
EDUCATION

NEW YORK UNIVERSITY New York, NY

The Courant Institute of Mathematical Sciences

MS in Mathematics in Finance (expected – Dec. 2020)

- **Coursework:** Black-Scholes model, portfolio theory, derivatives pricing, stochastics calculus, VaR, Monte Carlo & Financial Programming in Java
- **Future Coursework:** Algorithm in Trading & Quantitative Strategies, Credits Analytics, Time-Series & Arbitrage

UNIVERSITY OF MASSACHUSETTS AMHERST Amherst, MA

B.S in Mathematics, Statistics & Actuarial Science track (Sept. 2015 – May 2019)

- **Coursework:** ODE, linear algebra, actuarial probability, mathematical statistics, linear regression, numerical analysis, time-series modeling, micro & macroeconomics, Java
- **Honors:** Dean's List (4 years), Outstanding Academic Achievement in Actuarial Science (2019)

EXPERIENCE

GUOTAI JUNAN SECURITIES Shanghai, China

OTC Derivatives Analyst Intern (May 2018 – Aug. 2018)

- Utilized Python to collect market data such as bid, ask prices, and volatility, subsequently reducing initial 30-minute operations to 5-minute operations
- Applied Black-Scholes Model to construct and modify database of OTC derivatives and compute prices of over 40 kinds of European options of OTC derivatives on daily basis
- Analyzed prices of OTC derivatives of barrier options in terms of Monte Carlo simulation, and optimized prices using different market indexes
- Researched availability of OTC derivatives trading in rural areas independently and effectively presented the report to managers and shareholders

HETU EDUCATIONAL AND TECHNOLOGICAL INCORPORATED Guangzhou, China

Marketing Analyst Intern (May 2017 – Aug. 2017)

- Assisted brand promotion and seasonal promotion of products and services accounting for 32% of the annual corporate income
- Implemented the linear regression model to predict trend based on over 500 datapoints from quarterly report, then effectively presented the result to managers

PROJECTS

UNIVERSITY OF MASSACHUSETTS AMHERST Amherst, MA

Actuaries Student Research Case Study, Society of Actuaries (SOA)

- Utilized Python to coordinate and merge over 2000 data points and built multiple linear regression models with visualizations
- Researched market trend of automatic vehicles including sales, insurance coverage, and future availability, then presented recommendations to faculties

Markov Chains & Applications in Pricing Stock

- Utilized Python to collect, coordinate and merge two-year financial data from Yahoo Finance and visualized stock prices distribution
- Implemented Markov process on return and volatility of stock and improved with machine learning algorithm of kernel density approximation on PDE of return

COMPUTER SKILLS/OTHER

Programming Languages: Python, R, Java

Other Software: Microsoft office (Excel VBA), Matlab, Bloomberg

Languages: Mandarin (native), English (fluent)

Certificate: CFA level I, Exam P, Exam FM