

Ricardo Masini

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University of California, Davis
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Academic Positions

University of California, Davis

2023–current Assistant Professor, *Department of Statistics*

Princeton University

2021–2023 Researcher and Lecturer, *Center for Statistics and Machine Learning (CSML)*

2020–2021 Visiting Lecturer, *Operations Research and Financial Engineering (ORFE)*

2019–2020 Visiting Fellow, *Operations Research and Financial Engineering (ORFE)*

Getulio Vargas Foundation (FGV)

2021–2023 Affiliate Professor, *Sao Paulo School of Economics (EESP)*, Sao Paulo-SP, Brazil

2016–2020 Assistant Professor, *Sao Paulo School of Economics (EESP)*, Sao Paulo-SP, Brazil

Education

2012–2016 **PhD in Economics (with honors)**, *Pontifical Catholic University of Rio de Janeiro (PUC-Rio)*, Rio de Janeiro-RJ, Brasil

2010–2011 **MSc in Economics**, *London School of Economics (LSE)*, London, UK

2007–2008 **MBA (Finance Major)**, *INSEAD*, Fontainebleau, France / Singapore

1998–2002 **BSc in Aeronautical Engineering**, *University of São Paulo (USP)*, São Carlos-SP, Brasil

Main Publications

1. "Distributional Counterfactual Analysis in High-Dimensional Setup."
Journal of Econometrics, forthcoming.
2. "Constrained Polynomial Likelihood" with Caio Almeida and Paul Schneider.
Journal of Business & Economic Statistics, forthcoming.
3. "Bridging Factor and Sparse Models" with Jianqing Fan and Marcelo Medeiros.
Annals of Statistics, forthcoming.
4. "Do We Exploit all Information for Counterfactual Analysis? Benefits of Factor Models and Idiosyncratic Correction" with Jianqing Fan and Marcelo Medeiros.
Journal of the American Statistical Association, 117, 574-590, January 2022.
5. "Counterfactual Analysis With Artificial Controls: Inference, High Dimensions and Nonstationarity", with Marcelo Medeiros.

Journal of the American Statistical Association, 116, 1773-1788, November 2021.

6. "Regularized Estimation of High-Dimensional Vector AutoRegressions with Weakly Dependent Innovations" with Marcelo Medeiros and Eduardo Mendes.
Journal of Time Series Analysis, 43,532-557, October 2021.
7. "Machine Learning Advances for Time Series Forecasting", with Marcelo Medeiros and Eduardo Mendes.
Journal of Economic Surveys, 1-36, July 2021.
8. "Counterfactual Analysis and Inference with Nonstationary Data" with Marcelo Medeiros
Journal of Business & Economic Statistics, 40,1,227-239, September 2020.
9. "ArCo: An Artificial Counterfactual Approach for High-Dimensional Panel Time-Series Data", with Marcelo Medeiros and Carlos Carvalho.
Journal of Econometrics 207(2):352-380, December 2018.

■ Papers under Revision and Working Papers

1. "Yurinskii's Coupling for Martingales" with Matias Cattaneo and William Underwood.
Annals of Statistics, Reject and Resubmit.
2. "Higher-order Refinements of Small Bandwidth Asymptotics for Density-Weighted Average Derivative Estimators" with Matias Cattaneo, Max Farrell, and Michael Jansson.
Journal of Econometrics, Revise and Resubmit.
3. "Exogeneity Test in High Dimension" with Victor Orestes.
4. "Higher-order Extensions to the Lindeberg Method" with Matias Cattaneo and William Underwood.
5. "Fixed-Point Numeric Solution via Approximation and Estimation" with Victor Orestes.

■ Statistical Software Articles

1. " ArCo: An R package to Estimate Artificial Counterfactuals" with Yuri Fonseca, Marcelo Medeiros and Gabriel Vasconcelos.
The R Journal 10(1):91-108, December 2018.

■ Refereeing Experience

Annals of Applied Statistics, Econometric Reviews, Econometric Theory, International Journal of Forecasting, Journal of the American Statistical Association, Journal of Applied Econometrics, Journal of Business & Economic Statistics, Journal of Econometrics, Operations Research.

■ Invited Talks & Conferences

2022

- Econometrics and Statistics Seminar, Booth School of Business, The University of Chicago.
- Seminar of the Department of Statistics, Operations and Data Science, Fox Business School, Temple University.
- Econometrics Seminar, University of Pennsylvania, Department of Economics.

- Econometrics Seminar, University of California Riverside, Department of Economics.

2021

- CFE-CMStatistics, King's College, London, UK.
- Econometrics Student Seminar, Princeton University, Department of Economics.
- Econometrics Seminar, Rutgers University, Department of Economics.
- Statistics Seminar, Columbia University, Department of Statistics.
- Econometrics Workshop, North Carolina State University, Department of Economics.
- S. S. Wilks Memorial Seminar in Statistics, Princeton University, ORFE.
- StatLab Seminar Series, Princeton University, ORFE.

2020 and prior:

- Annual Meeting of the Brazilian Econometric Society (SBE), Sao Paulo School of Economics (FGV-EESP), Brazil, 2019.
- Annual Conference of the International Association for Applied Econometrics (IAAE), Université du Québec à Montréal (UQAM) and Université de Montréal (UdeM), Canada, 2018.
- Annual Conference of the International Association for Applied Econometrics (IAAE), Sapporo, Japan, 2017.
- Annual Conference of the Brazilian Society of Econometrics (SBE), Natal, Brazil, 2017.
- Annual Congress of the European Economic Association (EEA), Mannheim University, Germany, 2015.
- World Congress of the Econometric Society (ESWC), Montreal, Canada, 2015.
- Annual Conference of the International Association for Applied Econometrics (IAAE) Thessaloniki, Greece, 2015.
- NBER-NSF Time Series Conference, Federal Reserve Bank of St. Louis, 2014.
- Annual Conference of the Brazilian Society of Econometrics (SBE), Natal, Brazil, 2014.

Grants and Research Awards

- National Science Foundation (NSF), co-Principal Investigator, Grant [DMS-2210561](#) , \$350,000, 2022-2025

Awards & Honors

- *2017 Haralambos Simeonidis* prize for the best PhD thesis in Economics in Brazil, "Contributions to the Econometrics of Counterfactual".

Teaching Experience

Princeton University:

- Spring 2021 SML201: Introduction to Data Science, Undergraduate, CSML
- Fall 2020 ORF405: Regression and Applied Time Series, Undergraduate, ORFE
- Fall 2020 ORF245: Fundamentals of Statistics, Undergraduate, ORFE
- 2019-2020 ORF350: Analysis of Big Data, Undergraduate, ORFE

Getulio Vargas Foundation (FGV-EESP):

- 2017-2019 Time Series Analysis, *Undergraduate*

2017-2019 Probability, *Undergraduate*
2017-2019 Statistics, *Graduate*
2017-2019 Bayesian Econometrics, *Graduate*

Professional Experience

2021 **Statistical Software Development**, *University of Chicago (Booth)*, US
2008-2009 **Associate Consultant**, *McKinsey & Company*, São Paulo-SP, Brazil
2005-2007 **Lead System Engineer**, *Airbus*, Bristol, United Kingdom
2003-2005 **System Engineer**, *Embraer*, São José dos Campos, Brazil

Languages

Portuguese (Native); English (Fluent); Spanish (Intermediate); French (Basic).

Personal Information

Born May 1980 in Foz do Iguaçu, Brazil. Brazilian and Italian citizenship. US Permanent Resident (Green card holder).

Married to Vanessa Figaro. Two daughters: Gabriela (born 2014) and Julia (born 2016).

Academic References

- o Prof. Matias D. Cattaneo, Princeton University (cattaneo@princeton.edu)
- o Prof. Jianqing Fan, Princeton University (jqfan@princeton.edu)
- o Prof. Marcelo C. Medeiros. PUC/University of Illinois (mcm@econ.puc-rio.br)