

# Fred H. Li

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## EDUCATION

<b>Washington University in St. Louis (WashU)</b> <i>M.S. in Finance, Quantitative</i> ▪ <b>GPA:</b> 3.95/4.00, Rank 2/89 ▪ <b>Honors:</b> All-semester Dean's List, Beta Gamma Sigma Award, Charles F. Knight Scholar (Expected) ▪ <b>Coursework:</b> Continuous-Time Finance (Ph.D. Level), Stochastic Calculus, Exotic & Fixed Income Derivative Pricing, Asset Pricing, Python and R Machine Learning, LASSO, SQL, Quantitative Risk Management, Corporate Finance I & II	<b>St. Louis, MO, USA</b> Sep 2023 – Dec 2024 (Expected)
<b>The University of Hong Kong (HKU)</b> <i>B.S. in Economics and Finance</i> ▪ <b>GPA:</b> 3.41/4.00, Rank top 35%, <b>Awarded</b> 2:1 Distinction and HKU Reaching Out Award (C.V. Starr Scholarship) ▪ <b>Admitted</b> based on achieving a top 0.4% province-ranking (143 <sup>rd</sup> / 400,000) in National College Entrance Exam (Gaokao)	<b>Hong Kong</b> Sep 2017 – May 2021
<b>Institut d'Études Politiques de Paris (Sciences Po)</b> <i>Scholarship-Awarded Exchange Student</i>	<b>Paris, France</b> Jan 2020 – May 2020

## PROFESSIONAL EXPERIENCE

<b>Washington University in St. Louis, Olin Business School</b> <i>Research Assistant (Post Grant)</i> <b>Overview:</b> Data scientist to process a novel U.S. congressional hearing database and develop data solutions to enhance usability ▪ Conducted time-series analysis to identify a direct link between UK government-vs-media fiscal sentiment shocks and asset price changes, addressing omitted variable bias (OVb) by isolating sentiment effects from broader economic conditions ▪ Developed a Selenium web scraper to extract data from social media and news databases, improved sentiment classification through BERT and sub-model fine-tuning, transforming it into a key resource for quantitative research	<b>St. Louis, MO, USA</b> May 2024 – Present
<b>Privium Fund Management</b> <i>Portfolio Manager</i> <b>Overview:</b> Co-managed US\$ 200M AUM options selling strategy, overseeing algorithmic trading and risk management ▪ Executed options selling strategy on index options, minimizing slippage and maximizing premiums with algorithmic trading ▪ Integrated transaction costs, stop-loss mechanisms, and market impact analysis to ensure 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 ensure portfolio robustness	<b>Hong Kong</b> Apr 2022 – Dec 2022
<b>Yong Rong Asset</b> <i>Junior Trader</i> <b>Overview:</b> Research-focused buy-side trader at a fundamental high-conviction macro sub-fund with US\$ 30m AUM ▪ Participated in trading activities, maintained the firm's trading and reporting scripts to support execution ▪ Produced comprehensive research memos for U.S. space exploration, remote sensing, and Hong Kong machinery sectors	<b>Hong Kong</b> Jun 2021 – Jan 2022
<b>Peak Global Investments</b> <i>Private Equity Intern</i> <b>Overview:</b> Research, due diligence-focused intern while contributing to the firm's crypto and DeFi proprietary trading strategies ▪ Researched cryptocurrency exchanges across Asia and Europe, liaised with senior executives to prepare for acquisitions ▪ Collaborated with world's largest crypto exchange, utilized API to assess targets' trading volumes and their authenticity	<b>Hong Kong</b> Sep 2020 – May 2021

## RESEARCH & PROJECT EXPERIENCE

<b>Microstructure-Informed High-Frequency Trading Strategy</b> <i>Trading Strategy Design</i> ▪ Currently developing a proprietary high-frequency trading (HFT) 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 high-frequency dataset	<b>St. Louis, MO, USA</b> Oct 2024 – Present
<b>Research on PEVC-backed Companies</b> <i>Research Assistant under Prof. Minmo Gahng (Cornell University)</i> ▪ Developed scalable TF-IDF-based fuzzy matching solution for large datasets, utilizing custom cosine similarity with sparse matrices, variable-based blocking, and automated best-match selection to ensure high accuracy and performance	<b>Ithaca, NY, USA (Remote)</b> Mar 2024 – Oct 2024
<b>Hull-White Model Calibration for At-the-Money Caplets and Caps</b> <i>GitHub Repository: <a href="https://github.com/fredhli/Hull-White-Caplet-Calibration">github.com/fredhli/Hull-White-Caplet-Calibration</a></i> ▪ Implemented theoretical and simulation-based pricing functions, optimizing model parameters against market data, and producing a 15-page executive report with detailed analysis of model fit and limitations in fixed income derivatives	<b>St. Louis, MO, USA</b> Mar 2024 – May 2024

## ADDITIONAL QUALIFICATIONS

<b>Teaching</b>	TA for: <i>Options, Futures and Derivative Securities (Undergraduate)</i> ; <i>Behavioral Finance (Graduate)</i>
<b>Volunteering</b>	NGO Marketing Director, Soap Cycling HKU; Volunteer Teacher, Beyond the Pivot HKU
<b>Certificates</b>	CFA Level I, HKSFC Type-9 Asset Management License
<b>Programming</b>	Proficient in Python, R, SQL, Git, Microsoft VBA, LaTeX; Intermediate in Stata, MATLAB
<b>Work Permits</b>	Hong Kong SAR (Permanent Citizenship), Canada (OWP with Citizenship Assurance), USA (OPT)