

EXPERIENCE

- Extend** *San Francisco, CA, U.S.A.*
Dec 2021 – Present
- Senior Data Scientist*
- o Lead finance and revenue analytics data strategy, contributing to well-informed architecture and design decisions.
 - o Regularly presented to executives on performance, forecasts, and strategy insights/metrics for quarterly business review.
 - o Reduce churn of merchants worth >\$25M using machine learning on sales and alternative data sources to predict performance.
 - o Develop and deployed real-time monitoring to visualize and predict risk patterns for stakeholders to adjust reserve and pricing.
 - o Improve financial forecasting model accuracy by 30% by implementing a time series forecast model in Python.
 - o Propose and build a merchant conversion funnel to visualize and predict onboarding timelines to allocate resources efficiently.
 - o Concurrently serve as team analytics engineers using AWS services, Spark, ETL tools including DBT and Snowflake to optimize and maintain scalable data warehouse, and setup reverse ETL into Salesforce.
 - o Manage improvements to data and platform scalability, cross-functional collaboration, and research on novel data methods.

- Charles River Associates** *Boston, MA, U.S.A.*
Sept 2019 – Dec 2021
- Associate*
- o Led cross-functional teams as an analytics and economics consultant providing consulting on M&A to Fortune 500 companies operating in ad tech, media, healthcare, retail, using transaction, financial, and KPIs data.
 - o Presented memos, decks, and visualizations of findings to technical/non-technical stakeholders such as C-suite executives.
 - o Reduced client costs by \$150K through automating geospatial mapping analyses of client traffic data.
 - o Employed hypothesis testing, synthetic control, MMM and panel data regressions to provide competitive insights.
 - o Forecasted growth of a two-sided social media platform using discrete choice models, time series, and machine learning.
 - o Removed bottlenecks by speeding up big data analysis using cloud computing, multi-processing, vectorization, and encoding.
 - o Built an introductory programming module to train new hires in object-oriented programming and economic analysis.

- University of Toronto** *Toronto, ON, Canada*
May 2018 – Aug 2019
- Research Assistant, Department of Economics*
- o Led RA's in analyzing Michigan timber auction data for anomalies using regression discontinuity and isolation forests.
 - o Applied Natural Language Processing such as topic modeling on texts to map technology transfer across history.
- Teaching Assistant, IFP040HIS- Applied Concepts in Economics, University of Toronto* **Dec 2017 – Apr 2019**

EDUCATION

- University of Toronto** *Toronto, ON, Canada*
Jun 2019
- Hons B.A. Economics, Public Policy, and Statistics
- Arthur Hosios Scholarship in Economics:** Awarded annually for the best original research thesis in empirical economics.
- Rational Capital Fund:** Student-lead investment firm with >\$300,000 assets under management. Invested, sourced, evaluated, conducted due diligence as analyst.

PROJECTS

- Machine Learning applications in Sports betting**
- o Designed ML project using publicly available data to predict football match outcomes to explore optimal betting strategy.
 - o Employed M-Logit, Random forests, XGBoost etc., and sampling methods to assess accuracy.
- Leveraging NLP on alternate data for trading**
- o Predict bearish/bullish trends in stock prices by tracking sentiments for companies on the S&P500 using a deep learning Fin-BERT transformer leveraging scraped Google News and Reddit *wallstreetbets* data.
- Frictions in Dating Markets**
- o Collect novel dating app data to estimate drivers of dating activities and use econometrics to study frictions in dating markets.

TECHNOLOGIES & SKILLS

Programming: Python, Ray, SQL, Pyspark, Golang, jinja, R, STATA, MATLAB

Technologies: dbt-python, AWS (Glue, Sagemaker, etc.), Snowflake, Git, Airflow, Docker, Tableau, Mode, Excel

Other: Salesforce, JIRA, Similarweb, Datadog, ArcGIS