

EDUCATION

NEW YORK UNIVERSITY

New York, NY

The Courant Institute of Mathematical Sciences

MS in Mathematics in Finance (expected – January 2020)

- **Past Coursework:** SDEs, Ito calculus; derivatives hedging strategies; Java (K-means, market impact models, Monte Carlo simulation with Middleware ActiveMQ/OCL); Active Portfolio Management: stochastic optimal control, HJB; Market Microstructure; Scientific Computing: PCA, SVD, curve building; Interest Rate and FX models (one-factor rate models, SABR calibration, SVI)
- **Ongoing Coursework:** time series&statistical arbitrage; advanced econometrics&big data: parameter learning(Kalman filter, Baum-Welch), Gibbs sampling and EM applied to risk models
- **IAQF Annual Academic Competition 2019:** forecasted the direction and the magnitude of credit spread movements using machine learning based techniques including LASSO, random forest and boosting. Paper available

IMPERIAL COLLEGE LONDON

London, UK

MSci in Mathematics (Sep 2013 – Jul 2017)

- **Coursework:** Galois theory, game theory, random processes, queueing theory, quantum mechanics
- **Awards:** Associateship of the Royal College of Science (ARCS)

EXPERIENCE

JST CAPITAL

New York City, US

Quantitative *Summer Analyst* (June 24 2019 – Aug 15 2019)

- Worked closely with the core management team (former Wall Street traders) to gain exposure to institutional trading across all major cryptocurrencies
- Automated transaction cost analysis in Python, ensuring strong cash trades performance (order book/ticker datasets from MySQL/SQL Server)
- Constructed Python scripts to manage one of the prop trading books that reports daily NAV

NORDIC PROBABILITY AI SCHOOL

Trondheim, Norway

Norwegian University of Science and Technology, Norwegian Open AI Lab

Summer School Attendee (June 2019)

- One of the 130 attendees selected from 350 applicants worldwide
- Curriculum: probabilistic modelling, variational inference, Variational Auto-Encoders, Bayesian Neural Networks, Deep Generative Models (example project: train DLVM on a 50% incomplete version of MNIST database using TensorFlow probability and the Adam optimiser, with imputation)

TSINGHUA UNIVERSITY, PBC SCHOOL OF FINANCE

Beijing, China

Summer Researcher (Jul 2017 – Sep 2017)

- Built & optimized architecture of deep feedforward networks to forecast cross-sections of expected stock returns; applied convolutions for further optimization; compared alpha (Fama French five factor) and Sharpe ratio of portfolios constructed with different networks.

SHANGHAI STOCK EXCHANGE

Shanghai, China

Analyst Intern, Derivatives Market (Jul 2016 – Sep 2016)

- Collected and presented equity options data: trading volume, open interest (OI) and put/call ratio for senior managers; backtested S&P 500 vix options trading strategies

BLOOMSBURY CAPITAL

London, UK

Team Leader (Jan 2015 – Jul 2015)

- Proposed purchase of Petrobras ADR following its share price collapse in the wake of the crude oil oversupply and its debt obligations; received a 30% return by hedging against oil price uncertainty through long put options at the strike price of \$5, limiting the potential overall downside to -33%

COMPUTER SKILLS/OTHER

Programming/Software: Python, C, Fortran, C++, Java, MS Office (Excel, VBA), Matlab, R, MySQL

Languages: Mandarin (native), English (near native), Cantonese (basic), Italian (B1)

Certificate: CFA Level II candidate