Ryan James Martin

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EDUCATION

University of California, Los Angeles (UCLA)
PhD, Economics August 2013–June 2019
Focus: *Econometrics, Demand Estimation, Industrial Organization*
Graduate Minor (Unofficial), Statistics, 9 Courses Spring 2016–Fall 2017
Statistics Training: Causal Inference, Experiment Design, Machine Learning, Time Series, Networks, High Dimensional Statistics (3.97 Stats GPA)

University of California, San Diego
BS, Math—Probability and Statistics, *magna cum laude* Fall 2010–Summer 2012
Minor: Economics (Math-Econ GPA 3.96)
Computer Science Courses: C, Java and OOP, Data Structures (Java), Assembly
Coursera Courses: Data Structures (Python), Algorithms on Graphs (Python), Using Python to Access Web Data

RELEVANT EXPERIENCE

Economist, Causal Inference and Pricing, Flexport, San Francisco May 2021–Present

- Build tools in Python, R, and SQL to automate rigorous causal inference and demand estimation models at scale.
- Deliver the output of my models to key internal systems (through an API) or to business leaders through dashboards and automated reporting.
- Design, implement, and measure the impact of pricing and product-feature experiments.
- Work directly with interdisciplinary teams of applied scientists, data scientists, and other business stakeholders.
- Partially-automated reporting and storytelling on quarterly metrics for our website.

Senior Economist, Bank of Canada, Ottawa July 2019–May 2021

- Wrote academic-quality papers to inform bank policy and advance the frontier of economic research using my expert knowledge of platform markets, the financial ecosystem, Canadian bank note production and distribution, and consumer search.
- Performed innovative data analysis and created compelling data visualizations using R, Python, Git, and SQL.
- Helped design surveys and analyze the results of discrete choice experiments.
- Lead RAs in research and analysis teams.
- Projects:
  - Measuring Consumer Welfare Changes in Online Search Markets.
  - Estimating the Demand for Payment Cards at the Point of Sale in the Canadian Economy.
  - Measuring Volatility for the Demand for Canadian Bank Notes.
  - Using Discrete Choice Experiments and Panel Data to estimate the demand for Central Bank Digital Currency.

PhD Research, UCLA, Los Angeles Sep 2015–June 2019

- Developed expertise in competition on digital platforms and consumer search.
- Used expertise in R and Python to perform an empirical analysis of consumer welfare on search platforms.

- Developed innovative estimation strategies for recovering unobserved, antitrust-relevant quantities with data from an online A/B test.
- Worked directly with world-class professors on demand-estimation problems in the healthcare market
- Projects:
  - Estimating the Upper and Lower Bound of Bidder Valuations in an English Auction.
  - Estimating the Price Effects of Airline Mergers.
  - Estimating the effect of subsidies on the demand for insurance in California's healthcare exchanges.
  - Estimating the Consumer Welfare Consequences of Search-List Order for an Online Travel Agency.
  - Using the Lasso for inference on the Most-Treatable Subpopulations in a Randomized Experiment.
  - Bootstrap estimates for confidence bounds of Conditional CDFs and Non-additively Separable Functions.

Research Intern June 2016–Sep 2016
Microsoft, MSR, Economics Group, Redmond, WA

- Sharpened practical skills in database management using SQL-like language and data analysis using R and Python while working with large-scale search data.
- Studied the relationship between search intensity and price variation in online markets.
- Applied knowledge of web scraping, string parsing, and big-data queries.

Teaching Assistant, UCLA, Los Angeles Fall 2014–June 2019

- Led weekly classroom discussion sections of 10–30 undergraduates students for courses including Econometrics, Game Theory, Microeconomics, Macroeconomics, and Statistics for Economists.

Research Assistant to Ery Arias-Castro, UCSD, San Diego Fall 2011–June 2012

- Provided excellent computational support for research on statistical measures of spatial dependence.
- Wrote novel R package with component in C language for efficient computation of spatial statistics.
- Expanded knowledge of efficient algorithms for calculating spatial statistics.

RELEVANT SKILLS

Programming: R, Python (Pandas, StatsModels, Scipy, etc.), SQL, Snowflake, Spark, RShiny, Git, Bash, Looker, LaTeX, Matlab, Excel
Coursera Certificates: Using Python to Access Web Data, Data Structures (Coded in Python), Algorithms on Graphs (Coded in Python)
Additional: Website Design as hobby.