

I am a Data Scientist and Machine Learning Engineer with a passion for NLP and performance computing.

Languages

- Scala/Java
- Python
- C/C++
- Go
- Rust

Frameworks

- Pandas/Sklearn
- Zio
- SparkMMLib
- PyTorch
- React

Platforms

- Hadoop/Spark
- Kubernetes/Openshift
- AWS/GCP
- Linux
- Docker

Skills

- Machine Learning
- Gen AI
- Analytics/Big Data
- NLP
- Embedded Systems

Career Summary

2019 – present **Data Scientist — IBM Expert Labs**

Develop and deploy novel AI solutions.

- Developed monitoring platform for LLM workloads on NVIDIA GPUs.
- Develop and research novel techniques for improving computational efficiency of LLM training and inferencing. Develop high performance inferencing engine for LLMs.
- Fine tune geospatial foundation models and Large Language Models (LLMs) on proprietary data.
- Develop high throughput C++ applications for performing embedded database machine learning to support model drift and explainability analysis on federated data.
- Develop federated data platform for tracking bias across machine learning models deployed to Google Cloud.
- Research applicability of LLMs in machine translation.

2018 – 2019 **Data Specialist — Princeton University**

Assist research team in producing visualizations, data validation and data quality pipelines, and conducting statistical analysis of Arab Barometer survey data.

- Design and deploy data quality monitoring pipelines in R and Python. Build regression and RandomForest models to analyze survey data and contribute to original research. Perform statistical analysis and quality analysis of survey data. Provide Arabic-English translation assistance.
- Build pipelines for cleaning and managing Arab Barometer survey data to support automated data cleaning.
- Build dashboards, reporting and analytics pipelines. Conducted statistical analysis of Arab Barometer data and contributed to research.

Education

- 2019 Dual Masters of Global Policy Studies and Middle Eastern Studies (University of Texas at Austin)
- 2015 Bachelors of Arts, Classical Languages (Hunter College, City University of New York)

Languages

Native English, Professional Fluency in Arabic, Conversational in Japanese, German, French and Turkish