Ryan James Martin

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EDUCATION

University of California, Los Angeles (UCLA)
PhD, Economics August 2013–June 2019
Focus: *Causal Inference, Demand Estimation, Machine Learning/Econometrics*
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 machine learning and econometric 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

- Build machine-learning and time series tools to automate bank-note-demand forecasts and report bank-note-demand volatility over time in R.
- Estimate demand elasticities for payment cards at the point of sale using R and python.
- Design national surveys and analyze the results of discrete choice experiments using python.
- Build panel-data mdoels from financial diaries of payment card choice at the point of sale using R.
- Lead RAs in research and analysis teams.

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

- Developed innovative strategies for estimating demand across an online A/B test/experiment with R.
- Worked directly with world-class professors on demand-estimation problems in the healthcare market in Stata and R.
- Developed sophisticated econometric and statistic tools to solve the following problems:
  - 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)
Operating Systems: Mac, Linux (Ubuntu,Pop!_OS), Windows. *Additional:* Website Design as hobby (using Ruby).