

RELEVANT EXPERIENCE

<b>Quantitative research assistant</b> ICLS Tech	04/2024 – Current Ho Chi Minh City, VN
<ul style="list-style-type: none"><li>Performed comprehensive <b>data cleaning, preprocessing, and feature engineering</b> 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 <b>prediction</b> accuracy in volatile market conditions.</li><li>Developed and implemented <b>automated machine learning</b> pipelines to assess the probability of backtest overfitting and evaluate the robustness of existing cross-validation schemes.</li></ul>	
<b>Product assistant</b> YOLA English	01/2022 – 01/2023 Ho Chi Minh City, VN
<ul style="list-style-type: none"><li>Assisted the Product Manager in developing an English learning app and web extension, conducting <b>market research</b> and executing <b>targeted marketing strategies</b>; 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 <b>user-nurturing strategies</b>, resulting in a 7-10% retention rate for the 21-day user cohort.</li></ul>	

EDUCATION

<b>WorldQuant University</b> Master of Science in Financial Engineering	10/2024 – Current Remote
<b>Western Sydney University Vietnam</b> Bachelor of Business – Applied Finance Major (advanced graduation - degree completion in 2 years)	05/2022 – 05/2024 Ho Chi Minh City, VN
<ul style="list-style-type: none"><li><b>Dean's Merit List for Academic Excellence - Distinction Award (GPA: 6.43/7.00)</b></li><li>Awarded <b>192,000,000 VND+ in scholarships</b> over 2 years (Highest-tier First-year, Second-year, and Third-year Vice-Chancellor's Academic Excellence Scholarships; third-year scholarship awarded a year ahead of cohort).</li><li>Selected by HCMC Department of Industry and Trade &amp; HCMC Women Entrepreneurs Association to <b>represent Australia at the ASEAN++ Bridge Forum</b>, engaging with over 500 diplomats, consuls, business associations, including Australian Consul-General Ms Sarah Hooper, to promote sustainable development.</li><li>Achieved <b>High Distinction (A+ equivalent)</b> in Econometrics, Philosophical Economics, Securities &amp; Business Valuation, Financial Institutions &amp; Markets, Management, Accounting, Economics, Enterprise Law, Consumer Behaviour, International Business, Corporate Finance, and Human Resources.</li></ul>	
<b>VNU-HCM University of Economics and Law (UEL)</b> Discontinued	09/2021 – 02/2022 Ho Chi Minh City, VN
<ul style="list-style-type: none"><li>Awarded <b>36,000,000 VND+ in scholarships</b> over 1 semester (Valedictorian entrance scholarship for highest SAT/IB score; Academic scholarship for highest GPA in semester 1).</li><li>Assisted with <b>qualitative data analysis</b> 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>Condell Park High School</b> HSC	2017 – 2020 Sydney, AUS
<ul style="list-style-type: none"><li><b>Valedictorian / Dux of High School and First in Course</b> throughout all academic years</li><li>HSC Band 6/6 for Mathematics Advanced (93/100) and Mathematics Extension 1 (47/50); Top 8.4% for all-subject performance in State of NSW</li><li>Distinction &amp; Merit awards   Australian Mathematical Olympiad (AMO) &amp; Australasian Problem Solving Mathematical Olympiads (APSMO)</li></ul>	
<b>Tran Dai Nghia High School for the Gifted</b> Discontinued	2014 – 2016 Ho Chi Minh City, VN

EXTRACURRICULARS & NON-ACADEMIC ACHIEVEMENTS

<ul style="list-style-type: none"><li><b>P&amp;G PEAkathon 2024</b>   Top 4 Finalists of Vietnam</li><li><b>Vietnam's Southern region IELTS Talent Contest 2021</b>   First place award (month) and Merit award (quarter)</li><li><b>Mentee at Project X</b>   Joined a fellowship for Vietnamese students interested in IT, offering career guidance, and skills training</li><li><b>Project leader at university's English club EFFI</b>   Leader of a team of 40+ members, organised two successful projects attracting 250+ participants.</li><li><b>YOLA English Tutor</b>   Tutored students and working professionals, in IELTS preparation and general English language proficiency</li><li><b>Member of university's music club SOL</b>   Member of the piano team, in charge of piano-related production for 2 music videos</li><li><b>Freelance graphic designer</b>   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</li></ul>	
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SKILLS

<ul style="list-style-type: none"><li><b>Technical tools</b>   Python, R, PostgreSQL, LaTeX, Markdown, CSS, Excel, SPSS, Minitab, Stata, PowerBI</li><li><b>Languages</b>   Proficient English (CEFR C2, 4.5 years of overseas study experience), Elementary Chinese, Elementary Korean, Elementary French</li><li><b>Business</b>   Financial machine learning, market research, algorithmic trading, securities analysis, portfolio management, stock valuation</li><li><b>Graphic design</b>   Adobe Photoshop, Adobe Illustrator</li></ul>	
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TECHNICAL PROJECTS

<b>Evaluate backtest overfit in popular financial cross-validation schemes using AutoML (research paper)</b>   Machine learning, Python	
<ul style="list-style-type: none"><li>Used regime-switching models (Hidden Markov) and Entropy Theory of Information for feature construction and engineering FOREX and CRYPTO data</li><li>Evaluated the extent of overfit in K-Fold, Purged K-Fold, Walk Forward, Combinatorial Purged Cross Validation (CPCV) using AutoML</li></ul>	
<b>Business model analysis and stock valuation of public company – Hoang Anh Gia Lai</b>   Finance, Excel	
<ul style="list-style-type: none"><li>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).</li><li>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).</li></ul>	
<b>Stock analysis &amp; Value-at-Risk estimation for major US tech companies</b>   Finance, Python	
<ul style="list-style-type: none"><li>Analysed stock performances (AAPL, AMZN, GOOG, MSFT), incl. closing prices, trading volumes, moving averages, daily returns using real-time data</li><li>Estimated Value-at-Risk using 3 methods: historical, parametric and Monte Carlo simulation.</li></ul>	