

EXPERIENCE

Lyft

New York, NY

- *Senior Data Scientist - Rideshare / Delivery Team*

Mar 2022 - Present

Data Scientist - Customer Platform Science / Integrity Team

Oct 2018 - Mar 2022

- **Delivery:** Led growth and quality data science for Lyft delivery. Identified opportunities, defined and built key dashboards to track KRs. Created data based product designs that reduced delivery failures by 8%.
- **Segmentation and Strategy:** Defined and drove cross-team alignment on Integrity KRs. Segmentated losses to determine priorities for product, engineering, science, and operations. Led analytics sync for team of 12.
- **Data and Modeling:** Architected core source of truth tables for financial loss data. Engineered features to label fraudulent accounts, detected and alerted on time-series anomalies, and improved early loss forecasting by 25%.
- **Product Analytics:** Led product analytics and experimentation for Integrity team. Identified opportunities, co-designed, implemented and measured solutions for savings of >\$5M/year. Defined custom success metrics and drove cross-team alignment on payments product initiatives. Created standardized experimentation process, decision making criteria, and post-launch monitoring.

The Brattle Group

San Francisco, CA

- *Research Analyst*

Jul 2016 - Sep 2018

- **Data Management:** Created diverse data ingestion pipelines for multiple projects. Wrote and documented ETL processes, with widely-used, flexible cleaning functions, enabling many teams to more quickly perform analyses.
- **Data Processing:** Sped up existing code run-time (by 10x) without loss of functionality. Optimized model runs to finish in days instead of weeks on a tight timeline. Determined variable importance from hundreds of variables using MCA, PCA, and t-SNE. Established firm-wide coding standards for R and SQL by giving formal trainings.
- **Data Presentation and Insights:** Discovered and visually supported hypotheses for clients based on data trends, including custom interactive geospatial maps and D3-style network graphs.
- **Blockchain:** Scraped data with custom Python and R scripts. Calculated implied interest rates from bitcoin spot and futures prices with anomaly detection. Assembled blockchain research for Brattle whitepapers.

Delta Analytics

San Francisco, CA

- *Data Fellow and Teaching Fellow (Nonprofit Volunteer)*

Jan 2017 - Sep 2018

- **Kiva:** Extracted features from open data (satellite light, electricity use) to predict loan repayment in rural Kenya.
- **Machine Learning Course:** Authored Jupyter notebook modules (code and curriculum) on natural language processing, data visualization, Naive Bayes classification, and regression.
- **BUILD:** Provided client guidance on data strategy and a reproducible report that takes raw data as input and highlights top features of program effectiveness.

Tudor Investment Corporation

Greenwich, CT

- *Quantitative Analytics (Intern)*

Jun 2015 - Aug 2015

- **Price Modeling:** Optimized bond price estimation for 30x speed, maintaining accuracy using SciPy and pandas. Wrote modules to universally convert swap and bond pricing across currencies and tenors in Python.

EDUCATION

University of Pennsylvania

Philadelphia, PA

- *Bachelor of Arts in Mathematical Economics — Minors in Computer Science and Statistics*

Aug 2012 - May 2016

PROJECTS

- **'Handy' R Package:** Open source R package containing useful functions for common data handling tasks.
- **Shiny Web Application:** Viz built using R Shiny, D3, and Sheets imports to rank Euro football and office foosball.

SKILLS

- **Tools:** SQL (Presto, Hive), Python (pandas, scikit, pytorch, etc), R (tidyverse, ggplot, etc), Git, dbt, Excel
- **Skills:** Product experimentation, ETL, data mining & visualization, classification & regression, feature selection, NLP