# Diego Escobar Salce, Ph.D.

## **Economics | Data Science | Program Evaluation**

### **Professional Experience**

#### Doctoral Researcher, The University of Chicago - Chicago, IL

2017 - 2023

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

Led projects to create and interpret original economic research projects. Managed projects full cycle, including design, definition of data needs and collection, analysis, visualizations generation, 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

Steered end-to-end functions to conduct 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 2014 - 2015

Evaluated economic policies using observational methods such as instrumental variables, RDD, panel data, and demand estimation on multiple projects.

Explored labor force responses to government regulations through MATLAB-based model calibrations and simulations, securing research grants for project continuation.

#### **Education**

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

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.

2020

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

2014

Concentration: Financial Econ. Cohort ranking: 4/33. Magna cum laude. Distinguished Thesis Award (one in cohort).

**B.Sc. in Economics**, Pontifical Catholic University of Chile (Ranked #1 in LATAM by Times & OS).

2013

Cohort ranking: 22/260. Magna cum laude. GPA: 3.7/4.

### **Technical Skills**

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

Platforms: 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).