Hong Ngoc Le (Kelly)

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Relevant experience

Business intelligence intern
Doccen
11/2024 – Current
Ho Chi Minh City, VN

- Analysing data and researching healthcare market trends to support product feature analysis and decision-making processes within a medical and health-focused IT platform.
- Practising documentation of project details, preparing reports, and assisting in the implementation and user acceptance testing (UAT) of new systems tailored for the Vietnamese medical and pharmaceutical sectors.

Quantitative research assistant
ICLS Tech
04/2024 – Current
Ho Chi Minh City, VN

- Performed comprehensive **data cleaning**, **preprocessing**, and **feature engineering** on FOREX and CRYPTO datasets, ensuring high-quality inputs for machine learning models.
- 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.
- Developed and implemented **automated machine learning** pipelines to assess the probability of backtest overfitting and evaluate existing cross-validation schemes.

Product assistant
YOLA English
01/2022 – 01/2023
Ho Chi Minh City, VN

- 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%.
- Collaborated with external artists to implement **user-nurturing** strategies, resulting in a 7-10% retention rate for the 21-day user cohort.

Education

WorldQuant University
Master of Science in Financial Engineering
10/2024 – Current
Remote

Western Sydney University Vietnam
Bachelor of Business – Applied Finance Major
05/2022 – 05/2024
Ho Chi Minh City, VN

- **Dean's Merit List for Academic Excellence (Distinction Award) with an accelerated degree completion time of 2 years.**
- Awarded **193,000,000 VND+ in scholarships** over 2 years (Highest-tier 1st year, 2nd year, and 3rd year Chancellor's academic excellence scholarships)
- Selected by HCMC Department of Industry and Trade & HCMC Women Entrepreneurs Association to **represent Australia at the ASEAN++ Bridge Forum**, engaging with over 500 diplomats, consuls, business associations, including Australian Consul-General Ms Sarah Hooper, to promote sustainable development.
- Achieved **High Distinction (A+ equivalent)** in Econometrics, Philosophical Economics, Securities & Business Valuation, Financial Institutions & Markets, Management, Accounting, Economics, Enterprise Law, Consumer Behaviour, International Business, Corporate Finance, and Human Resources.

VNU-HCM University of Economics and Law (UEL)
Bachelor of International Economics
09/2021 – 02/2022 (Discontinued)
Ho Chi Minh City, VN

- Awarded **36,000,000 VND+ in scholarships** over 1 semester (Valedictorian entrance scholarship for highest SAT/IB score; Academic scholarship for highest GPA in semester 1).
- 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.

Condell Park High School
2017 – 2020

- **Valedictorian / Dux of High School and First in Course throughout all academic years**
- 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
- Distinction & Merit awards | Australian Mathematical Olympiad (AMO) & Australasian Problem Solving Mathematical Olympiads (APSMO)
- High School Student Academic Excellence Award | University of Sydney
- School Science Award | Victor Chang Cardiac Research Institute
- Top 8% of students in Australia in English | University of New South Wales International Competitions and Assessments for Schools
- Earned advanced standing, skipping 1 academic year based on outstanding performance
- Nominated for the NSW International Student Award | State of New South Wales, Australia

Tran Dai Nghia High School for the Gifted
2014 – 2016 (Discontinued)

Extracurriculars & Non-academic achievements

- P&G PEAKathon 2024 | Top 4 Finalists of Vietnam
- Vietnam's Southern region IELTS Talent Contest 2021 | First place award (month) and Merit award (quarter)
- Mentee at Project X | Joined a fellowship for Vietnamese students interested in IT, offering career guidance, and skills training
- Project leader at university's English club EFFI | Leader of a team of 40+ members, organised two successful projects attracting 250+ participants.
- YOLA English Tutor | Tutored students and working professionals, in IELTS preparation and general English language proficiency
- Member of university's music club SOL | Member of the piano team, in charge of piano-related production for 2 music videos
- Freelance graphic designer | Designed 200+ presentations, logos, marketing and product materials in accordance with strict regulatory requirements (e.g. 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

- Languages | English (CEFR C2, 4.5 years of overseas study experience), Chinese (HSK II), Korean and French (Elementary)
- Technical tools | Python, R, PostgreSQL, LaTeX, Markdown, CSS, Excel, SPSS, Minitab, Stata, PowerBI
- Business / Finance | Financial machine learning, market research, algorithmic trading, securities analysis, portfolio management, stock valuation
- Graphic design | Adobe Photoshop, Adobe Illustrator

Projects

Evaluate backtest overfit in popular financial cross-validation schemes using AutoML (research paper) | Machine learning, Python
- Used regime-switching models (Hidden Markov) 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 Cross Validation (CPCV) using AutoML

Stock analysis & Value-at-Risk estimation for major US tech companies | Finance, Python
Link
- Analysed stock performances (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.

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).