

JOEL LO

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EDUCATION

National University of Singapore (NUS) **Aug 2021 - May 2025**
Bachelor of Engineering (Honours) in Industrial & Systems Engineering **GPA: 4.12 / 5.0**

- Double Major in Data Analytics
- Minor in Computer Science
- Certification in Fundamentals of Investments (CFI) - Wealth Management Institute
- CFA Level I Candidate - Feb 2025

SKILLS

- Python, R, Tableau, Java, JavaScript, VBA for Excel, MATLAB, MySQL, HTML, CSS, React.js, GitHub
- Probability, Statistics, Engineering Economics, Data Visualisation, Data Analysis, Data Structures and Algorithms, Software Engineering, Operation Research, Microsoft Office Suite, Commodities Market

WORK EXPERIENCE

Derivatives Analyst Intern, InterFood **Jun 2024 - Present**

- Built an automatic announcement system which summarise and highlights trends in recent NZA reports on dairy powder supply and derivative contracts, using web scraping and regression models.
- Created a dashboard using 6 complex and bulky data sets using Pandas and Dash, providing the trading team with insider information regarding current market trends.
- Supported the creation of a backtesting system coded in Python for spread trading strategies.

Quantitative Research Consultant (Contract), WorldQuant **Sep 2023 - Present**

- Developed 14+ quantitative trading algorithms on Brain Platform using Fast Expression, ensuring sector neutrality, and incorporating diverse signals such as RSI, Volatility, and TTM Revenue.
- Backtested 1148 trading signals across US and China markets with a 10-year dataset.
- Achieved a Sharpe value of 2.10 with the top trading idea.

Summer Analyst Intern, Viettonkin Consulting **May 2023 - Aug 2023**

- Provided Market Readiness Assistance for Foreign Direct Investors entering the Asia-Pacific market.
- Used predictive analytics to reshape pipeline strategies, boosting client acquisition by 233% and MoM following by 11 times.
- Conducted FDI trend analysis and acquired 12+ partners by creating an automated CRM dashboard.

RESEARCH AND TEACHING EXPERIENCE

Teaching Assistant, National University of Singapore **Aug 2023 - Nov 2023**

- Instructed a class of 35 students on Industrial and Systems Engineering Principals, IE1111R, specifically mathematical modelling, data analytics and simulation, using VBA and Python.

Student Research Assistant, National University of Singapore **Jan 2023 - May 2023**

- Researched real-time applications of transformer-based computer vision models, implemented in Python, to detect housekeeping issues on 50+ construction sites in Singapore.

EXTRA CURRICULAR ACTIVITIES

Vice-President [Internal], NUS Industrial & Systems Engineering Club **Aug 2021 - Aug 2023**

- Mentored project directors and vice-project directors in medium-scale event planning of 12 events for 300+ members and ensured internal compliance with Singapore PDPA regulations and NUS policies.

AWARDS

- Qualified for WorldQuant International Quant Finance Challenge 2023 Semi-Finals.
- Won Best Business Use Case in NTUC FutureX 2022 Regional Blockchain Hackathon.
- Awarded Apollo 11 (Advanced) for Orbital Summer 2022 Independent Software Development Project.