

Summary

Highly numerate statistical data analyst and physics graduate currently working as a data specialist. Confident using SQL, R, and Power BI; interested in applying mathematical methods and analytics and visualisation tools to drive successful data-driven decision making. Looking to apply and further develop my knowledge and skills in analytics and data science.

Skills

- ≥ 5 years: Advanced Mathematics, Statistics, Excel, LaTeX.
- < 2 years: SQL, R, Power BI.

Training

- Advanced Statistics for Data Science (Coursera) In progress
- Data Analysis with R Programming (Coursera) July 2023
- Intermediate SQL for Data Scientists (LinkedIn Learning) March 2023
- Querying Microsoft SQL Server 2022 (LinkedIn Learning) Feb. 2023
- Microsoft SQL Server 2022 Essential Training (LinkedIn Learning) Dec. 2022
- Power BI Essential Training (LinkedIn Learning) Nov. 2022

Education

MSc Medical Physics - Distinction - University of Surrey, 2019-21

• Distinction (82%) in the Research Project and Dissertation, "Understanding SARS-CoV-2 and the impacts of associated variants of concern on the COVID-19 pandemic". Awarded the 2021/2 IPEM Student Prize for outstanding performance in the MSc Medical Physics programme dissertation.

BSc (Hons) Theoretical Physics - 2:2 - Queen Mary University of London, 2014-18

• Distinction (72%) in Extended Independent Project, "An investigation into the spectral separation of semiconductor quantum dots for super-resolution microscopy."

Experience

Data Specialist - UK Health Security Agency, Apr. 2023 - Present

- Led the extract-transform-load (ETL) process for the development of Power BI reports; worked with the senior software developer to write advanced SQL scripts to migrate data between databases.
- Transformed data in Power BI, derived statistical metrics, created advanced visualisations in R using the tidyverse package, and designed data tables for reports using DAX.
- Prepared scientific reports and analysed them in Excel and R; communicated key findings, including statistical inaccuracies, to ensure scientific validity and completeness of data.
- Developed R code to perform statistical hypothesis testing (specifically, the Kolmogorov-Smirnov test) on univariate datasets using various statistical packages.
- Automated several administrative processes such as splitting, merging, and bulk renaming files using file manipulation packages in R.

Data Quality Analyst - IQVIA, Nov. 2022 - Mar. 2023

- Reinforced and built on the existing data quality framework by supporting the automation of the quality assurance process for management information (MI) deliverables (Power BI dashboards and reports); this involved writing SQL queries and collaborating with software developers to integrate SQL Server data into Power BI to track fluctuations in key metrics.
- Supported agile methodology by pro-actively participating in the work-stream planning process which included daily scrum calls with the MI team, following each task through its life cycle, developing strong connections with colleagues.

Data Officer - NHS Digital, Jun. 2022 - Sep. 2022

- Managed the extract-transform-load (ETL) process for five national cancer datasets, ensuring the availability of high-quality (clean and complete) data for disease registration, in line with standard operating procedures and strict deadlines.
- Performed quality assurance and validation for five national cancer datasets; communicated with internal stakeholders
 and NHS Trusts to resolve data quality issues. Ensured data was received in agreed formats, in line with service level
 agreements.
- Analysed data transformation mappings to diagnose and solve compatibility issues between the source data and the data warehouse, ensuring that different data formats were integrated correctly into the ETL system.

Data Administrator - UK Health Security Agency, Feb. 2019 - May 2022

- Increased the effectiveness of the COVID-19 pandemic response and accelerated turnaround times for test reports by assisting in testing and deploying a VBA application to import COVID-19 patient data and diagnostic data into the laboratory information management system (LIMS).
- Efficiently and accurately updated the LIMS and resolved data validation issues through effective communication with internal and external stakeholders.