificial Intelligence, University of Chicago Booth School of Business
- 2021 **Graduate Fellowship**, Department of Economics, Stanford University
- 2019 **Henry Rutgers Scholar Thesis Award**, Rutgers University
- 2017 **Phi Beta Kappa**, Inductee

Presentations

Double and Single Descent in Causal Inference with an Application to High-Dimensional Synthetic Control.
HDMetrics: Big Data, High-Dimensional Methods, and Machine Learning. U. Illinois Urbana-Champaign. April 2023.
California Econometrics. U. Washington. September 2023.
Stanford Causal Science Conference. Stanford University. November 2023.
NeurIPS 2023. New Orleans. December 2023.

A Search for Fully Hadronic Mode Vector-Like Quark Pair Production in 13 TeV pp Collisions using CMS Data. *April Meeting of the American Physical Society*. Columbus, Ohio. April 2018.