Carl Brazier
Data Scientist

OVERVIEW

Data Scientist with over 2 years work experience. Possessing a MSc in Data Science (Distinction) and BA in Accounting and Financial Management (2:1). Also completed the IBM Data Scientist Professional Certification KA Advanced SQL Certification. Specialising in Python, R, SQL, Azure, SOAP/RESTful API's, PowerBI and ML model development and deployment.

SKILLS

Programming Languages	Python (Proficient), SQL (Proficient), R (Intermediate)
Software	PowerBI, Azure DevOps, R Studio, Jupyter Labs, SQL Server Management Studio, Azure Cloud Services, Postman, Tableau, Visual Studio, GitHub, Tabular Editor, Microsoft Access, Excel, and SharePoint.
Technical	Linear/Logistic Regression, MLR, Naïve Bayes, Decision Tree Classifier, K-Nearest Neighbours, SVM.

WORK EXPERIENCE

Data Scientist   September 2023 — Present

- Developed Random Forest model to determine optimal composition of petrol site features, to increase sales. Utilised binary encoding feature engineering and K-Fold Cross-Validation. Provided insight for CEO upon deciding new site features/franchises.
- Led the UK EV Interactive Dashboard Project from ideation to deployment, collaborating with ASDA, Tesla and various internal teams. Ingested data through automated RESTful & SOAP API's to Azure Web Server, eliminating need for manual data entry.
- Designed dashboard in PowerBI, utilised advanced DAX Queries to provide real-time insights into customer behaviour, financial metrics, and legislative compliance, empowering Chief Officers with actionable intelligence for strategic decision-making.
- Engineered sustainable, normalised data model in SQL, enhancing data integrity/accuracy by implementing functions and stored procedures for complex business logic. Led to realisation of over £500,000 EBITDA.

Forecasting Data Analyst   January 2023 — September 2023

- Enhanced forecasting accuracy for 250 product lines by analysing SAP inventory data. Identified seasonal trends and outliers via SQL and Excel, leading to a 15% reduction in inventory waste.
- Contributed to new depot project, analysed 50+ datasets in SQL of existing depots to predict required stock for new depots based on historical sales, geographic, and temporal variables.
- Extracted inventory data (SQL), performed ELT/EDA (Excel, Python) and produced reports (SSRS)/dashboards (QlikView) for ad hoc requests from a variety of stakeholders, providing actionable insights for operational efficiency.

Email Campaign Manager   March 2022 — April 2022

- Organizing/Implementing suitable email marketing campaign for a TEDx event (MailChimp) and executing the distribution of targeted email marketing.
- Responsible for event processes such as ticket processing, catering, welcoming speakers and coordinating the general operations of the day.

Professional Chef   September 2021 — January 2023

- Transferable Skills: Working under pressure, organising a team, prioritisation of tasks/deadlines.

Business Operations Analyst   January 2021 — September 2021

- Collaborated with Data Scientists to integrate Salesforce CRM with email marketing and analysed customer data, to create specific automated email campaigns targeted at customer segments, increasing overall repeat customers to 44%.
- Implemented Salesforce CRM system to improve customer onboarding process and track leads, resulting in process time being reduced by 3 hours per day.

Waiter   July 2019 — January 2021

- 99% positive customer feedback.
- Responsible for maintaining stock levels.
- Dealing with the public with a customer comes first business philosophy.

Kitchen Manager   December 2018 — July 2019

- Innovated new recipes and business processes.
- Ability to prepare fresh specialized food in a fast-paced environment.
- Adaptable to a diverse range of shifts including waiting on, food running and cooking.

Financial Data Assistant   November 2017 — December 2018

- Identified new market opportunities through OSINT of up to £20 million market value.
- Spearheaded various projects: transitioning the company towards paperless functioning, anticipating, and preparing for the potential effects of Brexit on the meat industry.
- Reconciled supplier statements (resulting in 98executive financial dashboard using Power BI, resulting in more insight for senior leadership.

Carl Brazier
Data Scientist

Kitchen Team Leader   **November 2015 — September 2017**
- Responsible for maintaining adequate stock levels.
- Managing a team to ensure coordination and synergy throughout extensive shifts.
- Working as a team member in a time pressured environment serving the general public.
- Trained in HACCP following all due diligence and temperature checks for cooked food, also trained under COSHH guidelines for chemical handling.

Barista/Waiter   **September 2014 — November 2015**
- Responsible for preparation and maintenance of espresso machine.
- Experience in cashing up tills at the end of every day.
- Maintained healthy loyal customer relationships.

EDUCATION

MSc Data Science

Grade: Distinction   *University*
- Thesis: Challenges of Implementing Data Science Methods to the Cyber Security Practices of National Power Grids. Thematic Analysis (NVivo) analysing risks of ML methods in IDS systems. Resulting in 2 principled recommendations for policy makers.

BA Accounting and Financial Management

Grade: 2:1   *University*
- Relevant Modules: Business Intelligence, Financial Derivatives, Corporate Finance.
- Achieved highest grade (96/100) in Management School for Tesla stock report project.

Diploma in Trading and Investment   **September 2017 — June 2018**

Grade: Distinction   *Academy of Financial Trading*
- Rudiments of trading and investing including technical and fundamental analysis, interpreting various chart types, effective use of leverage, order types, execution processes and risk management.

PROFESSIONAL CERTIFICATIONS

IBM Data Science Professional Certificate   **March 2021 — November 2022**
- Developed and deployed 5 prediction models with scikit-learn to predict successful landings of SpaceX Falcon 9 rockets. Utilised Pandas and NumPy for EDA on launch data. Feature engineered statistical features, encoding categorical variables, and normalizing numerical data. Communicated findings through an interactive dashboard (Plotly/Folium). F-scores achieved: Logistic Regression 0.89, SVM 0.83, Decision Tree 0.72 and, KNN 0.94.

Knowledge Academy Advanced SQL Certificate   **April 2023**
- Modules included: Stored Procedures, Scalar Functions, Testing Conditions, Looping, Derived Tables and CTE's, Subqueries, Database Cursors, Error-Handling and Debugging.

Council Healthy Schools Certificate   **June 2006**
- During primary school I worked closely with the local council to ensure the school meals were of a nutritionally healthy standard for all students. Created and implemented the idea for a free salad bar in the dinner hall for students/teachers.

Carl Brazier
Data Scientist

PROJECTS

Predicting Airline Passenger Satisfaction   **October 2022**

- Utilised KNIME Analytics to train and deploy Decision Tree Classifier and Naive Bayes models on unseen data to predict a binary class membership of satisfaction. Confusion Matrices, Cohen's Kappa, and ROC Curves were used to evaluate model performance.
- Decision Tree model achieved a Cohen's Kappa of 0.91 applying gain ratios for splits and MDL pruning method. Naive Bayes model achieved Cohen's Kappa of 0.79 with a threshold Standard Deviation of 0. ROC curves showed Accuracy's of 93.39% (Decision Trees) and 87.35% (Naive Bayes).

Influencing Factors of COVID-19 Deaths: Within Low-Income Countries   **September 2022**

- Utilised R Studio to conduct Multiple Linear Regression analysis of selected variables from NHS COVID-19 and World Bank Data, to significant influences on total deaths. Preformed Shaprio Wilk's test, Log Transformation and Collinearity checks.
- Total population, Basic sanitation services and Stringency Index had the most influence. High model accuracy was achieved with a Multiple R-squared value of 0.9895 and Adjusted R-squared of 0.9055.

ACHIEVEMENTS AND INTERESTS

- Established a niche clothing brand incorporating hand-painted designs sold and distributed via my e-commerce platform. Working with charities to make staff uniform.
- Hobbies include Rock climbing, swimming, hiking, and surfing.
- Raising funds (over £9,000) for Derian House Children's Hospice.
- Won the student ambassador award for Derian House in 2013.
- Presenter of the University's Finance and Economics Radio Show.
- Successfully won High Schools STEM bridge building course in 2009.