Kush Shah

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Summary

Physics graduate with a First Class Honours degree from King's College London, combining strong analytical thinking with practical experience in data handling, inventory management, and technical operations. Proficient in Python, SQL, Excel, and visualisation tools, with the ability to turn complex data into actionable insights. I am excited to contribute to a forward-thinking team where I can grow across analytical and operational functions.

EDUCATION

King's College London • London

September 2019 - July 2023

Masters in Science • Physics with Theoretical Physics • First Class Honours

Key modules: Mathematics & Computation for Physics, Symmetry in Physics, Numerical Modelling, Statistical Mechanics Awards: Maxwell Prize (2023) - Awarded for the best overall performance by a final year MSci student

Watford Grammar Boys School • Watford

September 2017 – June 2019

A Levels • Mathematics, Physics, Chemistry

Awards: Upper-Sixth Form Prize for Physics and Student Support Work

Work Experience

Inventory Analyst – Imperial Lifestyle Ltd.

June 2024 - June 2025

London

- Maintained Microsoft Excel spreadsheets to monitor wholesale and online sales, track stock levels across channels, and support basic forecasting.
- Helped manage inventory by recording new deliveries, updating stock records, and tracking product performance to support stock ordering decisions.
- Liaised with overseas suppliers to confirm order details, track delivery schedules, and report any damaged or missing stock issues

Graduate Teaching Assistant – King's College London

September 2022 - April 2023

London

- Graded lab notebooks and reports while assisting in the execution of experiments across two semesters.
- Guided students to effectively record, organise and analyse data using advanced Microsoft Excel techniques.
- Collaborated with professors and students to exchange ideas and enhance the module's experience for all.

E-Commerce Assistant – Imperial Lifestyle Ltd.

June 2021 - Sep 2021 & 2022

London

- Supported operations for 10 online retailers across 3 e-commerce platforms, ensuring optimised performance.
- Managed a 600+ item inventory using Microsoft Excel for order fulfilment and restocking coordination.
- Delivered outstanding customer service by resolving inquiries and efficiently dealing with escalating cases.

Academic & Portfolio Projects

Evaulating Performance of the Hyper Kamiokande Outer Detector Design

October 2022 - May 2023

- Simulated particle trajectories and detector geometry using WCSim (C++), for water Cherenkov studies.
- Performed data analysis and visualisation using ROOT (C++), to generate 3D models and histograms.
- Summarised findings in a detailed report and presentation, both centred on addressing the dissertation question of how the detector performance evolves over time.
- Presented the report to Kamiokande researchers and provided simulation code to Ph.D. students at the university for ongoing research.

Lloyds Banking Group Data Science Job Simulation on Forage

July 2025

- Built a predictive model using XGBoost to forecast customer churn, achieving 70% accuracy and an ROC-AUC score above 0.63 after iterative tuning; enabled the business to proactively target at-risk users.
- Preprocessed raw customer data by imputing missing values, label encoding categorical features, and applying scaling, preparing it for high-performance modelling and reducing data leakage.
- Enhanced model accuracy by optimising tree depth, learning rate, and class weights, and fine-tuned classification thresholds to maximise F1-score, leading to more balanced predictions.
- Conducted feature importance and threshold sensitivity analysis, improving model transparency and helping stakeholders balance false positives with recall priorities.

SKILLS

- Programming & Tools: Python (NumPy, Pandas, Scikit-learn, Statsmodels, Matplotlib, Seaborn), SQL (PostgreSQL, MySQL, BigQuery), Excel, Google Sheets, Tableau, Power BI
- Analytical Skills: Data Cleaning, Exploratory Data Analysis, Data Visualisation, Feature Engineering, Model Development & Evaluation, Regression Analysis, PCA, Statistical Testing
- Mathematics & Statistics: Linear Algebra, Calculus, Probability, Descriptive & Inferential Statistics
- Other Skills: Sales Forecasting, Inventory Management, Scientific Research & Report Writing, Problem Solving, Adaptability, Cross-functional Collaboration