

Avkaran Klair

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PROFILE

A passionate problem-solver with a deep curiosity for emerging AI technologies (LLMs, Generative AI). 8 years of Python coding experience, specialising in data science, machine learning, and software engineering. Experience as a corporate data scientist, honing my ability to transform real-world data into actionable insights, designing bespoke ML models to uncover trends in luxury retail. Beyond professional roles, I explore the intersection of data and sports, working on predictive modeling and data analysis projects in football, MMA, and cricket.

PROFESSIONAL EXPERIENCE

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| Data Science Intern, Burberry <ul style="list-style-type: none">Leveraged data to extract actionable insights that enhanced understanding of customer interactions to gain hands-on experience in customer behaviour analytics.Developed machine learning models to identify high-potential customers by analysing their transaction behaviours, to consistently improve customer retention by an average of 6-10%.Enhanced agile development by working extensively with a PaaS (Databricks) to deliver projects. | 09/2023 – 09/2024
London,
United Kingdom |
| Maths and Science Tutor, Cherry Hill Tuition <ul style="list-style-type: none">Tutored students from Primary to A-level in Maths and SciencesAided students to tackle difficult problems using problem-solving techniques like decomposition and abstraction.Improved maths student grades from D/C to A/A*. | 10/2020 – 07/2021
London |
| Maths and Science Tutor, Boost Education <ul style="list-style-type: none">Guided student classes to apply mathematical methods to solve complex problems.Accelerated learning of core concepts such as Algebra, Geometry and Mechanics | 05/2019 – 12/2019
London |

EDUCATION

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| BSc Computer Science and AI, Loughborough University
Studying core concepts: Natural Language Processing, Cloud Computing, Logic, Algorithms, Computer Vision, Software Engineering, Maths, Data Mining & Machine Learning, AI Methods | 2021 – 2025 |
| A levels, Greenford High School Post 16
3 A levels: Maths-A, Computer Science-A, Physics-B | 2018 – 2020 |
| GCSEs, Greenford High School
11 GCSEs (9-6) including: Physics (9), Biology (9), Maths (8), English Literature (8), Computer Science (7) | 2016 – 2018
London |

PROJECTS

- Premier League Football Score Predictor**
- Developed an ensemble model leveraging Scikit-learn's Linear Regression and K-Nearest Neighbours classification to predict Premier League match outcomes and final standings for the 2018-19 season.
 - Achieved an 84% accuracy in predicting correct results
- Predicting Customer Lifetime Value (CLTV) + Churn, Burberry**
- Leveraged Burberry's Likelihood-To-Transact (LTT) Modem library to identify key customer behaviours influencing spend and churn prediction for the next 12 months.
 - Constructed an XGBoost regression model using a zero-inflated lognormal distribution (ZILN) objective function to more accurately predict both CLTV and churn in high-value customers, overcoming traditional mean-squared-error limitations when predicting spend.
 - Increased customer retention by 7% through outreaching to the exit-bound customers
- Confluence, Productivity & Knowledge Management System**
- Developed a productivity management tool that helps individuals and teams manage tasks and track project progress.
 - Created a knowledge management module for sharing technical and non-technical information within the company.
 - Presented the system to clients, succeeding their project requirements.
- Daniel Lee Bags LTT Model, Burberry**
- Utilised Burberry's LTT Modem library to identify key behaviours indicating potential purchasers of Daniel Lee bags.
 - Discovered previous outerwear and bag purchases were significant predictors.
 - Enhanced bag purchaser conversions by 12% opposed to using generic LTT model (validated through A/B testing).
 - Successfully deployed the model in ongoing bag marketing campaigns.

POSITIONS OF RESPONSIBILITY

Educate to Save, Khalsa Cup

- Launched a charity football tournament to raise money for children in poverty from India.
- Actively raised over £23,000 for Educate to Save

01/2019 – 05/2019
London

Sports Secretary of Punjabi Society, Loughborough University

- Co-Founded Punjabi Society, and the head of sports secretary.
- Organised sports events such as football matches and collaborating with other universities
- Designed merchandise for the committee to capture the culture of Punjab.

03/2022 – 03/2023

SKILLS

Python – Expert

Experience in libraries and frameworks: Pandas, NumPy, Sci-Kit Learn, TensorFlow, Pyspark

Functional Programming – Expert

Java – Proficient

SQL – Expert

Machine Learning – Expert

Experience in algorithms: SVM, Linear Regression, Random Forest, Neural Networks, Bayesian Networks

Object-Oriented Programming – Expert

OOP paradigm experience through Java

JavaScript – Expert

REFERENCES

References available on request