

Fred H. Li

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EDUCATION

Washington University in St. Louis (WashU) <i>M.S. in Finance, Quantitative</i> ▪ GPA: 3.95/4.00, Rank 2/89 ▪ Honors: All-semester Dean's List, Beta Gamma Sigma Award, Charles F. Knight Scholar (Expected) ▪ Coursework: Continuous-Time Finance (Ph.D. Level), Stochastic Calculus, Exotic & Fixed Income Derivative Pricing, SQL, Asset Pricing, Python & R Machine Learning, LASSO, GARCH & Risk Management, Corporate Finance I & II	St. Louis, MO, USA Sep 2023 – Dec 2024
The University of Hong Kong (HKU) <i>B.S. in Economics and Finance</i> ▪ GPA: 3.41/4.00, Rank top 35%, Awarded 2:1 Distinction, HKU Reaching Out Award (C.V. Starr Scholarship) ▪ Admitted based on achieving top 0.07% province-ranking (143 rd / 200,000) in National College Entrance Exam (Gaokao)	Hong Kong Sep 2017 – May 2021
Institut d'Études Politiques de Paris (Sciences Po) <i>Scholarship-Awarded Exchange Student</i>	Paris, France Jan 2020 – May 2020

PROFESSIONAL EXPERIENCE

Olin Business School at Washington University in St. Louis <i>Research Intern</i> ▪ <u>Selected Project:</u> <i>Real-time Political Speech Sentiment Signal Tool to Reflect on Market Movements</i> <ul style="list-style-type: none">Developed a Selenium Chrome-driver scraper to automatically extract U.S. congressional hearing scriptsFine-tuned BERT Topic Model and its sub-models to implement topic classification of the congressional hearing databaseHighlighted instances where political speeches have high potential to influence market behaviorBuilt an anomaly detection model on sentiment trends to flag moments where sentiment sharply deviates from baselineCreated an automated alert mechanism triggered by specific keywords, phrases, or sentiment shifts against fiscal and monetary policies, to enable rapid responses to market-moving and short-term trading opportunities ▪ Overlaid UK budget announcement shock with market data to visualize how certain event statements or sentiment trends coincide with market price changes, supporting research project on fiscal shock omitted variable bias (OVb)	St. Louis, MO, USA May 2024 – Present
Privium Fund Management <i>Portfolio Manager – US\$ 200M Option Selling Strategy</i> ▪ Executed strategy on index and equity options, minimizing slippage and maximizing premiums with algorithmic trading ▪ Integrated transaction costs, stop-loss mechanisms, and market impact analysis to guarantee accurate performance metrics ▪ Applied risk models (Barra, Black-Litterman, Axioma, Greeks) for portfolio optimization and ensuring risk alignment ▪ Managed liquidity and order book dynamics, performed portfolio stress testing to assure portfolio robustness	Hong Kong Apr 2022 – Dec 2022
Yong Rong Asset <i>Junior Trader – US\$ 50M High Conviction Sub-fund</i> ▪ Participated in trading activities concentrating on equities in the U.S. space, remote sensing and agriculture industries ▪ Supported strategic asset allocation, utilized Microsoft VBA to streamline and automate maintenance of trading scripts ▪ Drafted comprehensive research memos for remote sensing, satellite industry, and Hong Kong machinery sectors	Hong Kong Jun 2021 – Jan 2022
Peak Global Investments <i>Private Equity Intern</i> ▪ Researched cryptocurrency exchanges across Asia and Europe, liaised with senior executives to prepare for acquisitions ▪ Analyzed client pain points and formulated pitch decks for management team in business development presentations ▪ Collaborated with world's largest crypto exchange, utilized API to assess targets' trading volumes and their authenticity	Hong Kong Sep 2020 – May 2021

PROJECT EXPERIENCE

Microstructure-Informed End-of-Day Frequency Trading Strategy <i>Trading Strategy Design</i> ▪ Currently developing a proprietary end-of-day (EoD) frequency trading strategy, leveraging market microstructure analysis to predict immediate price movements and execute rapid trades in the U.S. equities market ▪ Predicted short-term price movements, optimized code for low-latency execution, back-tested using EoD dataset	St. Louis, MO, USA Oct 2024 – Present
Hull-White Model Calibration for At-the-Money Caplets and Caps <i>GitHub Repository:</i> github.com/fredhli/Hull-White-Caplet-Calibration ▪ Implemented closed-form and Monte-Carlo based price solutions to optimize Hull-White model parameters against Caplet market data, achieving high accuracy in long-maturity cap pricing > 15 years with less than 3% function value loss	St. Louis, MO, USA Mar 2024 – May 2024

SKILLS AND QUALIFICATIONS

Certificates	CFA Level I, HKSF Type-9 Asset Management License
Teaching	TA for: <i>Options, Futures and Derivative Securities (Undergraduate)</i> ; <i>Behavioral Finance (Graduate)</i>
Research	RA for: <i>Research on PEVC-backed companies</i> – under Prof. Minmo Gahng, Cornell University
Volunteering	NGO Marketing Director, Soap Cycling HKU; Volunteer Teacher, Beyond the Pivot HKU
Programming	Proficient in Python, R, SQL, Git, VBA, LaTeX; Intermediate in Stata, MATLAB; Basic in JavaScript
Work Permits	Hong Kong SAR (Permanent Citizenship), Canada (OWP with Citizenship Assurance), USA (OPT)