BRYAN WEI XUAN CHEONG

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EDUCATION

Imperial College London – MSc in Business Analytics (Predicted Distinction) ⟶ Aug 2024 - Aug 2025
Modules: Generative AI, Statistics & Econometrics, Financial Analytics, Energy Analytics, Digital Marketing Analytics, Text Analytics, Network Analytics, Logistics & Supply Chain Analytics, Optimisation & Decision Models, Data Visualisation

University College London – BSc in Computer Science (2:1, Grade 68%) ⟶ Sep 2021 - Jul 2024
Modules: Advanced Machine Learning, Mathematics & Statistics, Algorithms, Object-Oriented Programming, Software Engineering

SKILLS

Programming	Python, SQL, R, SvelteKit, TailwindCSS, HTML (Proficient); Java, Haskell, C (Basic)
Libraries	pandas, scikit-learn, Plotly, XGBoost, PyTorch, statsmodels, SHAP, FastText, VADER, SciPy, spaCy, NetworkX
Technical Tools	Git, AWS, Docker, PostgreSQL, ETL, Power BI (DAX, Power Query), Excel, Google Analytics, VWO, Selenium
Languages	English (Native), Cantonese (Fluent), Mandarin (Intermediate), Malay (Intermediate)

PROFESSIONAL EXPERIENCE

Anavio Capital Hedge Fund ⟶ *London, UK*
Equity Analytics Intern – Long/Short Strategy ⟶ Jul 2023 - Sep 2023

- Built a Python screening dashboard integrating 15+ capital-efficiency metrics to support uncorrelated long/short strategies
- Scaled coverage from 10 to 200 tickers, automating 80% of manual work to accelerate insight delivery
- Enhanced pipeline robustness with 100+ Pytest tests and six error-handling decorators, reducing downtime and debugging
- Translated complex logic into clear flowcharts and wireframes for management, halving delivery time and improving alignment

GSE-M Technology Sdn. Bhd ⟶ *Malaysia*
Enterprise Resource Planning (ERP) Assistant ⟶ May 2023 - Jul 2023

- Partnered with ERP users across five departments to gather 30+ requirements, identify operational challenges, and find critical bugs
- Tailored ERP functionalities with consultants, improving process efficiency by 25% and aligning system with departmental needs
- Co-led daily conference room pilots, training 90 employees to ensure smooth adoption and usage of the new ERP system

British Red Cross ⟶ *London, UK*
Data Analyst ⟶ Sep 2022 - Apr 2023

- Developed a Power BI app with 20+ interactive dashboards to analyse complaints data, delivering actionable insights to support teams and senior stakeholders; reduced resolution time by 50%
- Built an ETL pipeline in Power BI Dataflows to extract data from four sources, modelled into fact and dimension tables, and leveraged DAX for geographical drill-downs and slicing, enabling consistent and scalable reporting
- Secured future development by presenting a streamlined issue resolution system along with a deployment manual to the Head of Data

Subplace (B2C Subscription E-commerce Platform) ⟶ *Malaysia*
Software Reliability Intern ⟶ Jun 2022 - Aug 2022

- Cut maintenance time by 60% via modular templates and systematic test cases, improving platform stability
- Resolved 200+ issues and introduced agile, test-driven development practices to enhance reliability and support continuous delivery

PROJECTS

Multi-Channel Attribution (DMEF Dataset from WRDS) Analysed 3.3M contacts and 240K orders to evaluate catalogue vs. email campaign effectiveness using PostgreSQL and Python. Computed response rates under first-, last-, and linear-click attribution, revealing catalogue's six-times higher conversion on average. Segmented customers into 125 RFM cells, calculated CLV with retention-adjusted discounting, and recommended cost-effective targeting strategies by estimating breakeven cost per email relative to catalogue

Portfolio A/B Testing and Analytics. Ran A/B tests with VWO comparing (1) a text-only vs personal-image and (2) presence vs absence of clickbait on the Download CV button on the hero page. Drove traffic via social media and Selenium bots, launched a Google Ads campaign with targeted keywords, and tracked engagement events (e.g. CTA clicks)

Beat The Bookies. Engineered a Premier League match predictor using 18 features across 5 seasons (earlier data showed performance decay), achieving 51% validation and ~40% test accuracy with CatBoost. Feature-engineered Pi-rating variants with tuned hyperparameters and selected key variables using SHAP. Explored pre-game sentiment as a predictive signal using LLMs and the Nitter API

RIE Cleaning of Lagged Covariance Matrices. Developed a cleaning algorithm for high-dimensional lagged covariance matrices using Rotationally Invariant Estimators (RIEs), correcting spectral distortions via the Marchenko-Pastur law. Achieved 100% noise reduction in AR(0) models and ~20% signal-to-noise improvement in AR(1), with larger gains as dimensionality increased. Applicable to portfolio risk modelling, time series forecasting, and signal processing

Text Analytics on Song Lyrics. Explored drivers of song popularity by modelling 40,000+ lyrics using LASSO with n-grams and FastText embeddings. Identified genre trends in explicitness and themes, and compared popular artists' album similarity using averaged word embeddings with PCA-filtering and cosine similarity to reveal deeper semantic shifts

Logistics and Supply Chain Optimisation Game. Simulated a multi-region supply chain using hybrid demand forecasting and cost-benefit analysis to guide factory and warehouse expansion. Applied adjusted reorder points and Silver-Meal heuristics to manage seasonal inventory, securing 2nd place in Imperial's cohort

Energy Demand Forecasting Model. Developed and tuned XGBoost model to forecast UK electricity demand, engineering features like Heating Degree Days, holiday dummies, and temporal lags. Achieved 96.3% R^2; generalises well with low residual autocorrelation

TetrisAI. Implemented a Tetris heuristics evaluation AI, scored 28,000+ points using 400 blocks, 80th percentile in UCL's cohort

AWARDS AND CERTIFICATIONS

AmplifyME – Mergers and Acquisition Simulation with UBS   Feb 2025
Boston Consulting Group – Introduction to Strategy Consulting (Forage)   Oct 2024
Goldman Sachs – Software Engineering Experience Program (Forage)   Jul 2024
Harvard University – CS50x Puzzle Day: Perfect Score (Teams of Six, Top 13% in the World)   Apr 2020