

# PEDRO H. C. SANT'ANNA

Department of Economics  
Emory University  
1602 Fishburne Dr, Atlanta, GA 30322

🌐: [psantanna.com](https://psantanna.com)  
✉: [pedro.santanna@emory.edu](mailto:pedro.santanna@emory.edu)  
Last updated: May 19, 2026

## EMPLOYMENT

---

Associate Professor of Economics, Emory University	September 2023 – Present
Amazon Visiting Academic, SCOT Team, Amazon	April 2023 – August 2023
Principal Researcher, Office of the Chief Economist, Microsoft	July 2022 – March 2023
Senior Researcher, Office of the Chief Economist, Microsoft	June 2021 – June 2022
Assistant Professor of Economics, Vanderbilt University	August 2015 – July 2023

## EDUCATION

---

Ph.D. in Economics, Universidad Carlos III de Madrid	August 2009 - June 2015
M.A. in Economics, Universidad Carlos III de Madrid	August 2009 - June 2011
B.A. in Economics, Ibmecc-MG (Brazil)	February 2005 - June 2009

## OTHER POSITIONS

---

Amazon Scholar, Amazon,	September 2023 – Present
Journal of Business & Economic Statistics, Associate Editor	2022 - Present.
Journal of Econometrics, Associate Editor	2024 - Present.
Journal of Causal Inference, Associate Editor	2026 - Present.
Becker-Friedman Institute for Economics, University of Chicago	3-5 October 2022
Visiting Assistant Professor, Cowles Foundation, Yale University	June 2018 - July 2019

## FIELDS OF RESEARCH AND TEACHING

---

Causal Inference, Econometrics, Machine Learning and AI, Applied Microeconomics.

## MEASURES OF RESEARCH IMPACT BASED ON CITATIONS

---

Citations (based on Google Scholar): 20,049  
h-index (based on Google Scholar): 19  
i10-index (based on Google Scholar): 23

## WORKING PAPERS

---

1. Better Understanding Triple Differences Estimators (with Marcelo Ortiz-Villavicencio), 2025.  
*Revise & Resubmit*
2. Beyond Parallel Trends: An Identification-Strategy-Robust Approach to Causal Inference with Panel Data (with Brantly Callaway, Derek Dyal, and Emmanuel S. Tsyawo), 2025.
3. Efficient Difference-in-Differences and Event Study Estimators (with Xiaohong Chen and Haitian Xie), 2025
4. Doubly Robust Estimators with Weak Overlap (with Yukun Ma, Yuya Sasaki, and Takuya Ura), 2026.
5. Was Javert right to be suspicious? Marginal Treatment Effects with Duration Outcomes (with Santiago Acerenza and Vitor Possebom), 2026. *Revise & Resubmitted, The Review of Economics and Statistics.*

6. Selection and Parallel Trends (with Dalia Ghanem and Kaspar Wüthrich), 2025.
7. Difference-in-Differences with a Continuous Treatment (with Brantly Callaway and Andrew Goodman-Bacon), 2025. *Accepted (conditionally on passing the replicability checks), American Economic Review.*
8. Program Evaluation with Right Censored Data, 2016.

## PUBLICATIONS

---

1. When should pre-trends be parallel? (with Dalia Ghanem and Kaspar Wüthrich). *American Economic Association Papers & Proceedings*, vol. 116, 2026, p. 64–69.
2. Difference-in-Differences with Compositional Changes (with Qi Xu). *Journal of Econometrics*, vol. 253, 2026, p. 106147.
3. Specification tests for generalized propensity scores using double projections (with Juan Carlos Escanciano and Xiaojun Song). *Journal of Nonparametric Statistics*, vol. 38, 2026
4. Difference-in-Differences Designs: A Practitioner’s Guide (with Andrew Baker, Brantly Callaway, Scott Cunningham, and Andrew Goodman-Bacon), 2026. *Journal of Economic Literature*, Forthcoming.
5. Event-Studies with a Continuous Treatment. (with Brantly Callaway and Andrew Goodman-Bacon). *American Economic Association Papers & Proceedings*, vol. 114, 2024, p. 601–605.
6. Efficient Estimation for Staggered Rollout Designs (with Jonathan Roth). *Journal of Political Economy - Microeconomics*, vol. 1 (4), 2023, p. 669–709.
7. What’s Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature, (with Jonathan Roth, Alyssa Bilinski, and John Poe) *Journal of Econometrics*, vol. 235 (2), 2023, p. 2218-2244.
8. When Is Parallel Trends Sensitive to Functional Form, (with Jonathan Roth). *Econometrica*, vol. 91 (2), 2023, p. 737-747
9. Covariate Distribution Balance via Propensity Scores, (with Xiaojun Song and Qi Xu). *Journal of Applied Econometrics* , vol. 37 (6), 2022, p. 1093-1120.
10. Distribution Regression in Duration Analysis: an Application to Unemployment Spells, (with Miguel A. Delgado and Andrés García-Suaza). *Econometrics Journal* , vol. 25 (2), 2022, p. 675–698.
11. Difference-in-Differences with Multiple Time Periods, (with Brantly Callaway). *Journal of Econometrics* , vol. 225 (2), 2021, p. 200-239.
12. The role of parallel trends in event study settings: An application to environmental economics, (with Michelle Marcus). *Journal of the Association of Environmental and Resource Economist*, vol. 8(2), 2021, p. 235–275.
13. Doubly Robust Difference-in-Differences Estimators, (with Jun B. Zhao). *Journal of Econometrics*, vol. 219 (1), 2020, p. 101-122.
14. Nonparametric Tests for Treatment Effect Heterogeneity with Censored Data. *Journal of Business & Economic Statistics*, vol. 39 (3), 2021, p. 816-832.
15. Specification Test for the Propensity Score, (with Xiaojun Song). *Journal of Econometrics*, vol. 210 (2), 2019, p. 379-404.
16. Testing for Uncorrelated Residuals in Dynamic Count Models with an Application to Corporate Bankruptcy. *Journal of Business & Economic Statistics*, vol. 35 (3), 2017, p.349-358

## CAUSAL INFERENCE SOFTWARE

---

1. `tripleddiff`: An R Package for triple-differences.  
<https://marcelortiz.com/tripleddiff/>.
2. `contdid`: An R Package for difference-in-differences with a continuous treatment.  
<https://bcallaway11.github.io/contdid/>.
3. `csdid`: A Python Package for difference-in-differences  
<https://github.com/d2cml-ai/csdid>.
4. `csdid`: A Stata Package for difference-in-differences  
<https://github.com/pedrohcgscsdid-stata>.
5. `staggered`: An R Package to efficiently estimate causal effects in settings with quasi-random treatment timing.  
<https://github.com/jonathandroth/staggered>.
6. `DRDID`: An R Package to compute doubly robust difference-in-differences estimators.  
<https://psantanna.com/DRDID/>.
7. `did`: An R Package to compute average treatment effects in difference-in-differences designs.  
<https://bcallaway11.github.io/did/>.
8. `IPS`: Covariate Distribution Balance via Integrated Propensity Scores.  
<https://github.com/pedrohcgscsdid-ips>.
9. `pstest`: An R Package to assess the goodness of fit of parametric propensity score models.  
<https://github.com/pedrohcgscsdid-pstest>.
10. `kmte`: An R package for Treatment Effects with Censored Outcomes.  
<https://github.com/pedrohcgscsdid-kmte>.

## FELLOWSHIPS, GRANTS, AND HONORS

---

Dennis J. Aigner Award for best empirical paper published in the Journal of Econometrics, 2023  
Zellner Thesis Award. Best Ph.D. thesis in Econometrics for the years 2014 - 2015 awarded by the Business and Economic Statistics Section of the American Statistical Association, 2016.  
Ph.D. in Economics, cum laude, Universidad Carlos III de Madrid, 2015  
PIF Scholarship, Universidad Carlos III de Madrid, 2012 - 2015.  
FPI Scholarship, Spanish Ministry of Science and Technology, Declined, 2012  
Outstanding Teaching Assistant Awards 2010-2011, UC3M, Spain, 2011  
Graduate Program Scholarship, Universidad Carlos III de Madrid, 2009 - 2012  
BA in Economics, Summa cum laude, Ibmecc-MG (Brazil), 2009.

## SEMINARS AND CONFERENCES

---

### Invited Seminars

**2026:** (1) Harvard University (Medical School), (2) Harvard University (Applied Statistics)

**2025:** (1) Stanford University, (2) Boston University, (3) Rice University, (4) Clemson University, (5) UFSC (Brazil, Virtual), (6) UC3M, (7) Brandeis University

**2024:** (1) Universidad Nacional de La Plata, (2) Amazon - PXT Central Science, (3) Georgia State University (Robinson School of Business), (4) Instacart, (5) Google, (6) Department of Justice, USA

**2023:** (1) Duke, (2) Georgetown, (3) Microsoft Research New England, (4) NY Fed, (5) UCLA, (6) UNU-Wider, (7) Yale.

**2022:** (1) University Washington (CSSS), (2) West Virginia University (3) Queen Mary, (4) Econisers/UAB-BSE , (5) Northwestern, (6) EU Commission – JRC, (7) Seoul National University, (8) Chicago Booth/Harris/U Chicago, (9) University of Colorado – Boulder, (10) Health Policy Grand Rounds, Vanderbilt University, (11) CEnREP Colloquium, North Carolina State University (12) Emory University, (13) CAF - Development Bank of Latin America, (14) Korea-America Economic Association, (15) Bonn-Mannheim Online Econometrics Seminar.

**2021:** (1) Durham Business School, (2) University of Cambridge, (3) Emory University, (4) University of Delaware, (5) University of Florida, (6) Microsoft, (7) University of Toronto, (8) Harvard/MIT, (9) USC, (10) University of Notre Dame, (11) UC Berkeley, (12) Insper, (13) University of Rochester, (14) University of Washington (CHOICE), (15) Ifo Munich, (16) DiD Online Reading group (University Ottawa), (17) University of Munich, (18) Electronic Health Economics Colloquium (online), (19) United Nations University – WIDER, (20) CMU-U Pitt (joint seminar), (21) Universidad del Rosario, (22) John Hopkins University (Biostatistics), (23) Urban Institute, (24) North Carolina A&T State U (Stats), (25) University of Washington (Econ), (26) U Virginia, (27) One World YoungStats Webinar.

**2020:** (1) Warwick, (2) Stanford, (3) St. Gallen, (4) UC Irvine, (5) UFPel (Brazil), (6) SBE Online Seminar (Brazil), (7) CUHK-Shenzhen, (8) UC Davis.

**2019:** (1) UT Austin, (2) SUNY Albany, (3) University of Chicago, (4) Southern Methodist University, (5) Universidad Carlos III de Madrid, (6) Academia Sinica.

**2018:** (1) Texas A&M, (2) Boston College, (3) NYU, (4) University of Iowa, (5) Yale, (6) Syracuse, (7) Carleton University.

**2017:**(1) Vanderbilt (Biostatistics), (2) Princeton.

**2016:** (1) Indiana University.

**2015:** (1) Mannheim University, (2) Collegio Carlo Alberto, (3) Paris School of Economics, (4) SUNY Binghamton, (5) Kansas State, (6) Vanderbilt University, (7) Universidad Autonoma de Barcelona.

**2014:** (1) Tilburg University, (2) Universidad Carlos III de Madrid.

**2013:** (1) Universidade de São Paulo (Ribeirão Preto), (2) Universidad Carlos III de Madrid.

## Invited Speaker at International Conferences

**2026** Southern Economic Association Conference (Keynote), Houston

**2026** European Economic Association Meetings (Invited Session on Advances in Causal Identification), Dublin

**2026** Counterfactual Methods for Policy Impact Evaluation (Keynote), Paris.

**2026** American Causal Inference Conference (Plenary), Salt Lake City.

**2025** UC3M-Alumni Conference (Keynote), Madrid.

**2024:** STATA Texas Empirical Micro Conference (Keynote), Dallas

**2024:** NABE TEC Economics Conference, Seattle.

**2024:** ASSA Meeting (AEA and Econometric Society), San Antonio.

**2023:** ASSA Meeting (Econometric Society), New Orleans; Causal AI Conference, New York

**2022:** Meeting of the Brazilian Econometric Society, Fortaleza, December 2022

**2021:** XVII Escola de Modelos de Regressão (Keynote), December 2021

## Contributed talks at International Conferences

**2026:** (1) North American Meeting of the Econometric Society (Atlanta)

**2023:** (1) Southern Economic Association Conference (New Orleans), (2) Meeting of the Brazilian Econometric Society (Rio, Brazil).

**2022:** (1) IAAE Conference (London, UK), (2) Interactions Conference (U Wisconsin, Madison), (3) Southern Economic Association Conference (Fort Lauderdale), (4) 5th GOFCP workshop (France).

**2021:** (1) New York Camp Econometrics (online), (2) Summer Meeting of the Econometric Society (online), (3) IAAE Conference (online), (3) Stata Conference (online), (4) Health Econometrics Conference (online), (5) LACEA-LAMES Conference(online), (6) Southern Economic Association (online)

**2020:** (1) Southern Economic Association (online),

**2019:** (1) New York Camp Econometrics XIV (Clayton, NY), (2) IAAE Conference (Cyprus), (3) CEME conference at UCLA, (4) Advances in Econometrics - UCL/Vanderbilt conference (Nashville), (5) IZA/CREST Conference on Labor Market Policy Evaluation (Bonn, Germany), (6) CMStatistics (London, UK).

**2018:** (1) Identification in Econometrics (Nashville, TN), (2) IAAE Conference (Montreal, Canada), (3) Latin American Workshop in Econometrics of the Econometric Society (Lima, Peru), (4) Canadian Econometrics Study Group (Ottawa, Canada), (5) Latin American Meeting of the Econometric Society (Guayaquil, Ecuador), (6) Southern Economic Association Annual Conference (Washington, DC), (7) Triangle Econometrics Conference (Chapel Hill, NC).

**2017:** (1) Asia Meeting of the Econometric Society (Hong Kong), (2) SETA (Beijing, China), (3) IAAE Conference (Sapporo, Japan), (4) MEG 2017 (College Station, TX), (5) Southern Economic Association (Tampa, FL).

**2016:**(1) Latin American Workshop in Econometrics of the Econometric Society (Montevideo, Uruguay), (2) IAAE Conference(Milan, Italy), (3) MEG 2016 (Urbana-Champaign, IL)

**2015:** (1) North America Winter Meeting of the Econometric Society (Boston, MA).

**2014:** (1) European Winter Meeting of the Econometric Society (Madrid), (2) Symposium Spanish Economic Association (Palma de Mallorca), (3) European Meeting of the Econometric Society (Toulouse), (4) 16th ZEW Summer Workshop for Young Economists (Mannheim), (5) 20th ENTER Jamboree (Stockholm)

**Before 2014:** (1) 15th Brazilian Time Series and Econometrics School (Teresopolis, 2013), (2) Spanish Stata Users Group Meeting (Madrid, 2010), (3) IV Encontro CAEN-EPGE (Fortaleza, 2009)

## Conference Program Committee

**2024:** IAAE Conference.

**2023:** IAAE Conference.

**2022:** IAAE Conference; Brazilian Econometric Society Conference.

**2019:** Latin American Meeting of the Econometric Society.

**2017:** Brazilian Econometric Society Conference.

## Miscellaneous

May 2025: Creator, organizer, and fundraiser, Econometrics at Emory: Causal Inference with Panel Data conference. Keynote by Prof. Guido Imbens (Nobel Laureate, Stanford University). Sponsored by Stata, Google, Goizueta Business School, and Emory Department of Economics.

Spring 2025–Present: Organizer, The Gary Chamberlain Online Seminar in Econometrics.

November 2024: Session organizer, Southern Economic Association Conference.

March 2024: Discussant, The Gary Chamberlain Online Seminar in Econometrics.

December 2023: Discussant, The Gary Chamberlain Online Seminar in Econometrics.

November 2023: Session organizer, Southern Economic Association Conference.  
 November 2022: Session organizer and discussant, Southern Economic Association Conference.  
 November 2021: Session organizer and discussant, Southern Economic Association Conference.  
 March 2021: Discussant, London Law & Finance Seminar Series.  
 January 2021: Discussant, The Gary Chamberlain Online Seminar in Econometrics.  
 November 2020: Session organizer, Southern Economic Association Conference.  
 November 2019: Session organizer, Southern Economic Association Conference.  
 November 2018: Session organizer, Southern Economic Association Conference.  
 November 2017: Session Organizer, Southern Economic Association Conference.

## TEACHING AND SUPERVISION

---

### Emory University

- ◇ Econometrics (ECON 320, Undergraduate level): Spring 2024, Spring 2025, Spring 2026
- ◇ Data Sciences for Economics (ECON 520, Master's level): Spring 2024
- ◇ Causal Inference with Panel Data (ECON 730, PhD Level): Spring 2026

### Vanderbilt University

- ◇ Econometric Methods (ECON 3035, Undergraduate level): Spring 2020, Summer 2020, Spring 2021
- ◇ Econometrics (ECON 6600, Master level): Spring 2017.
- ◇ Econometrics I (ECON 8310, Ph.D. core): Spring of 2016-2018.
- ◇ Nonparametric and semiparametric econometrics (ECON 9320, Ph.D. elective): Fall of 2017 and 2019,

### Students Advised (Committee member):

- ◇ Marcelo Ortiz-Villavicencio, Ph.D. student in Economics (In progress, Main Advisor), Emory University
- ◇ Qi Xu, Ph.D. student in Economics (2023), Vanderbilt University  
*Initial placement: Jinan University.*
- ◇ Trang T. Hoang, Ph.D. student in Economics (2021), Vanderbilt University.  
*Initial placement: Federal Reserve Board.*
- ◇ Jun B. Zhao, Ph.D. student in Economics (2021), Vanderbilt University.  
*Initial placement: University of Alabama.*
- ◇ Minghai Mao, Ph.D. in Economics (2021), Universidad Carlos III de Madrid.  
*Initial placement: Liaoning University.*
- ◇ Harold D. Chiang, Ph.D. in Economics (2020), Vanderbilt University.  
*Initial placement: University of Wisconsin, Madison.*
- ◇ Tam V. Bui, Ph.D. in Economics (2020), Vanderbilt University.  
*Initial placement: Happy Elements, San Francisco.*
- ◇ Jason Campbell, Ph.D. in Economics (2018), Vanderbilt University.  
*Initial placement: University of San Diego.*

### Guest Lectures

- ◇ Recent Advances in Difference-in-Differences, Department of Economics, PUC-Rio, Summer 2023.
- ◇ Recent Advances in Difference-in-Differences, Department of Leadership, Policy, and Organizations, Peabody College, Vanderbilt University, Fall 2022.
- ◇ Recent Advances in Difference-in-Differences, Applied Micro Junior faculty at Harris, Booth and University of Chicago, Fall 2022.
- ◇ Recent Advances in Difference-in-Differences, Economics Department, Harvard University (PhD Labor course), Spring 2022

- ◇ Recent Advances in Difference-in-Differences, Industrial Relations Section, Princeton University (talk with PhD Students), Spring 2022
- ◇ Recent Advances in Difference-in-Differences, Economics Department, University of Washington, Spring 2022.
- ◇ Recent Advances in Difference-in-Differences, Economics Department, Getulio Vargas Foundation - Rio de Janeiro (EPGE), Fall 2021.
- ◇ Difference-in-Differences with multiple time periods, Economics Department, University of Toronto, Spring 2021.
- ◇ Event-Study and Parallel Trends, Economics Department at Vanderbilt University (PhD applied-micro course), Fall 2020.
- ◇ Introduction to Difference-in-Differences, Biostatistics Department at Vanderbilt University, Spring 2020.
- ◇ Introduction to Treatment Effect Models, Economics Department at Yale University, Spring 2019.

#### Invited Mini-Courses

- ◇ Advances in Causal Inference, Brazilian Central Bank, Brasilia, May 2026.
- ◇ DiD workshop, PolMeth Summer Meeting, Atlanta, July 2025.
- ◇ 6th Summer School in Advanced Economics, Spetses Island (Greece), June 2025
- ◇ Difference-in-Differences, Department of Justice, October 2024
- ◇ Difference-in-Differences, UNU Wider, October 2023
- ◇ Difference-in-Differences, UCLA/CCPR, May 2023
- ◇ Difference-in-Differences, Georgetown Center for Econometric Practice, February 2023
- ◇ Difference-in-Differences, University of Michigan's Population Dynamics and Health Program, January 2024
- ◇ Summer School on DiD designs, University of Southern Denmark, August 2022
- ◇ Difference-in-Differences, Causal Solutions, July 2022, March 2023
- ◇ Difference-in-Differences, Statistical Horizons, June 2021, September 2021, October 2021.
- ◇ Difference-in-Differences, Universidad del Rosario, November 2021.
- ◇ Econometric Methods for Randomly Censored Data, Academia Sinica (Taiwan), November 2019.
- ◇ Recent Advances in Program Evaluation, Xiamen University (China), June 2017.

## PROFESSIONAL SERVICES

---

### Referee

Anonymous Referee for the following journals: *Annals of Applied Statistics*, *Annals of Economics and Statistics*, *Annals of Statistics*, *American Economic Review*, *American Economic Review: Insights*, *American Economic Journal: Policy*, *American Political Science Review*, *Biometrika*, *Brazilian Review of Finance*, *Econometrica*, *Econometrics Journal*, *Econometric Reviews*, *Econometric Theory*, *Economic Letters*, *Electronic Journal of Statistics*, *Empirical Economics*, *Evaluation Review*, *Health Service Research*, *Journal of the American Statistical Association*, *Journal of the Association of Environmental and Resource Economists*, *Journal of Business & Economic Statistics*, *Journal of Econometrics*, *Journal of Econometric Methods*, *Journal of Applied Econometrics*, *Journal of Causal Inference*, *Journal of Economic Behavior & Organization*, *Journal of Financial Econometrics*, *Journal of Human Resources*, *Journal of Multivariate Analysis*, *Journal of Political Economy*, *Journal of Political Economy: Microeconomics*, *Journal of the Royal Statistical Society: Series B*, *Operations Research*, *Oxford Bulletin of Economics & Statistics*, *Quantitative Economics*, *Quarterly Journal of Economics*, *Review of Economics and Statistics*, *Review of Economics Studies*, *Scandinavian Journal of Statistics*, *TEST*.

### University Services

#### Emory University

- ◇ Member of the Academic AI Task Force (AAIT), 2026-Present.
- ◇ Emory's Collaboration Committee with the U.S. AI Safety Institute, 2024-Present.

- ◇ Local organizing committee for the North American Summer Meeting of the Econometric Society (NASMES), 2026
- ◇ Member of the Atlanta Fed Working Group.
- ◇ Co-Chair of the Econometrics Recruiting Committee, 2023-2024.
- ◇ Undergrad Research Adviser in CS-Econ, 2023-Present.
- ◇ Collaborator for PhD Admissions in Economics, 2024, 2025, 2026.

Vanderbilt University

- ◇ Member of the T. Aldrich Finegan Best Honors Thesis Prize Selection Committee, Vanderbilt University, 2016-2017 and 2017-2018.
- ◇ Member of the Econometrics Recruiting Committee, Vanderbilt University, 2016 – 2017.
- ◇ Member of the Ph.D. Admissions Committee, Vanderbilt University, 2015