

# JUNWEI ZHU

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## EDUCATION

### University of Chicago

*BS in Computational and Applied Mathematics; BS in Statistics; BA in Economics*

GPA: 4.0/4.0; 2021-24 Dean's List; Jeff Metcalf Scholarship; Enrico Fermi Scholar; Gary Becker Scholar

2023 Optiver Ready Trader Go Finalist; WorldQuant UChicago Alphathon 2nd; 2023 UChicago x Jane Street Estimathon 3rd

Chicago, IL

Sept 2021 - Dec 2025

### St. Joseph's College

*Hong Kong Diploma of Secondary Education*

Top 1% in HK; ranked 2/150 overall in Class of 2021; SAT: 1580

Hong Kong SAR

Sept 2015 - Jul 2021

## WORK EXPERIENCES

### IMC Trading

*Quant Trader Intern*

Chicago, IL

Jun 2024 - Aug 2024

- Completed five-week training program covering basic Options Theory, mock systematic trading, and volatility trading
- Conducted trade analysis on price improvement auctions to improve dimming mechanism, received 2nd highest grade in intern class
- Worked with Equity Options Systematic desk on trading TSLA second week vol using realised vol and customer flow information; improved daily average pnl by 30% and Sharpe by 10% in rolling time window cross validation backtest compared to existing strategy

### Tailai Fund Management

*Quantitative Research Intern*

Hong Kong SAR

Jul 2023 - Sept 2023

- Validated 900+ data input items; helped to complete the data mapping, write the data description, and remove duplicates
- Developed a script to check new alphas' P&L correlation with existing alphas, filtering out ~75% of interns' alphas
- Wrote 100+ alphas using 50+ academic papers and research reports, achieving 0.53-3.68 Sharpe ratios in firm's backtesting engine

### PwC

*Data Analyst Intern*

Hong Kong SAR

Jul 2022 - Aug 2022

- Automated components of a data integration process that identifies disparities between the source, landing, and target database
- Constructed data pipelines managing 300+ items' inter-dependencies and discrepancies with the overarching data dictionary description
- Evaluated data transformation capabilities and prepared 10+ reports and proposals in total for:
  - 1) an Italian asset management company on topics about dashboard building and KPI tracking; and
  - 2) a Hong Kong asset investment and management group on topics about customer journey analytics using random forest classifier

## EXTRACURRICULAR AND LEADERSHIP

### Maroon Capital, University of Chicago

*Board Member*

Chicago, IL

Sept 2022 - Present

- Completed the organization's education curriculum covering quantitative finance and statistics topics
- Coded and backtested 7 SMA, momentum, mean reversion, and ML-based strategies using Python libraries NumPy and Pandas
- Developed an algorithmic trading strategy and optimized the portfolio using MPT, trading on \$1000 principal via Alpaca API
- Created 10+ trading algos and an order matching engine in Optiver's RTG Challenge and IMC's Prosperity Trading Challenge

### The Department of Mathematics, University of Chicago

*Teaching Assistant*

Chicago, IL

Sept 2022 - Dec 2022

- Tutored and graded in course *Elementary Functions and Calculus*, received an average rating of 4.8/5.0 in evaluation

### Oeconomica, University of Chicago

*Macroeconomics Student Researcher*

Chicago, IL

Oct 2021 - Jul 2022

- Attended reading groups covering the American Jobs Plan, European Union's austerity macro policies, and the Financial Crisis of 2008
- Analyzed economic indicators and built linear regression models using PWT 10.0 data to estimate wage-productivity growth decoupling

## SKILLS AND INTERESTS

### Languages:

Mandarin, Cantonese, English

### Relevant Coursework:

Investments, Probability and Statistical Theory, Time Series, Economics Analysis, Econometrics  
Intro to CS, Algorithms, Numerical Analysis, Optimization

### Technical Skills:

Python, R, Excel, Word, PowerPoint, Adobe Creative Suite

### Interests:

Skiing, Archery, Harmonica, Board Games, Video Games Modding, Note-taking