Yixi Zhao

Skills

Languages JavaScript | Java | Python | SQL | HTML | CSS

Technologies Git | Linux | Azure | AWS | Terraform | Jenkins | Power-shell | Agile/SCRUM | Databrick | Spark/Pandas

Certificate Microsoft Certified: Azure Data Fundamentals

Work Experience

05/2024- Data Engineer Coop, RBC INVESTMENT SERVICES, Toronto, Ontario.

08/2024 • Used **Apache Airflow** to create and manage data workflows aligned with project requirements.

- Enhanced Airflow framework to support conditional dataset dependencies along with cron scheduling.
- Conducted Data Quality(DQ) tests for existing workflows to ensure data integrity and functionality.
- Implemented **Unit tests** in existing framework to validate functionality and ensure code reliability..
 Experienced in container-based deployments using **Docker**, **docker compose**, and **docker image**.
- Developed command-line interfaces with **Click** to simplify workflow automation and user interaction.
- Established secure access and managed permissions for Azure resources using AD and Key Vault.
- Assisted the business team in generating reports by **aggregating** internal data and **scraping** public data.

09/2023- Performance Analyst Student, BLACKBERRY, Waterloo, Ontario.

04/2024 • Designed **ETL** process to extract data from SQL server to AWS S3 bucket.

- Built streaming and batch data pipelines using Delta Live Tables in Databricks.
- Leveraged Terraform to deploy data pipelines, manage AWS infrastructure, and oversee Unity Catalog tables.
- Executed Continuous Integration and Delivery (CI/CD) pipeline in Bitbucket with Atlassian.
- Transitioned workflows from Job Cluster to Serverless to optimize costs and improve resource allocation.
- Assisted in debugging existing workflows, addressing schema loss, data quality, and memory leaks.
- Supported the team in tracking cluster performance and expenses, contributing to a **cost-saving strategy**.
- Created user tagging strategies leveraging multi-layer golden tables for more precise data categorization.
- o Partnered with the product team to develop dashboards from golden and silver datasets within Databricks.

05/2022- Research Assistant, YORK UNIVERSITY, Toronto, Ontario.

08/2022 • Used **Python** to extract keywords and sentences from target datasets.

- $\,\circ\,$ Manually validated the outcomes and summarized the findings.
- Proposed ideas and refined scripts based on the professor's guidance in weekly scrum meetings.
- Utilized the Python Pandas library to perform statistical analysis and generated graphs based on datasets.
- Assisted in drafting and refining the paper, and collaborated with the professor on publishing the work.

Projects

Ongoing **Privacy Leakage in Android App**, University of Waterloo.

- o Experienced with build tools like Maven, Ant, and Gradle to create deployable artifacts from source code
- Leveraged BeautifulSoup, REST APIs, and Selenium for web scraping from public sources.
- Deployed **AndroidGuard** to gather data, and perform APK analysis for comprehensive app information retrieval.
- Applied statistical methods using NumPy and pandas to analyze datasets.
- Conducted taint analysis on applications using FlowDroid, collecting datasets for detailed security evaluation.

Education

2023–2025 University of Waterloo,

Software Engineering, Master of Applied Science.

2022-2023 Concordia University,

Computer Science, Master of Applied Science.

2016-2022 York University,

Computer Science, Bachelor of Science.