MEIXI (MAYSIE) SUN

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EDUCATION

NEW YORK UNIVERSITY New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance (expected – January 2020)

- ***Coursework:*** Derivatives pricing and hedging, factor models, stochastic calculus, portfolio and risk management, interest rate and FX models, VaR, OOP in Java, optimization in Python
- ***Expected coursework:*** machine learning, time series analysis, and statistical arbitrage

UNIVERSITY OF MICHIGAN Ann Arbor, MI
B.S. in Applied Mathematics & B.S. in Statistics (with Distinction) (2016-2018)

- ***Coursework:*** Probability, C++ programming, linear algebra, linear ODEs, Black-Scholes model, Monte Carlo simulation, applied linear and logistic regressions, LDA, QDA and KNN classification methods, ridge and Lasso regressions, SVM

ILLINOIS INSTITUTE OF TECHNOLOGY Chicago, IL
Majored in Applied Mathematics (2014-2016, then transferred to University of Michigan)

EXPERIENCE & PROJECTS

UNITED NATIONS JOINT STAFF PENSION FUND New York, NY
Quantitative Investment Summer Analyst (Jun 2019 – Aug 2019)

- Evaluated performance of external managers using stochastic dominance, regime shift and time series analysis, and implemented Monte Carlo simulation on their monthly returns to forecast future performance
- Monitored multi-asset allocation (AUM $67 billions) through Northern Trust platform and constructed optimal portfolios by minimizing their expected shortfall
- Researched on risk metrics in Real Estate and Private Equity investments by mapping quarterly data extracted from Burgiss database to ETF indices by sectors

NEW YORK UNIVERSITY New York, NY
Short term projects (OOP in Java, Python Programming, Microstructure, Risk Management, FX)

- Simulated the execution management system (EMS) of an exchange with order book mechanics in Java
- Priced Asian and European options using Monte Carlo simulation, and utilized Java Message Service and ActiveMQ to pass messages between publishers and clients
- Merged and Converted high frequency trading files using developed framework, then read the trading file and quote file simultaneously to classify each trade as buyer or seller initiated using Tick test and Quote test
- Calibrated the SABR foreign exchange smile model in Python using Market Convention
- Conducted back testing for returns, calculated VaR and maximum drawdowns, and applied regression and Brownian Bridge on missing data in Excel

CHINA SECURITIES Beijing, CHN
Investment Banking Summer Analyst (Jun 2018 – Jul 2018)

- Performed market, management, and risk due diligence on the target IPO company and evaluated their performance by analyzing financial statements from WIND
- Researched on annul reports of listed companies in the same industry to analyze their profit models

UNIVERSITY OF MICHIGAN Ann Arbor, MI
Data Analysis and Machine Learning (C++, R and SQL)

- Applied basic machine learning techniques, as well as binary search trees and the map data structure in C++ to identify and classify subjects of posts on an online class forum
- Implemented LDA, QDA, KNN classifications and Classification trees in R to predict Napa Valley red wine qualities from chemical components using historical data
- Used SQL select statements to sort and group data in rational databases by nested criterions

COMPUTER SKILLS/OTHER

Programming Languages: Java, Python, C++, R, Matlab, SQL, Excel VBA
Languages: Chinese Mandarin (native), English (fluent)