Jay Shah

jr-shah@outlook.com | +447497325864
Portfolio: `https://jayrshah.vercel.app/` | GitHub: `https://github.com/jays41`

EDUCATION

King's College London *Expected Graduation May 2026*
BSc Computer Science (expected 1st Class Honours)
Roundwood Park School *2016-2023*
A-Levels: Maths (A*), Further Maths (A*), Computer Science (A), Physics (A)

ACHIEVEMENTS

- UKMT Junior Mathematical Olympiad (2018): Distinction and Medal (Top 200 nationally)
- UKMT Intermediate Olympiad - Cayley (2019): Distinction and Medal (Top 100 nationally)

EXPERIENCE

HubSpot **London**
Software Engineering Intern *July - September 2025*

- Contributed to Data Studio, a flagship HubSpot feature launched at INBOUND 2025 and now used by thousands of customers
- Engineered a smart account verification polling system, reducing recovery time after verification errors from minutes to seconds and eliminating stale verification states
- Built an intelligent sync restart mechanism, reducing redundant API calls and improving sync throughput and reliability
- Strengthened product reliability with expanded automated test coverage, reducing regressions and supporting production releases

Valtech **London**
Software Developer Intern (Consulting for Ocado Technologies) *June - July 2024*

- Developed and deployed a React component powering rotating product recommendations and advertisements, seen by thousands of Ocado customers daily
- Delivered new frontend features and unit tests (Jest), improving performance and reliability across the platform
- Reviewed peer code contributions and proposed improvements to ensure production quality

PROJECTS

Explainable AI for Financial Forecasting

- Implemented interpretable models entirely from scratch in Python (rule-based classifier, custom KMeans, Gini Decision Tree, XGBoost variant with SHAP) for financial time-series forecasting

King's Capital (King's Business Club)
Senior Quantitative Trading Associate *Oct 2024 - Present*

- Developed and back-tested systematic trading strategies (market-neutral, factor tilt, beta-neutral) in Python/C++ on multi-year financial datasets
- Presented models to Deutsche Bank Quant Research (MDs and VPs), incorporating feedback into refinements
- Co-authored research on FinBERT sentiment analysis; deployed platform now actively used by the society
- Mentored junior members in Python and portfolio theory

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, Java, C++, Scala, SQL, HTML/CSS
Frameworks/Tools: React, Next.js, Node.js, Django, Flask, Rails, TensorFlow, NumPy, Pandas, Jest, Playwright, Postman, Redis