

# HAOTIAN YANG

543 Church St, #14 Ann Arbor MI 48104 | (734) 546-7155 | E-mail: [haotiany@umich.edu](mailto:haotiany@umich.edu)

## EDUCATION

---

**University of Michigan, Ann Arbor, MI** 08/2021-12/2022

*M.S* in Quantitative Finance and Risk Management

- **Main Courses:** Computational Finance, Stochastic Analysis for Finance, Advanced Financial Mathematics, Statistical Analysis of Financial Data

**Central University of Finance and Economics, Beijing, China** 09/2017-06/2021

*B.S* in Information and Computational Science (Financial Computing) GPA: 85.18/100 Rank: 3/23

- **Courses:** Mathematical Model (MATLAB) (93), Finance Engineering (97), Financial Marketing (90), Statistical Computation (R) (93), Database (94), Data Mining (91), Time Series Analysis (90), Financial Mathematics (92)
- **Awards:** CUFE Academic Merit Scholarship (10/2019)

**Uppsala University, Semester Exchange, Sweden** 09/2019-01/2020

- **Main Courses:** Discrete Mathematics, Econometrics, Time Series Analysis, Applied Statistical Methods

## EXPERIENCE

---

**Acies Tech INC, Intern of Quantitative Strategy** 06/2020-08/2020

- Used Python and tick-level trade and quote data to reproduce the stock matching engine in Shanghai Stock Exchange
- Used Python to conduct feature engineering processing and statistical analysis on the tick-level trading data
- Under the guidance of researcher, used XGBoost model to develop intraday trading strategies of stocks

**Everbright Securities Asset Management Co. LTD., Quantitative Investment Department** 01/2020-02/2020

- Assisted traders in studying the calendar spread arbitrage and inter commodity spread arbitrage of 300 ETF option and 50 ETF option, based on the low implied volatility of low ETF options at the end of 2019
- Segmented sentences and words, and extracted key words reflecting market sentiment from tens of thousands of crawled research reports by word2vec python package, then sorted out data and built the database

**Beijing Zhongjia Fund Management Co. LTD, Investment Research Department** 07/2019-09/2019

- Assisted researcher to sort out the data and data sources for internal research report, focusing on analysis of main companies, industrial chains and internal conditions of companies in photovoltaic manufacturing industry and non-bank finance

## ACADEMIC PROJECT EXPERIENCE

---

**Statistical Calculation: Logistic regression, Random Forest, Support Vector Machine, and AdaBoost**

- Based on logistic regression method, collected data from the European election survey website to analyze several factors that made influence on election voting
- Utilized Matlab to restore the image by advancing the three-channel value of the edge color of the broken image
- Used R language to extract book data from Douban and used SVM method for classification

**Econometrics: Application of two-stage least squares regression**

- Course paper: Research on the Gender Equality Factors in Income Based on the Two-Stage Least Squares Regression
- Studied the impact of gender and age education background variables on personal income by two-stage least squares regression and instrumental variables

**Mathematical Modeling: Application of Principal Component Analysis and Multiple Linear Regression**

- Course paper: Study on the Factors Influencing Stock Returns in Banking Industry Based on Principal Component Analysis and Multiple Linear Regression
- Collected the monthly frequency data of more than 20 variables of 32 banking stocks for 10 years, and conducted data cleaning for different kinds of variables
- Used principal component analysis and multiple regression method, transformed nearly 30 collected variables into five principal components to predict the stock return rate, among which the five principal components are highly interpretable and correspond to five types of indicators in stock financial data.

**Data Mining: Mastered XGBoost algorithm and Elastic-Net algorithm reproduction**

- Reproduced the algorithm with Python: optimal subset regression, Adaboost, Decision Tree, XGboost
- Predicted the Chicago real estate data by using the tree model of XGBoost in Sklearn; determined that accuracy is much higher than that of the traditional linear regression methods (including lasso, ridge, and ElasticNet methods)

## EXTRACURRICULAR ACTIVITIES

---

**College Debate Team, Team Leader** 09/2017-12/2019

## SKILLS

---

**Computer Skills:** R, Python, Lingo, Matlab, Wind