Marcelo Ortiz-Villavicencio

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Atlanta, GA
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EDUCATION

Emory University   Atlanta, GA
Ph.D in Economics   *2022 - current*

Escuela Superior Politécnica del Litoral (ESPOL)   Guayaquil, Ecuador
M.Sc. in Economics   *2019 - 2021*

Escuela Superior Politécnica del Litoral (ESPOL)   Guayaquil, Ecuador
B.A. in Economics   *2014 - 2019*

RESEARCH INTERESTS

Econometrics, Causal Inference, Machine Learning & Applied Microeconomics.

PUBLICATIONS

1. Heterogeneous treatment effects of a voluntary Inclusionary Zoning program on housing prices (with Gonzalo E. Sánchez & Mario A. Fernández).
   Housing Studies, vol. 40(3), 2024, p. 722 - 747.

WORKING PAPERS

1. Better Understanding Triple Differences Estimators (with Pedro H. C. Sant'Anna), 2025.

2. Learning Counterfactual Dynamics via Wasserstein Parallel Transport (with Ka Yan Cheng, Wonjun Choi and Florian Gunsilius), 2025.

RESEARCH EXPERIENCE

Emory University   Atlanta, GA
Research Assistant to:

- Prof. Pedro H.C. Sant'Anna: Spring 2024 - Present
- Prof. Elena Pesavento: Fall 2023

Inter-American Development Bank   Washington D.C.
Research Assistant to Juan Pablo Chauvin, Ph.D.   *Aug 2021 - Feb 2022*

ESPOL   Guayaquil, Ecuador
Undergraduate Research Assistant   *Jan 2018 - Sept 2019*

TEACHING EXPERIENCE

Emory University   Atlanta, GA
Instructor / Teaching Assistant

- ***Computational Data Science for Economics***: (Instructor, Masters level) Fall 2024, Summer 2025, Fall 2025.
- ***Econometric Methods I***: (TA, PhD level) Spring 2024.
- ***Parametric Statistics***: (TA, Undergraduate level) Fall 2023, Fall 2024.
- ***Econometrics***: (TA, Undergraduate level) Fall 2023.

ESPOL   Guayaquil, Ecuador
Teaching Assistant   *2017 - 2019*

- ***Econometrics II***: (Undergraduate level) Fall 2018, Spring 2018, Fall 2019.
- ***Statistical Inference***: (Undergraduate level) Spring 2017.

Fellowships, Awards & Honors

- 2025: 1st place in the Economics Student Research Fair (Emory).

- 2022: Laney Graduate School Fellowship for Doctoral studies (Emory).

- 2021: MSc. Economics, Summa cum laude (ESPOL).

- 2019: Masters Full Scholarship (ESPOL).

- 2018: Elected as a Student Representative on the Board of Directors of the School of Social Sciences and Humanities (ESPOL).

- 2018: Awarded a *Merit Scholarship* for academic excellence and distinction as an undergraduate in the Department of Economics (ESPOL).

- 2011-2014: Recipient of the *Medalla Escolar* from the Benemerit Guayas Philanthropic Society (awarded to the top students across all schools in Guayaquil).

Seminars & Conferences

- 2025: 4th Georgia Econometrics Workshop (Georgia Tech) | Cafe CIEC (ESPOL)

- 2024: *Optimization-Conscious Econometrics Summer School - OCE III (The University of Chicago)* | *Midwest Econometrics Group Conference 2024 (University of Kentucky)*

- 2020: *12th International Conference on Social Informatics (Online)*.

- 2019: *IX Semana Internacional de Economía (Quito, Ecuador)*.

- 2019: *Latin American WEB Congress* (San Francisco, CA).

Professional Experience

Rappi   Bogota, Colombia
Sr. Data Scientist   *2021 - 2023*

I developed ML models and systems to prevent fraud while enhancing the platform's user experience. I implemented real-time prediction microservices with ∼30 requests per second, automated ML pipelines, and built data pipelines for ETL and feature engineering. Additionally, I conducted experiments, fine-tuned models using statistical analysis, and optimized solutions to improve customer, rider, and partner satisfaction.

Addi   Bogota, Colombia
Data Science Consultant   *Mar 2022 - May 2022*

I contributed to the company's first in-house fraud prevention model for its buy-now-pay-later platform. Leveraging ML and large-scale data processing tools, I developed and optimized data-driven solutions to address complex fraud detection challenges during a short-term engagement.

Nodel/Maven Road   Guayaquil, Ecuador
Data Scientist   *2019 - 2021*

I built models to categorize social media data using ML and NLP, performed time series analysis for early warnings and anomaly detection, and independently documented, presented findings, and implemented solutions.

Technical Skills & Software

- *Computer Languages*: Python, R, SQL, C++, Matlab, Stata.

- *Libraries & Technologies*: Scikit-learn, XGBoost, Pytorch, TensorFlow, MLflow, Databricks, AWS, Microsoft Azure, GCP, Snowflake, Airflow, Spark.

Miscellaneous

- *Referee Service*: Journal of Econometrics

- *Languages*: Spanish (native) | English (fluent)

- *Citizenship*: Ecuador