

# Jim Murphy

DATA ENGINEER

London

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## 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.