Tallal Usman

✉ tallal-usman@outlook.com   857-472-1408 📞

⚙ github.com/tallalUsman   🌐 tallal-uoft.github.io   linkedin.com/in/tallal-usman-uoft 🔗

EXPERIENCE

Extend   *San Francisco, CA, U.S.A.*
Senior Data Scientist, Finance and Risk   **Dec 2021 – Present**

- Lead initiatives in risk management, financial modeling, and machine learning at a fast-growing Fintech company.
- Improve retention of valuable clients, responsible for over $25M in revenue, through predictive analytics.
- Develop and deployed a Tableau dashboard to monitor risk patterns for stakeholders.
- Enhance financial prediction accuracy by 30% using python and excel, aiding investment decision-making.
- Bolster efficiency in sales and operations through machine learning and resource optimization strategies.
- Act as the team analytics engineer, overseeing the development of flexible data systems, and streamlining implementation of new tools and methods.
- Partner with stakeholders such as Finance, Product, etc. to drive initiatives and democratize data access across Extend.
- Maintain a proprietary python library to foster team collaboration, efficiency, and knowledge-sharing.
- Work with the engineering team to create a platform that predicts potential data issues, reducing 50k$ in monthly sales losses.

Charles River Associates   *Boston, MA, U.S.A.*
Associate   **Sept 2019 – Dec 2021**

- Led strategy as an economics consultant on M&A/competition to Fortune 500 using transaction, financial, etc data.
- Presented memos, decks, and visualizations of findings to technical/non-technical stakeholders such as C-suite executives.
- Achieved substantial cost savings for clients by automating location-based analysis of customer behavior.
- Utilized various analytical methods to provide insights into market competition and trends.
- Predicted the future growth of a social media platform, leveraging data modeling and predictive analytics.
- Improved efficiency in data analysis, reducing delays and streamlining processes.
- Developed an introductory training program for new hires, covering fundamental programming and economic analysis skills.

University of Toronto   *Toronto, ON, Canada*
Research Assistant, Department of Economics   **May 2018 – Aug 2019**

- Led RA's in analyzing Michigan timber auction data for anomalies using regression discontinuity and isolation forests.
- Applied Natural Language Processing such as topic modeling on texts to map technology transfer using spaCy.

EDUCATION

University of Toronto   *Toronto, ON, Canada*
Hons. Bachelors in Economics, Public Policy, and Statistics   **Jun 2019**
    Arthur Hosios Scholarship in Economics: Awarded annually for the best original research thesis in empirical economics.

Financial Risk Management (FRM) Candidate   **Aug 2023**

PROJECTS

Deploying Deep Learning applications in Sports betting

- Designed streaming a Machine Learning pipeline on Google Cloud (GCP) using a combination of CI/CD, Docker, Databricks, Airflow, dbt, Pytorch written in Go, Pyspark, SQL, Python to predict football match outcomes.
- Employed a deep learning model as well as traditional machine learning models to assess accuracy.

Leveraging NLP on alternate data for trading

- Predict bearish/bullish trends in stock prices by tracking sentiments for companies on the S&P500 using NLP-based Fin-BERT transformer leveraging scraped Google News and Reddit wallstreebets data.

Frictions in Dating Markets

- Collect novel dating app data to estimate drivers of dating activities and use regression to study frictions in dating markets.

TECHNOLOGIES & SKILLS

Programming: Python, SQL, Spark, Go, jinja, R, STATA, MATLAB
Technologies: DBT-python, AWS, GCP, Snowflake, Databricks, Ray, Git, Airflow, Docker, Tableau, Mode
Packages: pandas, numpy, sci-kit learn, seaborn, polars, Pytorch, Duckdb, tidyverse, CARAT, E1071, LightGBM, MLlib, SHAP