Diego Escobar Salce, Ph.D.

Economics | Data Science | Program Evaluation

diego.escobar.salce@gmail.com • (312) 678-5684 <u>LinkedIn</u> • <u>Research Portfolio</u> • Chicago, IL, U.S.

Quantitative Economist with 9 years of experience generating innovative data-intensive Economic research. Passionate about applying Experimental and Observational methods for causal inference to real-world problems, while leveraging advanced Artificial Intelligence and Machine Learning tools. Excited about using these skills in Economic Consulting.

Professional Experience

Doctoral Researcher, The University of Chicago - Chicago, IL

2017 - 2023

- Managed projects full cycle, including design, data definition, analysis, and developing results storytelling.
- Measured unintended effects of a size-dependent policy introducing incentives to firms to avoid hiring women. Under review for publication in the Journal of Labor Economics (R&R) and cited in parliamentary discussion in Chile.
- Produced first economic literature estimates isolating <u>supply-side induced segregation by voucher/charter schools</u>.
- Developed novel methodology to estimate causal effects of group composition through classroom-level randomization and simulations in Java, generating first large-scale randomized peer-effects study outside the US.
- Constructed data on political preferences of U.S. college faculty and foundations by web scraping and matching entries to large administrative data with random forests and LLM to classify 3 million grants' descriptions.
- Directed students as a TA in 16 Econometrics/Statistics, ML, and Economics courses (8 Ph.D.-level, 30-80 students).
- Excelled guiding group work for Booth's EMBA students in 6 courses in London/Hong Kong (reviews of up to 4.9/5).
- Led LGBTQ+ and Ph.D. Social organization, arranging 10+ events for policy diffusion and community building.

Research Associate - J-PAL (Research Center funded at MIT) - Santiago, Chile

2015 - 2017

- Collaborated in 8 experimental evaluations (A/B Testing Randomized Controlled Trials) assessing behavioral economics interventions to improve programs' outcomes for government offices and NGOs.
- Organized project timeline while simultaneously collaborating with 3 research teams, including 5-10 people each.
- Prepared deliverables for grant-makers and partners, including technical and non-technical partners such as 3ie, IDB, the Chilean Ministries of Education, the Chilean Pensions Supervisor, and multiple NGOs.
- Measured impact of information delivery on educational choices, reaching 235,000 students in 5,600 schools.
- Assessed micro-entrepreneurship training initiatives, finding a cost-effective intervention to reduce training time.
- Conducted <u>causal impact analysis of personalized vs generic information</u> on individual retirement contributions.

Graduate Research Assistant (Full Time) - PUC Chile, Economics Department - Santiago, Chile

Evaluated economic policies using observational methods such as instrumental variables, RDD, panel data, and demand estimation on multiple projects in labor economics, technological growth, and energy.

Education

Ph.D. in Public Policy, The University of Chicago. GPA: 3.6/4.

Jun 2023

Fields: Econometrics, Microeconomics, Education. Full Scholarship + Stipend for 6 years.

M.Sc. in Computational Analysis and Public Policy (MSCAPP), The University of Chicago. GPA: 3.6/4.

Jun 2020

M.Sc. in Economics (Financial Economics), Pontifical Catholic University of Chile. GPA: 3.8/4.

Jun 2014

Concentration: Financial Econ. Cohort ranking: 4/33. Magna cum laude. Distinguished Thesis Award (one per cohort). **B.Sc. in Economics**, Pontifical Catholic University of Chile. GPA: 3.7/4.

Dec 2013

Cohort ranking: 22/260. Magna cum laude. (Ranked #1 in LATAM by Times & QS).

Technical Skills

Languages: Python, R, SQL, Java, Matlab, Stata, ArcGIS.

Platforms/Packages: Scikit-learn, Pandas, SciPy, PySpark, AWS S3/EC2, Git, PyTorch, Tensorflow, Keras, Tableau.

Research/Statistical Methods: Causal Inference Design (e.g., Randomization, RDD, IV, Diff-in-Diff, Panel Data

Analysis, Matching, Synthetic Control), Time-Series, Structural Modeling, Monte-Carlo Simulations.

Machine Learning/AI: Logistic, Linear, Ridge, and Lasso Regressions, K-means Clustering, K-NN, SVMs, PCA, Boosting, Random Forests, Neural Networks (CNN, RNN), Autoencoders, Big Data, Large Language Models (LLM).