Fred Li

fredhli@outlook.com | linkedin.com/in/fredhli | fredhli.github.io | +852 6565 6298 | Wan Chai, Hong Kong

EDUCATION

Washington University in St. Louis (WashU) — **St. Louis, MO, USA**
M.S. in Quantitative Finance — Sep 2023 – Dec 2024

- **GPA**: 3.96/4.00, **Rank** 2/89
- **Honors**: All-semester Dean's List, Beta Gamma Sigma Award, Charles F. Knight Scholar
- **Coursework**: Exotic Derivative Pricing, Continuous-Time Finance (Ph.D. Level), Stochastic Calculus, SQL, Python, Machine Learning, Quantitative Risk Management, Corporate Finance I & II, Bayesian Regression & Factor Search

The University of Hong Kong (HKU) — **Hong Kong**
Bachelor of Economics and Finance — Sep 2017 – May 2021

- **Rank** top 40%, Graduated with 2:1 Distinction, **Selected** as C.V. Starr Scholarship recipient to exchange at Sciences Po Paris

PROFESSIONAL EXPERIENCE

Olin Business School at Washington University in St. Louis — **St. Louis, MO, USA**
Research Intern — Oct 2023 – Jan 2025

- ***Research Project**: Event-Driven Political Speech Sentiment Analysis & Market Movements*
  - Performed extensive exploratory data analysis (EDA) to identify key trends and patterns within political speech data, including sentiment shifts over time and the impact of specific speeches on financial markets
  - Applied Natural Language Processing (NLP) techniques, including BERT Topic Model fine-tuning, to classify topics within political speeches, and unveil deeper insights into governmental discourse and market movements
  - Conducted literature reviews to understand existing body of research, incorporating relevant methodologies into the study
- ***Research Project**: The Causal Impact of Fiscal Shocks – Evidence from UK Budget Announcement*
  - Applied UK budget announcement shock with market data to visualize how certain political event statements or sentiment trends coincide with market price changes, supporting research project on fiscal shock omitted variable bias (OVB)

Privium Fund Management — **Hong Kong**
Assistant Portfolio Manager — Apr 2022 – Dec 2022

- Contributed to the management of a $200M portfolio, focusing on the identification and analysis of trading signals
- Investigated macroeconomic conditions, market liquidity and volatility to align strategies with prevailing market trends
- Co-managed portfolio risk, utilizing diversification and hedging strategies across sectors and geographies to minimize exposure to systemic risks, while monitoring potential market contagion
- Applied pricing models (Heston, Barra, Black-Litterman, Greeks) for underlying asset price prediction and risk alignment
- Integrated transaction costs, stress testing, and market impact analysis to guarantee accurate performance metrics

Yong Rong Asset — **Hong Kong**
Junior Trader — Jun 2021 – Jan 2022

- Conducted in-depth fundamental research on Hong Kong and U.S. listed companies, including but not limited to satellite imagery analysis and customer impersonation checks to validate competitive advantages and production capacities
- Analyzed and constructed trade flows, submitting orders and collaborating with counterparties to optimize trading outcomes
- Utilized strategies such as limit orders, VWAP, TWAP to achieve optimal execution and transaction cost control (TCA)
- Supported strategic asset allocation, used VBA to streamline trading script maintenance and Net Asset Value report process

Peak Global Investments — **Hong Kong**
Private Equity Intern — Sep 2020 – May 2021

- Researched cryptocurrency exchanges across Asia and Europe, liaised with senior executives to prepare for acquisitions
- Assessed client pain points and formulated pitch decks for management team in business development presentations
- Collaborated with world's largest crypto exchange, applied API to assess targets' trading volumes and their authenticity

CMBC Capital — **Hong Kong**
Corporate Finance Summer Intern — Jun 2020 – Aug 2020

- Prepared financial models and pitch books to support IPO processes, including DCF and comparable company analysis
- Conducted in-depth due diligence by analyzing company filings, market trends, and sector performance, providing data-backed recommendations for capital raising strategies

PROJECT EXPERIENCE

Hull-White Model Calibration for At-the-Money (ATM) Caplets and Caps — **St. Louis, MO, USA**
Outputs: fredhli.github.io/projects/#hull-white-model-calibration — Mar 2024 – May 2024

- Implemented closed-form caplet pricing solutions and Monte-Carlo price check, to optimize Hull-White model parameters against Caplet market data, achieving high accuracy in long-maturity cap pricing > 15 years with less than 3% value loss

SKILLS AND QUALIFICATIONS

Certificates	CFA Level I, HKSFC Type 4 & 9: Advise on Securities & Asset Management License
Languages	Mandarin (Native), English (Fluent), Cantonese (Proficient)
Teaching	TA for: *Options, Futures and Derivative Securities (Undergraduate); Behavioral Finance (Graduate)*
Research	RA for: *Research on PEVC-backed companies* – under Prof. Minmo Gahng, Cornell University
Volunteering	NGO Marketing Director, Soap Cycling HKU; Village School Teacher, Beyond the Pivot HKU
Programming	Proficient in Python, R, SQL, Git, VBA, LaTeX; Intermediate in Stata, MATLAB; Basic in Julia