Aarya Shah

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TECHNICAL SKILLS

Languages: Python, SQL, R., Java, JavaScript, Typescript, React, NodeJS, C, C++, Swift, Streamlit Tools: Azure, GCP, AWS, Snowflake, Tableau, PowerBI, Git, Kubernetes, Docker, MongoDB, PostgreSQL

Frameworks: PyTorch, TensorFlow, Keras, Sklearn, Langchain, Kafka, Hadoop, Spark, DBT

EDUCATION

University of Waterloo

September 2021 – April 2026

Bachelor of Mathematics in Statistics & Computer Science

Waterloo, ON

• Relevant Coursework: Neural Networks, Data Types & Structures, Linear Models, Stochastic Processes

EXPERIENCE

April 2025 - Present Globys

Machine Learning Engineer Intern

Seattle, WA

- Integrated active training & fine-tuning to 7+ multi-agent RAG LLMs using Langchain/OpenAI embeddings
- Researched predictive models using Python (pytorch) for customer churn with 98% satisfaction from 8+ clients
- Utilized indexing for NoSQL (Azure) in C# REST APIs to optimize backend & reduce query latency by 70%

Health Canada

September 2024 – December 2024

Data Scientist Intern Toronto, ON

- Enforced a feature store in GCP that improved machine learning model scalability & performance by over 15% • Established time series models such as LSTM, Prophet & XGBoost for forecasting projects with 97%+ accuracy
- Conducted A/B testing to enhance experience using React to boost the carousel click-through rate by 25%

Gore Mutual Insurance

January 2024 – April 2024

Data Scientist Intern

Cambridge, ON

- Implemented an NLP model to assess query complexities saving hosting costs by \$500,000+ in Databricks
- Created 5+ deep learning projects using neural networks (CNN/RNNs) for projects in image/text domains
- Deployed 20+ data pipelines (ETL) & 10+ CI/CD workflows to Azure using Python, Spark, SQL & Git

IBM

July 2023 – August 2023

Machine Learning Engineer Intern

New York, NY

- Developed file processors in C++ & Docker which improved RAG model performance for 10+ file types
- Conducted prompt tuning & prompt engineering on watsonx GEN AI models to enhance human interaction
- Orchestrated RAG pipeline using Langchain with Pinecone/FAISS vector stores cutting response times by 60%

RBCData Engineer Intern

May 2023 – August 2023 Mississauga, ON

• Identified various methods to transition data foundation from DB2 to Snowflake to increase user flexibility

- Accelerated data pipelines by validating 25+ data sources in Data Lake, Kafka, Hadoop (Hive) & SQL

• Led the shift of converting legacy ETL scheduling scripts to Airflow which resulted in better customizability

Data Analyst Intern (Software)

May 2022 – August 2022 Mississauga, ON

- Designed a caching layer with PostgreSQL optimizing load times reducing latency for 4,000,000+ users
- Designed 15+ Tableau & PowerBI Dashboards & wrote 20+ SQL queries to influence business decisions
- Performed regression and logistic modeling for statistical analysis in R/Python scripts (pandas, numpy)

Projects

RBC

• Applied RAG for Q/A chatbot with ability to give quotes, check insurance coverage, and give tailored advice

Pharmaceutical (iOS) App (4000+ users) \bigcirc | Node.js, React, HTML/CSS, Python, AWS, Nvidia LLMs

• Engineered robust app using ML to read prescriptions, check coverage, corresponding price and availability

Driver Drowsiness Detection (1500+ users) \square | Python, CNN, Computer Vision (OpenCV)

• Constructed a system that processes pupil images & attention span to detect drowsiness with correctness of 92%

Tensorflow Enhancements (7) | C++, Python

• Enhanced features such as compiling libtensorflowlite with SVE or restoring training capability for LiteRT models

Flight Path Optimization (7) | Python, SQL, PostgreSQL, Machine Learning

• Built an optimization algorithm using unsupervised learning methods to find most fuel efficient flight path