

JACK KELLY

Data Scientist

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An experienced data scientist with strong research background and 4+ years of experience using predictive modelling, data processing and data mining algorithms to solve challenging business problems.

WORK EXPERIENCE

Lead Data Scientist at the RAC

Jan 2025 - Present

- Own large scale data sets feeding all operational demand and resourcing outputs across Roadside and Contact Centre operations
- Optimised patrol rotas, improving demand gaps and saving hundreds of human-hours in planning a month
- Played a key role in rebuilding and optimising a best-in-class Planning and Analysis function
- Conducted deep dives with stakeholders, effectively communicating complex concepts to both technical and non-technical audiences.
- Delivered actionable insights through machine learning models, improving forecasting accuracy and capacity planning across operations.

Data Scientist at Bet365

Aug 2022 - Dec 2024

- Skilled in working directly with stakeholders to drive the integration of data driven approaches and understanding of commercial customer behaviour across many groups within the business. Day to day experience using Python, SQL, BigQuery and deploying productionised models on GCP
- Developed supervised models to identify high risk gambling players using global user data. Increased detection of disordered gamblers by 6x compared to industry gold standard. This included developing novel extensions to transformers for tabular data classification in Python.
- Introduced unsupervised deep learning approaches to identifying outlier and high risk users that have historically been missed by traditional approaches and detection of high risk users.
- Improved marketing segmentation, including optimising customer reactivation campaigns using predictive modelling. This improved conversion rate by 7% while reducing costs
- Lead the introduction of MLOps tools to the team in order to increase stability and reproducibility within the data science and analyst teams, including integration of CI/CD, version control and standardising data pipelines
- Supervised junior data scientists and data analyst teams members, including project planning and tracking using tools like Jira. Additionally have developed workshops and learning plans to continually improve the data teams skill sets.

Research Associate at the University of Manchester

Dec 2020 - Aug 2022

- Developing novel machine learning approaches to causal inference and clustering analysis of complex and large scale genetic data
- Awarded the Turing Institute post-doctoral enrichment award for my published research
- Worked as the consultant statistician for the Manchester Centre for Audiology and Deafness, leading and advising on primary studies
- Co-supervised multiple PhD and pre-doctoral fellowship candidates

EDUCATION

PhD in Medical studies at Plymouth University

Awarded 2021

- Title: Statistical learning on biomarker discovery for neurodegenerative diseases
- Developing novel machine and deep learning approaches to analysis of large scale Gene expression data

- Research published in multiple high impact journals and given talks at international conferences

MSc. in Bioinformatics at Plymouth University

Awarded 2017

BSc. in Biomedicine at the University of East Anglia

Awarded 2016

SKILLS

- Fluent in **R** and **Python** programming languages (including TensorFlow and PyTorch)
- Cloud computing using Google Cloud Platform Snowflake
- Segmentation of global customer data
- Databasing using SQL and MongoDB
- Supervising other members of data teams and project planning
- Building, optimising and applying complex Machine and Deep Learning algorithms
- Data visualising for public and stakeholder engagement
- Git version control and collaboration