

EXPERIENCE

- **Strivr** NY, Remote
Research Scientist Nov 2022 - Present
 - **Tool Building:** Created LLM tool for course writing team to generate detailed content outlines from customer call notes, saving 30%+ time on early drafting. Deployed as web app via GKE.
 - **Research and Presentation:** Performed novel research into evaluating traits through VR headset analytics. Quantified immersive learning impact, presentation contributed to first Strivr Data Science Services deal.
- **Lyft** New York, NY
Senior Data Scientist - Rideshare / Delivery Team Mar 2022 - Nov 2022
Data Scientist - Customer Platform Science / Integrity Team Oct 2018 - Mar 2022
 - **Delivery:** Led growth and quality data science for Lyft delivery. Identified opportunities, defined metrics and built key dashboards to track KRs. Created data based product designs that reduced delivery failures by 8%.
 - **Integrity:** Led failed charge and chargeback reduction areas. Drove solutions and cross-team initiatives from ideation to execution, reduced steady-state failed charge losses by 62%. Promoted twice in 3 years. Drove loss reduction on our largest payment launches, Daily Billing and Lyft Cash, improving overall savings 2x.
 - **Data and Modeling:** Engineered features to label fraudulent accounts via model instead of agent review. Architected core source of truth tables for financial loss data, now in the top 8% of most used Lyft tables. Deployed time-series anomaly detection model and alerts on losses. Reduced error on loss forecasting by 25%.
 - **Product Analytics:** Led weekly science and analytics sync and planning for team of 12. Segmentated losses to align priorities and roadmap planning for product, engineering, science, and operations. Led Integrity team experimentation; standardized 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 Research:** 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.

EDUCATION

- **University of Pennsylvania** Philadelphia, PA
Bachelor of Arts in Mathematical Economics — Minors in Computer Science and Statistics Aug 2012 - May 2016

PROJECTS

- **Ask Data:** Ask your data questions in natural language and get answers with SQL or Python code.
- **Python Discord Bot:** Greet, message, and track game stats for discord channels. Back-end data in PostgreSQL.
- **'Handy' R Package:** Open source R package containing useful functions for common data handling tasks.
- **Machine Learning Course:** Authored Jupyter notebook modules (code and curriculum) on natural language processing, data visualization, Naive Bayes classification, and regression.

SKILLS

- **Tools:** Python (pandas, scikit, pytorch, plotly, flask, etc), SQL (Presto, Hive), R (tidyverse, ggplot, etc), Git, dbt, Docker, Javascript (React, Next.js), Excel, Large Language Models (langchain, model tuning, prompt engineering)
- **Skills:** Product design & experimentation, data warehouse & ETL, data mining & visualization, classification & regression, feature engineering & selection, NLP, data base design, web development, DevOps