

EDUCATION

NEW YORK UNIVERSITY New York, NY
The Courant Institute of Mathematical Sciences

MS in Mathematics in Finance (expected – December 2019)

- **Coursework:** Fixed Income Pricing, Black-Scholes Model, Greeks, Modern Portfolio Theory, Monte Carlo Simulation, OOP in Java, Stochastic Calculus, VaR
- **Future Coursework:** Time Series Analysis, Interest Rate and FX Models, Black-Litterman, Data Science in Quantitative Finance, Algorithmic Trading

UNIVERSITY OF CALIFORNIA, SAN DIEGO La Jolla, CA

BS in Mathematics & BA in Economics (September 2014 – June 2018)

- **Coursework:** Differential Equations, Probability, Linear & Logistic Regression, Statistics, Numerical Analysis, Operations Research, Micro & Macroeconomics, Econometrics, Java
- **Honors:** Summa Cum Laude, Provost Honors (4 years)

EXPERIENCE

STEPSTONE GROUP La Jolla, CA

Data & Analytics Quantitative Intern (June 2019 – August 2019)

- Predicted buyouts' exit time by utilizing Cox's proportional hazard model with factors such as regions, industries, GP qualities, and fund sizes (Python)
- Filtered, processed and visualized funds' data for further survival analysis and presentation (Python)
- Investigated funds' investment memorandums and presented the findings

PICC (PEOPLE'S INSURANCE COMPANY OF CHINA GROUP) Beijing, China

Actuarial Summer Intern (July 2018 – August 2018)

- Developed Copula-based pricing strategy in R and applied model to calculate YP, RP, and RPHPE loss ratios and premiums of insurance under different deductibles
- Adjusted prices according to CPI and policy-based index to get real prices from nominal prices and met risk management requirements with the adjusted prices
- Constructed and modified database of formal and informal names of over 46000 locations using Excel and R, to help insurance company capture keywords and locate the places

MOTORSKILL VENTURE GROUP Sugar Land, TX

Summer Analyst Intern (August 2017 – September 2017)

- Applied economic model to forecast impacts of investment such as placement opportunities produced, expected investment returns, and risks
- Back-tested and optimized model in R, by data cleaning, data visualization & regression analysis

PROJECTS

NEW YORK UNIVERSITY New York, NY

Short-term Course Projects

- **K-Means Clustering in java:** Implemented Lloyd's K-Means algorithm to perform multi-dimensional data point clustering based on Euclidean distance
- **Option Pricing with Monte Carlo Simulation in Java:** Priced the vanilla European and Asian options using Monte Carlo Simulation given error tolerance and confidence level
- **VaR's estimation and backtest:** Utilized variance/covariance, Monte Carlo simulation, and historical simulation to calculate daily VaR and backtested VaR's performance with prior day's PnL
- **Data Interpolation:** Infilled missing data using Brownian Bridge, Bootstrapping, and Regression-based techniques given differencing intervals and firm's assumptions

UNIVERSITY OF CALIFORNIA, SAN DIEGO La Jolla, CA

Multifractal Detrended Fluctuation Analysis (MF-DFA) Case Study

- Applied MF-DFA model into CSI 300 stock index on its realized volatility
- Constructed a trading model in MATLAB using results of obtained Hurst index based on 2015 performances and tested the model on A-Shares

COMPUTER SKILLS/OTHER

Programming Skills: Java, Python, R, MATLAB, Stata, Excel