Patrick Harned

Data Scientist/ML Engineer

Machine Learning Engineer and Data Scientist with experience building end-to-end containerized analytics and machine learning applications.

Competencies

• Scala	• C/C++	• Machine Learning
• Python	• SQL	$ \bullet \ \mathrm{Docker/Kubernetes/Openshift} \\$
• R	• Linux	• Spark/Hadoop

Career Summary

2021 – present Data Scientist — IBM Expert Labs

Build and deploy AI solutions leveraging IBM Cloud Paks and Red Hat Openshift. Architect cloud-based solutions 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 connecting Hadoop environments to support batch scoring of Spark models
- Developed Scala APIs for exposing NOSQL datastores to visualization layers for multi-cloud provider Openshift deployment application.
- Designed stress tests for containerized MRM applications identified and closed application performance gaps.
- Developed scalable LIME Explainability modules for producing local model explanations at scale.
- \bullet Developed accerators for MRM applications to speed client integrations and in-database machine learning routines for DB2

2019 - 2020 Data Scientist — IBM Cloud Pak Acceleration Team

Build AI solutions on IBM Cloud Paks and Openshift.

- Implement containerized software solutions for ML project including automated model deployment and risk management.
- Built and deploy Spark MLLib pipelines to analyze customer churn.
- Develop containerized database operators in Scala.

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 pipleines for cleanining 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

2016 - 2019	Dual Masters of Global Policy Studies and Middle Eastern Studies (University of Texas at Austin)
2012 - 2015	Bachelors of Arts, Classical Langauges (Hunter College, City University of New York)

Languages