

David Young

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EDUCATION

National University of Singapore (NUS)

Operations Research and Analytics PhD Student

Singapore

Aug 2026 – Present

- **Relevant Courses:** Optimization, Stochastic Process

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)

BBA in Financial Engineering, Quantitative Finance Stream

Shenzhen, China

Aug 2022 – Jun 2026

- **CGPA:** - / 4.0; **MGP:** - / 4.0. **Grade:** First Class Honours
- **Honours:** Full Tuition and Accommodation Scholarship awardee, 2022-2023 Academic Performance Scholarship awardee, 2022-2023 & 2024-2025 Dean's List
- **Activities & Organizations:** Statistics Alliance, Financial Engineering Club
- **Relevant Courses:** Partial Differential Equations, Numerical Analysis, Mathematical Modeling, Optimization, Stochastic Process, Time Series, Data Structures, Machine Learning, Financial Computation, Asset Pricing, Factor Investing

Singapore Management University (SMU)

International Student Exchange Program (ISEP)

Singapore

Jan 2026 – May 2026

- **Courses Taken:** Quantitative Trading Strategies, Stochastic Finance, Financial Innovation, Operations Management

RESEARCH & PROJECT EXPERIENCES

Betting Against Beta in the Chinese Stock Market (Taking BABAB Critiques into Account)

Shenzhen, China

DDA3600 (Factor Investing) final project

Oct 2025 – Dec 2025

- **Project Focus:** To critically evaluate the robustness and applicability of the Betting Against Beta (BAB) factor in China's equity market by replicating its construction and testing it against methodological critiques.
- Constructed the BAB factor for the SSE A-Share, SZSE A-Share, and CSI 500 markets and performed regression analysis against standard asset pricing models to test its purported excess returns.
- Integrated critiques from the Betting Against Betting Against Beta (BABAB) framework to rebuild the factor, adjusting for leverage and deleverage construction biases, and re-evaluated its performance.
- Demonstrated that the original BAB factor's significant returns were largely an artifact of its specific construction, the refined factor showed no significant anomaly, providing evidence against the validity of the low-risk anomaly in China.

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)

Research Assistant (Under -)

Shenzhen, China

Jan 2025 – Feb 2025

- Assisted in developing NLP-based sentiment indicators to study how Marketwide Memory affects trading decisions.
- Supported the development of a research pipeline for the project by independently implementing and evaluating core text-processing methods, including Word2Vec, TF-IDF, and bag-of-words models, on financial news to quantify memory.
- Operationalized the project's methodological framework by testing and comparing these embedding and memory calculation techniques to identify the most effective approach to quantify investors' memory of similar past events.

Autocorrelation-Adjusted Measure for Accurate Risk-Return Evaluation of Investment Strategies

Shenzhen, China

Practical Research in Quantitative Investing (Under -)

Sep 2024 – Nov 2024

- **Research Focus:** Addressed a key limitation of the traditional Sharpe ratio, which fails to account for temporal dependencies in returns (autocorrelation), leading to an inaccurate risk assessment of strategies.
- Developed Autocorrelation-Adjusted Sharpe Ratio (AASR) in Python, implementing two statistical methods to adjust volatility for autocorrelation. Analyzed high-frequency return data and validated them for 15 diverse investment strategies.
- Conducted rigorous backtesting and sensitivity analysis, demonstrating that the AASR more accurately captured key risk-return nuances, providing a superior performance metric.

PROFESSIONAL EXPERIENCES

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)

Undergraduate Student Teaching Fellow for Fintech Theory and Practice (FIN3210)

Shenzhen, China

Sep 2025 – Dec 2025

- Facilitated a cohort of 180 students by conducting weekly office hours and responding to emails to address questions outside of class hours.
- Assisted with debugging code and explaining the algorithmic logic of Fintech concepts.

Confidential Employer – [Hedge Fund]

Quantitative Research Intern

Beijing, China

May 2025 – Aug 2025

- Leveraged Python to develop and replicate 65+ quantitative factors for futures commodities markets. Conducted large-scale backtesting (2013–2025) and sensitivity analysis to identify optimal factor thresholds.
- Researched 30+ trade factors for commodities futures by leveraging alternative search volume data and return data.
- Performed parameter optimization across rolling windows and diagnosed model stability.

SKILLS

Languages: Indonesian (Native, Bilingual), English (Bilingual, IELTS 7.5), Chinese (HSK4 & HSKK Intermediate)

GRE: V = 150, Q = 170, AW = 4

Programming Languages: Proficient in Python and MATLAB; familiar with STATA, R, Java; regularly use MS Suite

Data Science & ML: Pandas, Numpy, Statsmodelapi, Seaborn, Lifelines (Cox Hazard Model), and Scikit-learn

Fintech: Satellite Image Analysis (GEE), Textual Analysis (nltk & Readability), and Sentiment Analysis (Pytrends)

Asset Pricing: Fama-MacBeth Regression, Double Bootstrapping, Univariate & Bivariate Sorts