Jay Kodeswaran

THIRD YEAR COMPUTER SCIENCE MAJOR

📞 +1 (416) 994-0803 | ✉ kodesjay@gmail.com | ⌂ jaykodes | in jaykodes

Skills

Languages	Python, SQL, C++, C, Java, Scala, JavaScript, PHP, HTML/CSS
Data Frameworks	Spark, Hive, Airflow, Presto, Snowflake, MongoDB, MySQL, PostgreSQL, Hadoop, AWS (Reshift/S3)
Libraries/Tools	TensorFlow, PyTorch, Pandas, NumPy, NLTK, Docker, Power BI, Tableau, Git, AWS (EC2/RDS)

Work Experience

Wish (ContextLogic) *San Francisco, CA*
DATA ENGINEER - DATA SCIENCE TEAM *Jan 2022 - Apr 2022*

- Migrated **Petabytes** of data on a daily basis across different infrastructures (**MongoDB**, **Redshift**, **Data Lake**, etc) by designing, implementing, and maintaining **20+** data pipelines using **Presto**, **Spark**, **Hive**, and **Airflow**
- Collaborated with cross functional stakeholders to identify and prioritize requirements for developing data models and pipeline architectures that discovers up to **$250,000** of chargeback fraud per week
- Parallelized data flow, created partition schemes, and utilized optimal data engines to decrease runtime of ETL pipelines by **23%**

Equitable Life of Canada *Waterloo, ON*
SOFTWARE DEVELOPER - INVESTMENT TECHNOLOGY TEAM *May 2021 - Aug 2021*

- Designed and implemented the infrastructure for a scalable batch processing system that collected daily swap prices from the **Bloomberg Terminal** increasing the efficiency **5x** by creating a new **Python** stack and using the Bloomberg API
- Automated ETL processes across millions of rows of data using **PostgreSQL** and **Python** reducing manual workload **18%** per week
- Created a **Flask** application that highlights cash flow errors by calculating the variance between Bloomberg, BMO, and BNS prices

Emerald Investment Analysts *Waterloo, ON*
LEAD DATA SCIENTIST - FINANCIAL RESEARCH TEAM (PART TIME) *May 2021 - Aug 2021*

- Increased article visibility by **12%** by performing **A/B tests**, collecting **KPIs**, and suggesting recommendations to the authors
- Ingested raw data from sources using Medium, Google Analytics, and LinkedIn APIs to create data views to be used in **Power BI**
- Lead a team of **8** members providing technical mentorship by performing code and design reviews and teaching industry practices

Genellipse Inc *Mississauga, ON*
DATA ANALYST - ADVANCED ANALYTICS TEAM *Sept 2020 - Apr 2021*

- Developed a **Deep Neural Network** with **TensorFlow** that classifies and connects members and non-members of the client's company, increasing the recruitment efficiency by **15%** and saving **2+** hours a week
- Aided client's marketing decisions by performing **Cluster Analysis** on member spending habits, geographic, and demographic
- Designed data models to measure, analyze, and forecast department performance in conjunction with current operations
- Generated financial reports by transforming raw payroll data with **Pandas**, **NumPy**, and **MySQL**, saving **4+** hours a week

Programming and Design Projects

Stock Bot
SYSTEM DESIGN PROJECT *github.com/jaykodes/Stock-Bot*

- Architectured a **Snowflake Warehouse** that stores processed stock data from a batch data pipeline using **Python** and **Airflow**
- Produced a **Recurrent Neural Network** with **TensorFlow** that predicts when to buy and short a stock using technical indicators

Virtual Voice Assistant
FULL STACK PROJECT *github.com/jaykodes/Alfred*

- Utilized **Django REST Framework** and **AWS (EC2/RDS)** to design and develop a backend REST API backed by **MySQL**
- Developed a desktop assistant that uses **Natural Language Processing** and **Logistic Regression** to identify and fulfill user needs

Education

University of Waterloo *Waterloo, ON*
CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE *Sept 2019 - Apr 2023*

- **Relevant Courses:** Machine Learning, Algorithms, Data Structures and Data Management, Database Systems, Operating Systems