

EDUCATION

University of Michigan, Ann Arbor, MI

Sept. 2017-Apr. 2019

- Master of Science in Quantitative Finance and Risk Management
- GPA: 4.0/4.0
- Quant Program Merit Scholarship, 2017-2018
- Course Highlights: Machine Learning, Numerical Analysis, Stochastic Analysis

Shanghai Jiao Tong University (SJTU), Shanghai

Sept. 2013-Jun. 2017

- Bachelor of Science in Mathematics & Applied Mathematics (Mathematics-Finance Experimental Class)
- GPA: 3.7/4.0
- Academic Excellence Scholarship, 2013-2014, 2014-2015; Outstanding Graduate Award, 2017
- Course Highlights: Algebra, Calculus, Stochastic Process, Statistics, Finance, Econometrics

ACADEMIC EXPERIENCES

Machine Learning Research Assistant (Examination of the Brexit Market)

Aug. 2018-Dec. 2018

- Used minute by minute data and implemented Deep Neural Networks (DNNs) and Support Vector Machines (SVMs) adaptively in Tensorflow to test the flow of information from high-value to low-value stocks, which could aid financial prediction (training accuracy is 100%; testing accuracy is about 60% for SVM and 57% for Neural Network)

Financial Engineering Research Assistant (Credit Default Probability Prediction)

May 2018-Jul. 2018

- Realized multi-period corporate default prediction model based on forward intensity approach including doing parameter estimation of likelihood function in Python and assessing model based on ROC curve (with AUC of 0.8 and KS of 0.4 for one month prediction)
- Researched on KMV model and Altman's z-score model, and realized them in Python

Systemic Risk Quantification

Mar. 2017-May 2017

- Utilized VARMA-MGARCH models to forecast variance-covariance matrices of HS300 industry indices, and founded risk index through VaR based on matrices
- Researched a variety of optimization methods like BFGS, BHHH and built infrastructure in Python to perform parameter estimation which sped up prior algorithm by 10x

INTERNSHIP EXPERIENCES

Shanghai Zenithmacr Asset Management Co. Ltd., Data Analyst Intern

Jan. 2017-Jul. 2017

- Collected financial data from Wind SQL database; did preprocess on these data like normalization, NA filling, etc.
- Used PCA to reduce the number of features generated from economic data and based on them to build regression models to predict the market risk which helped decrease the loss by at least 10%

China Hedge Fund Research Center, Research Assistant

Sept. 2016-Dec. 2016

- Built Python web crawler to capture 10G text data from Wechat media platform of brokers and researched abnormal return of recommended stocks using event study methodology which verified that there's insider information in Chinese equity market
- Realized ARMA-GARCH models in R to study arbitrage opportunities between *CSI 300 Index Futures* and *Singapore A50 Index Futures*

Singapore Goldpebble Research Pte. Ltd., Data Analyst Intern

May 2016-Aug. 2016

- Conducted industry research on leading P2P live-streaming companies such as Momo and YY and built regression model to estimate revenue of Momo with error less than 5%
- Implemented Kalman filter, X-12-ARIMA seasonal adjustment, and other methods of time series analysis to accomplish data analysis on economic data with help of Python

QUALIFICATIONS& SKILLS

Qualifications: CFA Level III Candidate

Programming Skills: Proficient with Python, R, Matlab, C++, Stata; Basic knowledge of SQL