

Machine Learning Engineer and Data Scientist with experience building end-to-end containerized analytics and AI applications. Extensive knowledge of embedded database programming, database optimization, cloud-native development and Hadoop.

Competencies

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| • Scala | • C/C++ | • IBM Cloud/AWS |
| • Python | • SQL | • Docker/Kubernetes/Openshift |
| • R | • Linux | • Hadoop |

Career Summary

2021 – present Data Scientist — IBM Expert Labs

Build and deploy cloud-native AI solutions on IBM Cloud Paks and Red Hat OpenShift for enterprise clients.

- Develop end-to-end model risk management solutions for AI based applications. Develop and deploy Spark applications for MRM on high volume ML models.
- Develop Kerberos authentication API for authenticating containerized Spark jobs to remote Hadoop environments (Hive, HDFS) to support batch scoring of Spark models.
- Developed Scala APIs for exposing NoSQL datastores to visualization layers to provide analytics to LOB for OCP cluster provisioning application.
- Designed stress tests for containerized MRM applications - identified and closed application performance gaps.
- Developed embedded database applications for performing embedded database machine learning to support model drift and explainability analysis on federated data.
- Developed Gitops workflows with ArgoCD/Terraform to automate provisioning of OpenShift clusters and application deployments.

2019 – 2020 Data Scientist — IBM Cloud Pak Acceleration Team

Build AI solutions on IBM Cloud Paks and OpenShift. Deploy to various cloud providers (AWS/Azure/IBM Cloud)

- Developed federated DB2 data warehouse for merging JSON and tabular data source from external APIs and remote databases (Hive, MySQL, Postgres).
- Developed Scala and Python microservices for integrating analytics applications with federated authentication services.
- Developed and deployed custom ML models (Scala/Akka) for customer ranking and churn prediction.

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 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.

2018 – 2019 Arabic Teaching Assistant — University of Texas, Austin

Assisted in first-year intensive Arabic instruction at the Center for Middle Eastern Studies

- Lead instruction and lecture on Arabic grammar and syntax, assisted professors in classroom activities.
- Provide one on one tutoring, grading, and review sessions for students
- Contribute to development of language curriculum

Education

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| 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