# **Hong Ngoc Le**

## **Professional experience**

#### Research Assistant | ICLS Tech

HCMC, Vietnam | Apr 2024 - Current

- Researched and applied AutoML techniques to explore backtest overfitting risks in financial models, focussing on mostly academic and exploratory work.
- · Studied several advances in financial ML and wrote reports summarising the methodology and findings from related research papers.

## **Product Assistant | YOLA**

HCMC, Vietnam | Feb 2022 - Mar 2023

- Conducted market research and executed targeted marketing initiatives, resulting in an increase of 25,000 users for the app and 15,000 users for the app extension, contributing to a monthly active user rate of approximately 50%.
- Collaborated with external stakeholders to implement user nurturing strategies, achieving a retention rate of 7-10% for the 21-day cohort.

## **Education**

## Western Sydney University Vietnam | Applied Finance Major, Bachelor of Business

HCMC, Vietnam | May 2022 - August 2024

- Dean's Merit List for Academic Excellence (GPA: 6.43 / 7.00)
- · Received 3 Vice-Chancellor's Academic Excellence Scholarships (highest tier)
- · Completed bachelor degree in 2 years

#### University of Economics and Law (UEL) | Bachelor of International Economic Relations

HCMC, Vietnam | Sep 2021 - Feb 2022

- · Enrolment scholarship for highest GPA among candidates for enrolment through the SAT/ACT/IB pathway
- Academic scholarship for highest GPA in Semester 1 across all students in the cohort
- Assisted English professor with analysing qualitative data on "Peer tutors' agency and emotions in tertiary English education in Vietnam"

#### Condell Park High School | New South Wales High School Certificate

Sydney, Australia | Jan 2017 - Dec 2020

- · High School Valedictorian and First in Course throughout all academic years
- · Band 6/6 for Mathematics Advanced and Mathematics Extension 1 Australian Tertiary Admission Rank
- University of Sydney Year 10 Academic Excellence Award

# **Projects**

## Measuring probability of backtest overfitting using AutoML | Python

- Developed an AutoML framework for model selection, hyperparameter optimisation, and meta-labelling using financial time series data with the triple barrier method.
- Evaluated backtest overfitting risk by calculating metrics like Deflated Sharpe Ratio and Probability of Backtest Overfitting on FOREX and CRYPTO data after backtesting using different financial time series cross-validation schemes

#### Quantitative risk analysis of major US tech stocks | Python

- Conducted a detailed quantitative risk analysis for prominent US tech stocks (AAPL, AMZN, GOOG, MSFT), employing exploratory data analysis, data visualisation, and predictive modelling techniques.
- Utilised historical, parametric, and Monte Carlo approaches to calculate Value at Risk (VaR), offering a comprehensive assessment of potential financial risks associated with investing in the selected tech stocks.

# **Extracurriculars**

# Graphic designer | Freelance

HCMC, Vietnam | June 2022 - Current

- Designed 200+ presentations, logos, marketing materials and product packaging using Adobe Photoshop and Adobe Illustrator while ensuring compliance with strict regulatory guidelines (e.g. FDA)
- Collaborated closely with clients to come up with brand concepts that showcased their brand identity and appealed to the target audience.

## English tutor | YOLA

Sep 2022 – Jan 2023

• Tutored students of all ages to improve their English skills and achieve their educational goals.

Country representative | HCMC Department of Industry & Trade, Women Execs & Entrepreneurs Association

Jul 2022 - Aug 2022

- Conducted extensive research and collaborated with team members to develop an engaging presentation on Australia's economy, culture, and business ethics for a high-profile event (ASEAN Bridge Business Forum), attracting over 500 guests.
- · Successfully represented Australia at the event, engaging with over 100 potential business clients.

# Project leader | The English Club EFFI

Oct 2021 - Feb 2022

- · Led a team of 40+ members for two successful projects, which attracted over 250 participants.
- Demonstrated strong project management skills by planning and executing projects, creating timelines, budgets, and managing resources for timely completion.

## **Skills**

- Machine learning: Python, R (basic proficiency), SQL (basic proficiency)
- · Statistical modelling: Stata, SPSS, MInitab
- Financial modelling and valuation: Excel