Fred H. Li

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EDUCATION

Washington University in St. Louis (WashU)   St. Louis, MO, USA
M.S. in Finance, Quantitative   Sep 2023 – Dec 2024
- **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 & VaR Risk Management, Corporate Finance I & II

The University of Hong Kong (HKU)   Hong Kong
B.S. in Economics and Finance   Sep 2017 – May 2021
- **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 (143rd / 200,000) in National College Entrance Exam (Gaokao)

Institut d'Études Politiques de Paris (Sciences Po)   Paris, France
Scholarship-Awarded Exchange Student   Jan 2020 – May 2020

PROFESSIONAL EXPERIENCE

Olin Business School at Washington University in St. Louis St. Louis, MO, USA
Research Intern   May 2024 – Present
- Conducted time-series analysis, supported research project regarding omitted variable bias (OVB) in fiscal shocks
- Parsed and refined novel datasets from raw files, creating a robust sentiment and anomaly detection toolbox
- ***Selected Project****: Real-time Political Speech Sentiment Signal Tool to Reflect on Market Movements*
  o Developed a Selenium Chrome-driver scraper to extract congressional hearing scripts, fine-tuned BERT and its sub-models to improve sentiment classifications, transforming it into a novel text-based database for political research
  o Built an anomaly detection model on sentiment trends to flag moments where sentiment sharply deviates from baseline levels. Leveraged historical data to highlight instances with high potential to influence market behavior
  o Created an automated alert mechanism triggered by specific keywords, phrases, or sentiment shifts against fiscal and monetary policies, enabled rapid responses to market-moving political statements and short-term trading opportunities

Privium Fund Management   Hong Kong
Portfolio Manager – US$ 200M Option Selling Strategy   Apr 2022 – Dec 2022
- 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

Yong Rong Asset   Hong Kong
Junior Trader – US$ 50M High Conviction Sub-fund   Jun 2021 – Jan 2022
- 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

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
- 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

PROJECT EXPERIENCE

Microstructure-Informed End-of-Day Frequency Trading Strategy St. Louis, MO, USA
Trading Strategy Design   Oct 2024 – Present
- 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

Hull-White Model Calibration for At-the-Money Caplets and Caps St. Louis, MO, USA
GitHub Repository: github.com/fredhli/Hull-White-Caplet-Calibration Mar 2024 – May 2024
- 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

SKILLS AND QUALIFICATIONS

Certificates	CFA Level I, HKSFC Type-9 Asset Management License
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; 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)