# BRYAN WEI XUAN CHEONG

🗾 +44 7825 787529 | 🗖 wei.cheong24@imperial.ac.uk | 🛅 linkedin.com/in/bryancwx | 🚱 bryancheong.vercel.app

#### **EDUCATION**

**Imperial College London** — MSc in Business Analytics (Predicted Distinction)

Aug 2024 - Aug 2025

Modules: Databases, Data Visualisation, Energy Analytics, Generative AI & Large Language Models, Financial Analytics, Logistics & Supply Chain Analytics, Network Analytics, Digital Marketing Analytics, Statistics & Econometrics, Text Analytics

University College London — BSc in Computer Science (2:1, Grade 68%)

Sep 2021 - Jul 2024

Project: Cleaning Lagged Covariance Matrices Using Rotationally Invariant Estimators (RIE)

Modules: Algorithms, Cybersecurity, Interaction Design, Machine Learning, Mathematics & Statistics, OOP, Software Engineering

#### **SKILLS**

Python, SQL, R (Proficient); JavaScript, HTML/CSS (Experienced); Java (Basic) **Programming** 

**Python Libraries** NumPy, pandas, Matplotlib, scikit-learn, TensorFlow, PyTorch, CatBoost, Shapley Additive Explanations (SHAP) **Technical Tools** ETL, PostgreSQL, Power BI, Tableau, AWS, Databricks (Spark), DAX, GitHub, Docker, Jira, Confluence, Excel

English (Native), Cantonese (Fluent), Mandarin (Intermediate), Malay (Intermediate) Languages

### PROFESSIONAL EXPERIENCE

#### **Anavio Capital Hedge Fund**

London, UK

Equity Analytics Intern – Long/Short Strategy

Jul 2023 - Sep 2023

- Built an equity screening dashboard integrating 15+ capital efficiency metrics to support uncorrelated long/short strategies targeting idiosyncratic returns. Scaled daily coverage from 10 to 200 tickers, reducing manual workload by 80% through automation
- Enhanced pipeline robustness with 100+ Pytest tests and six error-handling decorators, reducing downtime and debugging time
- Translated complex logic into clear flowcharts and wireframes for management, accelerating alignment and halving delivery time

### **General System Engineering**

Malaysia

Enterprise Resource Planning (ERP) Assistant

May 2023 - Jul 2023

- Collaborated with cross-functional ERP users across five departments to gather 30+ requirements, understand operational challenges, and locate critical bugs. Tailored the ERP with consultants to enhance process efficiency by 25% and meet departmental needs
- Co-led daily conference room pilots, training 90 employees on the ERP system to ensure smooth system adoption

**British Red Cross** 

London, UK

Data Analyst

Sep 2022 - Apr 2023

- Developed a Power BI app with 20+ interactive dashboards to analyse complaints data, providing actionable insights for support teams and key stakeholder reports. Enhanced decision-making and reduced complaint resolution time by 50%
- · Built an ETL pipeline in Power BI Dataflows to extract data from four sources, normalised it into fact and dimension tables, and leveraged DAX for advanced reporting features like 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

## **PROJECTS**

Beat The Bookies. Engineered a classifier achieving 51% validation and ~40% test accuracy for Premier League games using a dataset of 18 features spanning 20 seasons. After evaluation, five recent seasons were chosen for training, as older data showed diminishing returns. Feature-engineered matchup-specific Pi-ratings with tuned hyperparameters using two grid searches. Applied SHAP summary plot for feature selection. Explored sentiment analysis with an LLM with the Nitter API to score teams based on pre-game discussions

RIE Noise Reduction of Lagged Covariance Matrices (Grade: 72%). Developed a novel algorithm using research on RIEs to clean high-dimensional lagged covariance matrices to combat curse of dimensionality. Applied techniques, including Singular Value Decomposition (SVD) and Frobenius Norm optimisation, to enhance covariance accuracy, achieving 100% noise reduction in AR(0) models and an average 20% improvement in signal-to-noise ratio for AR(1), with better improvements as number of dimensions increases

Public Perception on Benefit Fraud. Analysed eight variables in the 2019 British Social Survey on benefit fraud with two-sided ttests, linear regression and more using R. Found public estimates (34.6%) far exceeded the government's (1.1%), with discrepancies influenced by political affiliation and education level. Highlighted the need for targeted education to address public misconceptions

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

# AWARDS AND CERTIFICATIONS

**Boston Consulting Group** — Introduction to Strategy Consulting (Forage) **Goldman Sachs** — Software Engineering Experience Program (Forage) Harvard University — CS50x Puzzle Day: Perfect Score (Teams of Six, Top 13% in the World) Oct 2024

Jul 2024

Apr 2020