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**Hui Cai**

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## EDUCATION

### University of Michigan, Ann Arbor, MI

Sept. 2017-Dec. 2018

- Master of Science in Quantitative Finance and Risk Management
- Overall GPA: 4.0/4.0 (Top 1) Major GPA: 4.0/4.0
- Course Highlights: Stochastic Analysis, Financial Mathematics, Machine Learning, Numerical Analysis

### Shanghai Jiao Tong University (SJTU), Shanghai

Sept. 2013-Jun. 2017

- Bachelor of Science in Mathematics & Applied Mathematics (Mathematics-Finance Experimental Class)
- Overall GPA: 3.6/4.0 Major GPA: 3.7/4.0
- Academic Excellence Scholarship, 2013-2014, 2014-2015; Academic Progress Scholarship, 2015-2016; Outstanding Graduate Award, 2017
- Course Highlights: Algebra, Calculus, Stochastic Process, Statistics, Finance, Econometrics

## INTERNSHIP EXPERIENCES

### Galaxy Futures, Option Trading Intern

Mar. 2018-Jun. 2018

- Researched trading strategies on commodity options; developed option backtest framework in Python
- Developed Excel based tools to generate daily option reports including Greeks, IV, etc.

### Shanghai Zenithmacr Asset Management Co. Ltd., Quantitative Trading Assistant

Jan. 2017-Jul. 2017

- Developed quantitative trading strategy on stocks (mainly focused on technical analysis); did backtest on them via Python
- Built a risk management model based on five factors such as interest rate (Shibor) and the average close price of the stock market
- Classified significant events on every trading day and reported to traders

### China Hedge Fund Research Center, Research Assistant

Sept. 2016-Dec. 2016

- Built Python web crawler to capture text data from Wechat media platform of brokers and researched the abnormal return of recommended stocks using event study methodology
- 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
- Performed model validation to estimate the revenues of Tencent and Netease mobile games
- Implemented Kalman filter, X-12-ARIMA seasonal adjustment, and other methods of time series analysis to accomplish data analysis with the help of Python

## ACADEMIC EXPERIENCES

### Systemic Risk Quantification

Mar. 2017-May 2017

- Utilized VARMA-MGARCH models to forecast the variance-covariance matrices of HS300 industry indices, and founded risk index through VaR based on the matrices
- Researched a variety of optimization methods and built infrastructure in Python to perform parameter estimation

### HTC Investment Value Analysis (Guanghua School of Management Case Study Program)

Mar. 2016-Apr. 2016

- Conducted fundamental analysis based on collected HTC financial data
- Applied Matlab to run regression analysis with HTC financial index to its stock prices; performed principal component analysis on accounting factors to conduct electronics industry analysis

## EXTRACURRICULAR ACTIVITIES

### WeChat Operator, Lujiazui Finance Club WeChat Platform

Mar. 2016-Jun. 2017

- Organized mock stock trading competition to enlarge our user base

### VP, TECC (Technology & Education: Connecting Cultures)

Mar. 2015-Jun. 2017

- Organized student teams to provide educational aid in economically depressed areas of rural China

## QUALIFICATIONS& SKILLS

### Qualifications:

- CFA Level II Candidate

**Programming Skills:** Proficient with Python, R, Matlab, SQL, Stata and Eviews