

Jim Murphy

DATA ENGINEER & DATA ANALYTICS SPECIALIST

London

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About

I am a data engineer passionate about deriving new insights by building integrated and intuitive solutions.

Experienced at utilising cloud computing platforms for large scale processing as well as deploying and maintaining robust, user friendly analytics for use in production environments.

Technical Skills

DATA ENGINEERING & SCIENCE

Big data wrangling, relational databases, DevOps CI/CD, interactive data visualisation, APIs, text mining, machine learning, process automation, web scraping, OAuth.

SOFTWARE

Cloud computing architectures (Azure, Databricks, DataFactory), RStudio, SQL Server, Tableau, Jupyter Notebooks, Bash, LaTeX.

LANGUAGES

Adept user of R, SQL, Python (including pyspark)

Familiarity with Unix, Java programming, MATLAB, HTML, JavaScript

Experience

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

- Built risk assessment Tableau dashboards for use by the audit team of the BBC reviewing risk in reversals and purchases in general ledger data.
- Developed an automated sprint report system using DevOps API, for review by my team to assess bottlenecks and progress against key objectives still in use today.
- 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.