

# HO YIN KIAT

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## WORK EXPERIENCE

### Quantitative Research Intern, Tokka Labs, Singapore

Aug 2024 - Present

- Crafted and built a CEX-DEX arbitrage market making engine on Chainflip decentralised exchange as well as traditional centralised exchanges, achieving over 20% APY in a live-testing environment
- Undertook a detailed examination of volatility dynamics, including clusters and regimes, within the cryptocurrency token universe, assessing critical factors that influences volatility patterns and leveraging insights to refine trading strategies and strengthen risk management practices.
- Performed in-depth quantitative research in cryptocurrency markets, identifying emerging trends and actionable trading opportunities to support strategic decision-making in digital asset trading.

### Quantitative Analyst Intern, Phillip Securities, Singapore

May 2024 - Aug 2024

- Leveraged BERT-based Large Language Models to conduct sentiment analysis with over 92% classification accuracy on news headlines from Reuters, integrating these sentiment scores into systematic trading strategies for the SGX stock universe.
- Enhanced the internal Python backtesting framework to support multi-factor models, enabling researchers to input customized asset factors for streamlined and efficient multi-factor backtesting.
- Constructed a diverse spectrum of quantitative trading strategies independently, encompassing reinforcement learning, multi-factor modelling as well as statistical arbitrage based strategies, with Sharpe Ratios exceeding 1.5 and low maximum drawdown rates.

### Full Stack Developer Intern, Azendian Solutions, Singapore

Aug 2023 - Nov 2023

- Revamped Azendian Estate's Dashboard Management System for Keppel, developing key features on both the frontend and backend in a Sprint team, applying Agile Methodologies across 3 sprints.
- Implemented multiple scalable RESTful APIs on Express.js server-side applications, integrating with Azure and PostgreSQL database.
- Developed and implemented responsive user interface designs for Azendian's Real-Time Dashboard using React.js, working cross-functionally using Git and Jira.

### Data Analytics and Visualization Intern, United Overseas Bank, Singapore

May 2023 - Aug 2023

- Transformed over millions of rows of financial data for sales performance data analysis with Microsoft Power BI and Python Pandas.
- Constructed multiple end-to-end Power BI data models for the Business Management team, streamlining and automating monthly financial reporting process of data cleaning, data aggregation and dashboard building.
- Utilized data visualization tools in Power BI to generate monthly dashboards for performance tracking across both individual and organisational level.

## EDUCATION

### National University of Singapore

Expected May 2026

### Bachelor of Science in Business Analytics, Minor in Quantitative Finance

- Achieved an overall GPA of 4.78.
- Relevant Coursework: Database Management, Statistical Analysis, Econometrics Modelling, Object-Oriented Programming, Data Structures and Algorithms, Quantitative Finance, Optimization Techniques, Bayesian Networks, Markov Models.
- Participated in the IMC Prosperity Challenge, developing efficient market making algorithms in Python to market make in a virtual challenge.
- Achieved Top 8 in the NUS Fintech Summit, crafting quantitative strategies for hedging impermanent loss and optimising fee returns in Uniswap V3 using a hybrid ARIMA-GARCH model and hedging strategies
- Technical Skills: Python, Java, JavaScript, R, Tableau, PowerBI

## PROJECTS

### Quantitative Research Consultant, WorldQuant, Singapore

Aug 2023 - Present

- Conducted independent financial market analyses and quantitative research on equities portfolio trading strategies, developing over 20 technical and fundamental based alphas hypotheses.
- Built an Alpha Generation Engine in Python, algorithmically searching and constructing alpha expressions based on research insights.
- Automated simulation and backtesting on the BRAIN platform with web scraping, attaining performances of Sharpe Ratios over 1.5 and fitness over 1.

## EXTRA-CURRICULAR ACTIVITIES

### Quartermaster, NUS Varsity Canoeing, Singapore

Aug 2022 - Present

- Achieved multiple podium finishes in marathon and sprint competitions across the national level
- Contributed to team's overall second place achievement in Inter-Tertiary Canoe Championships through mentorship and individual achievements
- Appointed as the team's quarter-master, responsible for management of team's equipment as well as coordinating with other stakeholders to execute 100 man strong team-wide activities.