

Chenxin Lyu

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Waterloo, Ontario, Canada

Education

University of Waterloo, Waterloo, ON

Sep 2024 – Dec 2027 (Expected)

Ph.D. in Actuarial Science and Quantitative Finance; GPA: 87/100

Supervisor: Prof. Ruodu Wang | Coursework: Asymptotic Statistics, Deep Learning, Financial Econometrics

The University of Hong Kong, Hong Kong SAR

Sep 2022 – Aug 2024

M.Phil. in Mathematics (Differential Equations)

The University of Hong Kong, Hong Kong SAR

Sep 2018 – Jul 2022

B.Sc. in Mathematics, First Class Honours; GPA: 3.69/4.3; Faculty Top 10%; Dean's List 2019–2022

Technical Skills

Programming and Data: Python (NumPy, pandas, statsmodels), R, SQL, MATLAB, Excel

Methods: Time-series analysis, statistical and machine learning, VaR/ES forecasting, Monte Carlo, off-policy evaluation, multiple testing

Tools: Git, Linux, Jupyter, LaTeX, Bloomberg

Selected Research

Adaptive Window Selection for Financial Risk Forecasting

2024 – 2026

ArXiv preprint; with Yinhuan Li and Prof. Ruodu Wang

- Developed a bootstrap-calibrated online method for adaptive look-back selection in sequential VaR and joint VaR–Expected Shortfall forecasting under non-stationarity; evaluated theory, simulations, and S&P 500 data.

IntOPE: Off-Policy Evaluation in the Presence of Interference

2024 – 2025

- Co-developed an importance-weighted estimator for contextual-bandit feedback with direct and peer effects; evaluated the method through synthetic and real-world experiments.

Numerical Fourier method and multi-dimensional second-order Taylor scheme for stochastic differential equations

M.Phil. thesis, The University of Hong Kong

2022 – 2024

- Developed Fourier-based numerical schemes for stochastic differential equations and backward discretization, with applications to European-style option pricing.

Experience

Mercor, Mathematics Expert – AI Training & Evaluation (Part-time)

Sep 2026 – Present

Remote

- Translate mathematics and computational-finance research into LLM benchmarks with reference solutions and grading rubrics; build Python oracles, numerical edge-case tests, and multi-stage integration tests.

AQUMON, Quantitative Research Intern – Hong Kong SAR

May 2021 – Aug 2021

- Researched and backtested systematic equity and ETF strategies using Python and SQL; compared datasets, quantitative models, and factor-based portfolio methods.
- Built a reusable strategy-research package and automated daily market-data pipelines, performance reporting, and operational workflows.

Deloitte, Risk Management Assistant – Beijing, China

Jun 2020 – Aug 2020

- Extracted, validated, and reconciled Bloomberg market and accounting data for financial-risk assessment and scenario stress-testing models.

Credentials and Distinctions

Credentials: SOA ASA examination requirements completed; designation pending. CFA Program Level I candidate; exam scheduled February 2027.

Distinctions: Russell Hiscock Graduate Scholarship (2025); HKU Postgraduate Scholarship (2022–2024); Point72 Investment Case Competition team captain, First-Class Prize (Top 10%) and Asia-Pacific finalist (2020).