Jim Murphy

DATA ENGINEER

London

✉ jmrph@protonmail.com | 🏠 jmrph.org | ⦿ j-mrph

About

Accomplished data engineer with a track record of delivering robust, scalable cloud data pipelines and analytics. Specialises in production-grade workflow automation and enabling business insights for large organisations via modern cloud platforms.

Skills

Languages/Tools: Python (pyspark), SQL (Snowflake + SQL Server), dbt, Airflow (self-hosted + Astronomer), Azure (Databricks, DataFactory), AWS (S3, EC2, Lambda), Terraform, Kafka

Expertise: Data pipeline architecture, real-time data ingestion, cloud infrastructure, CI/CD

Experience

Sainsbury's Tech
London, U.K.

DATA ENGINEER — *Oct. 2022 - Present*

- Prototyped, built and maintained the data backend of an external facing data platform for Sainsbury's suppliers to securely access their data. Worth upwards of £3 million in annual revenue.
- Led on infosec upgrades, test coverage and migration from legacy Jenkins infrastructure using Terraform, AWS and GitHub Actions.
- Built and deployed real-time supply chain data pipelines using Kafka, Airflow, and Snowflake models in dbt. Enabled robust stream processing for critical business operations.

National Audit Office
London, U.K.

DATA ENGINEER / DATA ANALYTICS DEV — *Sep. 2019 - Present*

- Developed reproducible cloud based pipelines in Pyspark conforming incoming varied audit data totalling billions of records into a standardised database using combination of DataFactory, Databricks and SQL.
- Built and deployed live service wide audit automation analytic with 300+ users. Integrating CI/CD best practices with built in unit testing in Azure release pipeline.
- Introduced robust app user authentication using OAuth and Azure Active Directory in service wide R Shiny apps for large scale user tracking and security measures regarding data access.

Government Actuary's Department
Remote

DATA ANALYTICS DEVELOPER (SECONDMENT) — *Spring 2021*

- Developed actuarial tools in Python Dash to increase speed and quality of salary modelling.
- Introduced a small development team to effective version control using git to better manage deployments and collaboration on shared code.

National Audit Office
London, U.K.

DATA SCIENCE INTERN — *Aug. 2018 - Sep. 2019*

- Developed an automated sprint report system using DevOps API, for review by my team to assess bottlenecks and progress against key objectives.
- Built application making use of web scraping, text analysis and visualisation to bulk confirm audit fees of NAO clients garnering interest from international audit institutions.

Education

University of Liverpool
Liverpool, U.K.

MASTER OF PHYSICS (FIRST CLASS) — *Sep. 2013 - Jul. 2017*

- Making use of strong numerical and analytical skills, the ability to find underlying patterns in seemingly chaotic data allowed me to excel during my studies.
- Harnessed my ability to work effectively as part of a team or on an independent basis to deliver accurate results regardless of pressure or workload.
- In weekly report writing and lab work tasks I have enhanced my written and verbal communication skills allowing me to produce concise documents within strict time constraints.