

Moonlie Fong-Whittaker

Data Engineer

RELEVANT WORK EXPERIENCE

Latymer Foundation, London

Database and Finance Manager

01/2024 – 10/2024

- Handled data for £5 million in annual revenue using SQL and RDBMS for transaction reconciliation and campaign review reporting.
- Enhanced workflow by identifying operational risks, outsourcing over 200 direct debits to Donor Debit, and leading a data migration.
- Enhanced legacy databases by refining data structures and standardising entries, leading to fewer manual corrections and improved accuracy in reports.
- Collaborated with the Data Protection Officer and teams to address and resolve data leaks promptly.

Royal College of Music, London

Development Operations Manager (Data and Research)

06/2023 – 12/2023

- Oversaw £5M in in-year revenue and £7M in new revenue by overseeing pledge payments and ensuring accurate data management for fundraising activities.
- Orchestrated data integration initiatives by importing large alumni cohorts and reconciling financial data from over 5+ sources, including BACS, Spektrix, and CAF.
- Trained over 40 users on Raiser's Edge NXT, ensuring data accuracy and security while maintaining compliance with data governance protocols.
- Delivered data analysis for the annual review report and CASE Insights Survey.

Imperial College, London

People and Organisational Development Coordinator

07/2018 – 06/2023

- Co-led the creation and management of Imperial's largest staff mentoring database, automating workflows and maintaining data accuracy through regular cleansing using Power Automate.
- Directed data integration projects across four faculties, enhancing the system's reach and optimising performance by responding to user feedback.
- Mapped and analysed business processes using MS Visio and Excel, delivering data-driven insights.

University of Greenwich, London

BAME Awarding Gap Project Manager

08/2017 – 08/2018

- Managed data collection, collation, and evaluation for the Office for Students-funded Value-Added (VA) dashboard project, part of the race equality initiative aimed at closing the BAME awarding gap.
- Ensured GDPR compliance and data governance for sensitive student data, implementing secure and ethical data handling practices.

CONTACT

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SKILLS

Technical Skills:

- Python
- SQL
- AWS
- Spark
- Databricks
- Kafka
- Airflow
- git

Languages:

- English (Native)
- Dutch/Flemish (Native)
- Mandarin (Conversational)
- Cantonese (Conversational)
- German (Basic)

EDUCATION

Birkbeck College

Masters of Science
Education, Power & Social
Change
London, UK
10/2016 - 09/2018

School of Oriental and African Studies

Bachelor of Arts
Chinese Language and Culture
London, UK
10/2010 - 07/2014

OTHER

Databricks Certified Data
Engineering Associate (in
progress)

CIPD Level 5 - Learning and
Development Associate
Diploma

- Conceptualised the development, training, and data interpretation for the Tableau dashboard, guiding stakeholders on how to understand the methodology and interpret the insights for departmental analysis.

Other Previous Experience

01/2014 – 07/2017

- Engineered an MS Access database that streamlined the booking process for 800 library workshops, reducing processing time by 75% and allowing staff to focus on academic tasks.
- Led a data migration project at UAL, integrating 3,000 curriculum data points, improving insights and operational efficiency for academic teams.
- Spearheaded data reporting for Race Equality projects, synthesising findings from 100+ survey responses to deliver insights that influenced policy changes and enhanced inclusivity.

PROJECTS

AWS Data Engineering Pipeline

08/2024

- Implemented an end-to-end AWS-based data engineering pipeline that leveraged both batch and stream processing to analyse over 30k rows of data.
- Provisioned an API Gateway RESTful API to leverage a Kafka REST proxy & send data to 3 different Kafka topics on MSK.
- Distributed batch data from MSK to an AWS S3 data lake using MSK Connect plugin-connector pair.
- Created custom Spark transformations on Databricks, to clean and aggregate data stored in the S3 data lake.
- Automated Databricks Workloads to run daily using custom-made DAG scripts on MWAA.
- Streamed data in real-time using 3 AWS Kinesis data streams & performed near real-time analysis using Spark Structured Streaming on Databricks.

Multinational Data Centralisation Pipeline

07/2024

- Developed a system that extracts sales data from 5 data sources: PDF documents, AWS RDS database, RESTful API, JSON & CSV files.
- Created custom Python scripts to clean and transform over 120k rows of data before loading the data into a PostgreSQL database.
- Designed a star-schema database by joining five dimensions tables, resulting in data querying time with < 1 millisecond latency.
- Designed >10 complex SQL queries to extract business insights from the data, including the velocity of sales, yearly revenue and regions with the most sales.