

EDUCATION

<b>WorldQuant University</b> Master of Science in Financial Engineering	<b>Remote</b> Oct 2024 – Current
<b>Western Sydney University Vietnam</b> Bachelor of Business – Applied Finance Major (advanced graduation - degree completion in 2 years) <ul style="list-style-type: none"><li>Dean's Merit List for Academic Excellence - Distinction Award with a GPA of 6.43/7.00 (equivalent to 3.67/4.00)</li><li>First-year Vice-Chancellor's Academic Excellence Scholarship, highest tier</li><li>Second-year Vice-Chancellor's Academic Excellence Scholarship, highest tier</li><li>Third-year Vice-Chancellor's Academic Excellence Scholarship, highest tier (awarded 1 year in advance)</li><li>High Distinction (A+ equivalent) in Econometrics, Philosophical Economics, Securities &amp; Business Valuation, Financial Institutions &amp; Markets, Management, Accounting, Economics, Enterprise Law, Consumer Behaviour, International Business, Corporate Finance, Human Resources</li></ul>	<b>Ho Chi Minh City, Vietnam</b> May 2022 – May 2024
<b>VNU-HCM University of Economics and Law (UEL) – Discontinued</b> <ul style="list-style-type: none"><li>Academic scholarship for highest GPA in Semester 1 across all students in the cohort</li><li>Highest GPA enrolment scholarship (SAT/IB/ACT pathway)</li><li>Assisted with qualitative data analysis for a paper titled "Peer Tutors' Agency and Emotions in Tertiary English Education in Vietnam" and participated in Sociology and Cross-Cultural Studies classes for Master's students</li></ul>	<b>Ho Chi Minh City, Vietnam</b>
<b>Condell Park High School</b> <ul style="list-style-type: none"><li>Valedictorian / Dux of High School and First in Course throughout all academic years</li><li>HSC Band 6/6 for Mathematics Advanced and Mathematics Extension 1</li><li>School Science Award   Victor Chang Cardiac Research Institute</li><li>High School Student Academic Excellence Award   University of Sydney</li><li>Distinction &amp; Merit awards   Australian Mathematical Olympiad (AMO) &amp; Australasian Problem Solving Mathematical Olympiads (APSMO)</li><li>Top 8% of students in Australia in English   University of New South Wales International Competitions and Assessments for Schools</li><li>Earned advanced standing, skipping 1 academic year based on outstanding performance</li><li>Nominated for the NSW International Student Award   State of New South Wales, Australia</li></ul>	<b>Sydney, Australia</b>
<b>Tran Dai Nghia High School for the Gifted – Discontinued</b>	<b>Ho Chi Minh City, Vietnam</b>

RELEVANT EXPERIENCE

<b>Quantitative research assistant</b> ICLS Tech <ul style="list-style-type: none"><li>Performed comprehensive data cleaning, preprocessing, and feature engineering on FOREX and CRYPTO datasets, ensuring high-quality inputs for machine learning models.</li><li>Applied a triple-labelling method for labelling FOREX and CRYPTO data, integrating regime-switching models such as Gaussian Mixture Models and Hidden Markov Chains to enhance prediction accuracy in volatile market conditions.</li><li>Developed and implemented automated machine learning pipelines to assess the probability of backtest overfitting and evaluate the robustness of existing cross-validation schemes.</li></ul>	<b>Ho Chi Minh City, Vietnam</b> April 2024 – Current
<b>Product assistant</b> YOLA English <ul style="list-style-type: none"><li>Assisted the Product Manager in developing an English learning app and web extension, conducting market research and executing targeted marketing strategies; increased the app's user base by 25,000 and the extensions by 15,000, achieving a monthly active user rate of ~50%.</li><li>Collaborated with external artists to implement user nurturing strategies, resulting in a 7-10% retention rate for the 21-day user cohort.</li></ul>	<b>Ho Chi Minh City, Vietnam</b> Jan 2022 – Jan 2023

EXTRACURRICULARS & NON-ACADEMIC ACHIEVEMENTS

- P&G PEAKathon 2024** | Top 4 Local Finalists of Vietnam
- HCMC Department of Industry & Trade & HAWEE ASEAN++ Bridge Business Forum** | Represented Australia at the high-profile business networking event, attracting over 500 global business leaders, promoting sustainable development in the ASEAN region.
- UEL English Club EFFI** | Project leader of a team of 40+ members, organised two successful projects attracting over 250 participants.
- YOLA** | Tutored students, ranging from school-age to working professionals, in IELTS preparation and general English language proficiency.
- Project X** | Participated in a non-profit fellowship program to connect tech startups with the Vietnamese students interested in IT and offer mentorship, career orientations, and technical / soft-skills training through events/workshops and building communities
- Vietnam's Southern region IELTS Talent Contest 2021** | First place award (month) and Merit award (quarter)
- Freelance graphic designer** | Designed 200+ presentations, logos, marketing and product materials in accordance with strict regulatory requirements (U.S. FDA standards) for export to international markets such as Japan, New Zealand, and the U.S; experience in preparing materials for both digital and print production

SKILLS

- Technical tools** | Python, R, PostgreSQL, LaTeX, Markdown, CSS, Excel, SPSS, Minitab, Stata, PowerBI
- Finance** | Financial machine learning (time series forecasting, predictive modelling, algorithmic trading), securities analysis, company valuation, corporate finance & capital structure, portfolio management, economic and financial modelling, international finance
- Business strategy** | Consumer behaviour analysis, customer segmentation, market research, strategic management, consulting, international business strategy
- Language** | English (IELTS 8.0, 4.5 years of overseas study experience)
- Graphic design** | Adobe Photoshop, Adobe Illustrator

TECHNICAL PROJECTS

- Evaluate backtest overfit in popular financial cross-validation schemes using AutoML (research paper)** | Machine learning, Python [Not published yet](#)
  - Used regime-switching models (Hidden Markov Chain) and Entropy Theory of Information for feature construction and engineering FOREX and CRYPTO data
  - Evaluated the extent of overfit in K-Fold, Purged K-Fold, Walk Forward, Combinatorial Purged & Embargoed Cross Validation (CPCV) using Automated ML pipelines
- Business model analysis and stock valuation of public company – Hoang Anh Gia Lai** | Finance, Excel [Link](#)
  - Analysed HAG's 3F business model, SWOT, Porter's competitive positioning analysis, financial ratios, valuation risk (sensitivity analysis and scenario analysis) and investment risks (Altman's Z-Score, Kupiec POF test and Monte Carlo simulation).
  - Initiated coverage on HAG with a BUY recommendation based on a target price of 11,220 VND through a weighted mix of DCF, APV, and relative valuation (CCA).
- Stock analysis & Value-at-Risk estimation for major US tech companies** | Finance, Python [Link](#)
  - Provided analysis of the stock performance (AAPL, AMZN, GOOG, MSFT), incl. closing prices, trading volumes, moving averages, daily returns using real-time data
  - Estimated Value-at-Risk using 3 methods: historical, parametric and Monte Carlo simulation.
- Loan approval prediction using k-Nearest-Neighbour model built from scratch** | Machine learning, Python [Link](#)
  - Built a kNN model from scratch to predict loan approval and simple linear regression to improve accuracy