

BRYAN WEI XUAN CHEONG

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EDUCATION

Imperial College London – MSc in Business Analytics (Distinction, Dean’s List)	Aug 2024 - Aug 2025
<i>Modules:</i> Generative AI, Statistics & Econometrics, Optimisation & Decision Models, Financial Analytics, Digital Marketing Analytics, Text Analytics, Network Analytics, Energy Analytics, Logistics & Supply Chain Analytics, Data Visualisation, Databases	
University College London – BSc in Computer Science (2:1)	Sep 2021 - Jul 2024
<i>Modules:</i> Machine Learning, Mathematics & Statistics, Algorithms, OOP, Software Engineering, Reinforcement Learning, Security	

SKILLS

Programming	Python, SQL, TypeScript, React, R, Java, C++
Technical Tools	PostgreSQL, AWS, CI/CD, Terraform, Docker, FastAPI, Power BI, Snowflake, Supabase, dbt
Applied ML	pandas, scikit-learn, PyTorch, XGBoost, LightGBM, CatBoost, PCA, SHAP, statsmodels, ARIMA
Gen AI	Mastra, Claude API, OpenAI API, Weaviate, Pydantic, RAGAS, Arize
Financial	Bloomberg Terminal & API, Portfolio Optimisation, Factor Models, Hedging, CVaR, Monte Carlo
Analytical	Forecasting, A/B Testing, Segmentation, Recommender Systems, Causal Inference
Languages	English (Native), Cantonese (Fluent), Mandarin (Intermediate), Malay (Intermediate)

WORK EXPERIENCE

Tecno International (Capstone Project)	London, UK
LLM Agent Engineer	Jun 2025 - Aug 2025
<ul style="list-style-type: none">Automated 75% of ESG analysis via multi-agent pipeline using GPT-4.1 + Weaviate RAG with hybrid search (BM25 + embeddings)Cut 80% of repetitive tasks through automatic PDF ingestion/generation, freeing consultants for strategy implementationDeveloped a 24/7 assistant that collected structured customer inputs, increasing data captured for funnel and behavioural analysisReduced API costs by 20% without quality loss by optimising token usage via context compression and caching	
Anavio Capital Partners LLP	London, UK
Equity Analytics Intern – Long/Short Strategy	Jul 2023 - Sep 2023
<ul style="list-style-type: none">Built a Python dashboard to uncover firm-level inefficiencies across 15+ metrics, identifying outliers for investment decisionsScaled coverage 20x (10 to 200 tickers) daily by automating 80% of analysis and strengthening reliability with 100+ Pytest testsHalved delivery time by translating business rules into clear flowcharts and wireframes for non-technical stakeholders	
GSE-M Technology Sdn. Bhd	Shah Alam, Malaysia
Enterprise Resource Planning (ERP) Assistant	May 2023 - Jul 2023
<ul style="list-style-type: none">Consulted with 5 departments to gather 30+ requirements, translating operational needs into ERP solutionsResolved 4 critical bugs and co-led training for 90 employees, improving adoption and process efficiency by 25%	
British Red Cross	London, UK
Data Analyst	Sep 2022 - Apr 2023
<ul style="list-style-type: none">Built ETL pipeline from 4 sources and developed 20 Power BI dashboards to visualise behavioural trends in complaintsDefined resolution KPIs and identified delay drivers, reducing resolution time by 50% and improving service outcomes for customersSecured 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)	Kuala Lumpur, Malaysia
Software Reliability Intern	Jun 2022 - Aug 2022
<ul style="list-style-type: none">Cut maintenance time by 60% via modular and systematic test case templates, improving stability for a SQL-backed platformResolved 200+ issues and introduced agile, test-driven development practices to enhance reliability and support continuous delivery	

PROJECTS

Multi-Channel Attribution. Analysed 3.3M contacts and 240K orders to compare catalogue vs. email effectiveness by computing 3 attribution models on PostgreSQL. Found catalogues drove 6x higher conversion, but emails delivered 7x higher ROI based on breakeven cost analysis. Recommended targeting strategies using 125 RFM segments and CLV estimates

Portfolio A/B Testing & Analytics. Ran A/B tests to measure clickbait vs professional phrasing on my website’s “Download CV” CTA. Professional version saw a 70.3% higher CTR than clickbait, overturning intuition and proving the value of evidence-based decisions

RecSys Purchase Prediction. Built a recommender system on 33M clicks and 1.1M purchases using a 2-stage pipeline, engineering 21 features such as session duration and using SHAP to interpret their contribution to model performance to optimise a Jaccard-based score

RIE Covariance Cleaning. Developed a spectral cleaning algorithm using Rotationally Invariant Estimators, shrinking noise in high-dimensional lagged covariance matrices. Achieved 100% noise reduction in AR(0) and ~20% signal-to-noise improvement in AR(1), with more gains as dimensionality increased. Applicable to portfolio allocation, volatility forecasting, and covariance-based models

Beat The Bookies. Engineered a Premier League match predictor with CatBoost, achieving 51% validation accuracy using 18 features across 5 seasons. Applied Pi-rating variants, SHAP for feature selection, and explored LLM-based online sentiment as a signal

NLP Analysis Of Song Lyrics. Modelled 40,000+ lyrics using LASSO with n-grams and FastText embeddings to study 8 genre-level drivers of song popularity. Used PCA and cosine similarity to quantify semantic shifts between popular artists’ debut and later albums

Supply Chain Optimisation. Simulated multi-region supply chain with hybrid forecasting (SARIMA, CrostonSBA) and seasonal inventory optimisation (Silver-Meal), securing second place in Imperial’s cohort with no lost orders in the final 60% of the competition

Gas Plant Risk & Hedging. Simulated 10,000 copula-based gas and electricity prices to assess plant risk and profitability. Designed a hedge (long electricity, short gas) that cut 95% Expected Shortfall by 29%, factoring in outages and cross-commodity correlations

Energy Demand Forecasting. Developed and tuned XGBoost model to forecast UK electricity demand, engineering features like Heating Degree Days, holiday dummies, and temporal lags. Achieved 96.3% R²; generalises well with low residual autocorrelation

Gas Valuation With Real Options. Valued a 2-stage gas project using NPV and real options, showing timing effects on valuation. Identified a break-even gas price of \$0.136/m³ and option values up to \$1.25M, with deferral adding significant flexibility value

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

AWARDS AND CERTIFICATIONS

DeepLearning.AI – Retrieval Augmented Generation (RAG)	Sep 2025
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 (Top 13% Worldwide, Teams of 6)	Apr 2020