# PRERNA

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## EDUCATION

**University of Michigan – Ann Arbor** **Ann Arbor, Michigan**
*Master of Science in Quantitative Finance and Risk Management* *December 2017*

- ***Courses**:* Financial Mathematics, Applied Statistics, Numerical Methods with Financial Applications, Discrete State Stochastic Processes.

**Georgia Institute of Technology (Georgia Tech)** **Atlanta, Georgia**
*Bachelor of Science in Applied Mathematics (with Honors)* *May 2015*
*Minor in Economics, Certificate in Finance* **GPA**: 3.31/4.00

- ***Courses**:* Industrial Organization, Game Theory Economics, Economic Forecasting. Fixed Income, Security Valuation, Derivative Securities, Corporate Restructuring, Mgt. of Financial Institutions.
- ***Honors**:* Dean's List: Fall 2011, Spring 2012, Spring 2013, Spring 2014, Fall 2014, Spring 2015; Faculty Honors: Fall 2012; Inducted into Omnicron Delta Epsilon – International Economics Honor Society for scholastic achievement in Economics.

## EXPERIENCE

**Tata Asset Management Ltd.** **Mumbai, India**
*Internship Trainee, Product Development Department* *September 2015 – March 2016*

- Created a database of relevant market indices using Bloomberg data in MS Excel which was used for creating internal financial reports. This tool helped speed up the process of creating financial reports by 10 times.
- Assisted the sales team with creating marketing strategies for the NFO by preparing reports about the various statistical measures like Sharpe ratio, Treynor ratio, market risks,etc.
- Completed Bloomberg training sessions held regularly to increase proficiency with Bloomberg.

**Center for Academic Success, Georgia Tech** **Atlanta, Georgia**
*Tutor and Peer Leader for Economics, Math, Computer and Physics Courses* *August 2012 – May 2015*

- Mentored and assisted the tutees in understanding instructional study strategies both individually and in groups and prepare supplemental materials.
- Interviewed prospective tutors and leaders for future semesters, assisted in administrative work.

**School of Physics, Georgia Tech** **Atlanta, Georgia**
*Undergraduate Teaching Assistant for MOOC sections and in person sections* *January 2013 – December 2014*

- Conducted lab sessions and graded lab quizzes for freshmen physics classes.
- Assisted students in understanding the course material in person and via email.

## PROJECTS

**Vertically Integrated Projects, Georgia Tech** **Atlanta, Georgia**
*Humor Genome Project, an ongoing research-based class* *January 2015 – May 2015*

- Led the categorization team for the project towards developing tools to collect data on humor.
- Responsible for communicating with instructors and other teams about the progress of the project.

## LEADERSHIP

**Residence Hall Association, Georgia Tech** **Atlanta, Georgia**
*Finance Coordinator* *August 2013 – May 2014*

- Managed the financial accounts ensuring fiscal responsibility.
- Recruited future members and volunteered for events organized by the organization.

## AWARDS & AFFILIATIONS

- Bloomberg Market Concepts: Certificate of Completion.
- Institute of Actuaries of India: Student Member.
- Member of GT Undergraduate Consulting Club and GT Student Foundation Investment Committee.
- Placed 2nd in Regional Mathematics Olympiad (2011), qualified for Indian National Mathematics Olympiad.
- Hold sixth year diploma in Indian Vocal Classical music and fifth year diploma in Fine Arts (Painting).

## SKILLS

**Languages:** English, Hindi and German.
**Programming:** MS Office, MATLAB, R, STATA, Java, Python, VPython, MySQL, HTML, XML, CSS.

# Esther (Shuangning) Zhu

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## EDUCATION

**University of Michigan** Ann Arbor, MI

*Master of Science in Quantitative Finance and Risk Management* *Sept. 2017 – Expected May 2018*

*Bachelor of Science in Financial Mathematics* *Sept. 2015 – May. 2017*

- GPA: **3.84/4.00** James B. Angell Scholar and University Honors
- Courses: Financial Math, Stochastic Process, Numerical Analysis, Computer Science, Probability

**Beijing Foreign Studies University** Beijing, China

*Double Major in Finance and English Literature* *Sept. 2012 – Jun. 2015*

- GPA: **3.62/4.00** Global Times Scholarship (Top 5%)

## WORK EXPERIENCE

**Chinalin Securities Co., Ltd.** Beijing, China

*Fixed Income Summer Intern* *Jul. 2017 – Aug. 2017*

- Worked on various *Asset Backed Securities(ABS)* products, assisted in finalizing terms of a $60-Million bond
- Created spreadsheets in Excel to analyze cash flow of a $80-Million asset that determined the actual dollar amount of interest paid to investors
- Conducted company research on electric power industry that assisted seniors to implement risk analytics
- Analyzed financial statements, assessed underlying assets and summarized information on company's finances

**Stephen M. Ross School of Business** Ann Arbor, MI

*Research Assistant* *May 2017 – Jul. 2017*

- Assisted on the paper *"Estimating and Testing Dynamic Corporate Finance Models"*
- Reviewed a Monte Carlo study of highly computationally intensive estimation techniques
- Used C++ and Python to make multiple simulations on Linux system

**China Guangfa Bank** Beijing, China

*Investment Analyst Intern* *Feb. 2015 – Mar. 2015*

- Created database in financial operating system based on information of 700 clients
- Connected with more than 150 industrial clients and assisted them in the system update process

## LEADERSHIP EXPERIENCE

**Enactus** (a global nonprofit organization) Beijing, China

*Team Leader* *Sept. 2012 – Jun. 2013*

- Built a new business model for a local organization, developed product strategy and go-to-market policies, coordinated on-campus trade shows, resulting in cost reduction and profit growth

**Student Government** Beijing, China

*Communications Director* *Sept. 2012 – Jun. 2013*

- Served as point of contact and provided information on resources to more than 200 students and alumni
- Enhanced online reach of newsletters through social media to inform students of upcoming events

## SKILLS

- **C++:** Experience designing, implementing, testing and debugging many large-scale projects independently
- **Python:** Wrote algorithms to model market risk and built Monte Carlo simulations of 3 stocks
- **Excel:** Applied financial functions such as VLookUp, Proficient with other MS Office applications

# Zixuan Zhu

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## EDUCATION

**University of Michigan** Ann Arbor, USA
*M.S. in Quantitative Finance and Risk Management* Sept 2017 - now
- Coursework: Applied Statistics, Advanced Financial Mathematics, Stochastic Analysis, Numerical Methods(Matlab)

**Nankai University**, School of Mathematical Science Tianjin, China
*Bachelor of Science in Mathematical Finance and Actuary, GPA: 3.65/4.0* Sept 2013 - Jun 2017
- Coursework: Investment, Financial Engineering, Actuarial Mathematics, Probability Theory, Mathematical Statistics, Operational Research, Multivariate Analysis, Data Structure, C++ Programming
- Scholarship: Outstanding Student Scholarship of Nankai University
- Award: Successful Participant in American Mathematical Contest in Modeling, Second Prize in Contemporary Undergraduate Mathematical Contest in Modeling

**University of California-Berkeley**, Haas School of Business Berkeley, USA
*Summer Session* Jul 2015 - Aug 2015
- Coursework: Introduction to Financial Accounting, Introduction to Managerial Accounting

## PROFESSIONAL EXPERIENCE

**Everbright Securities** Tianjin, China
*Quantitative Analysis Intern* Sept 2016 - Nov 2016
- Developed algorithmic trading strategies on Chinese A share stocks and CSI300 stock index using R
- Built market strategy timing yielding 15% annual return, 1.2 Sharp ratio, and 5% MDD
- Analyzed volatility of high-frequency stock price with Hilbert-Huang Transform and tried to find the internal law of the price and its volatility, through this way to improve the internal quantitative trading strategies

**China Development Bank** Beijing, China
*Risk Management Intern* Jul 2016 - Sept 2016
- Analyzed 20 historical default cases and drafted research report based on findings
- Improved internal Default Probability and Accurate Rate model based on Basel III
- Completed spreadsheet automation with VBA, and updated in-house C++ and Matlab codes

**Taikang Life Insurance** Tianjin, China
*Marketing Intern* Mar 2016 - Apr 2016
- Generated 500 earnings reports and conducted statistical analysis with R
- Designed 3 pitch books of newly launched product, based on product characteristics and market data
- Facilitated compilation of about 200 claims in 2015

**Willis Towers Watson** Beijing, China
*Benefits & Actuarial Consultant Intern* Dec 2016 - Mar 2017
- Constructed raw data and checked IAS for further computing with Excel VBA
- Compiled and reviewed 20 actuarial reports with modeling results, based on CAS or IAS

## RESEARCH & PROJECTS

**Study on CNY Fixing Price Forecasting** Sept 2016 - Nov 2016
- Built model to forecast daily CNY fixing price based on CFETS currency basket weights
- Achieved forecasting accuracy with daily average 50 pips error

**Tianjin Undergraduate Training Program for Innovation and Entrepreneurship** Mar 2015 - Apr 2016
- Utilized Analytic Network Process and triangular fuzzy number, together with SuperDecisions software, to calculate weights of each factor
- Distributed over 2000 questionnaires and analyzed data, using SPSS to conduct correlation test
- Wrote paper *"A Study on Factors Influencing Quality of Third Party Payment Platform and Evaluation System"*

## SKILLS

- Programming: C++, Matlab, VBA, R, Python
- Software packages: Excel, LaTeX, SPSS, SuperDecisions

# Guoqing Zhao

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## EDUCATION

**University of Michigan** Ann Arbor, MI
M. S. in Quantitative Finance and Risk Management Sept. 2017-Present
- **Courses:** Financial Mathematics, Stochastic Processes, Numerical Analysis, Statistics

**Xi'an Jiaotong University** Xi'an, China
B. S. in Mathematics and Applied Mathematics (Honors Science Program) Sept. 2013-Jun. 2017
- **Courses:** Numerical Analysis, Probability and Mathematical Statistics, Mathematical Finance, Stochastic Processes, Mathematical Programming, Data Analysis and Statistical Software (SAS).
  **GPA:** 84.86/100
- **Honor:** SIYUAN Merit Scholarship in 2017

**Georgia Institute of Technology** Atlanta, GA
Georgia Tech School of Mathematics Visiting Honors Student Program Jan. 2016-May 2016
- **Courses:** Probability and Statistics with Application, Information Theory.
  **GPA:** 4.0/4.0

## PROJECT EXPERIENCE

**Parameter Estimation of Quantile Regression for Longitudinal Data** Feb. 2017-Jun. 2017
- Constructed several different weights in R to the loss function of nonlinear quantile regression
- Applied the induced smoothing method in R to smooth the original discontinuous estimating functions, and used the Newton-Raphson iteration algorithm to solve the estimating equations

**Prediction of Stock Price Based on LSTM Model** Jan. 2016-May. 2016
- Analyzed the impact of news and blogs on stock prices using sentiment analysis in python
- Applied LSTM network to determine the impact of historical data on share price
- Trained the stock price model with 5 years' historical data
- Evaluated the difference between the predicted stock price and real data and adjusted parameters to enhance the prediction accuracy

**Prediction of China's Population Based on ARMA Model** Jul. 2015-Sept. 2015
- Analyzed the station process of Chinese population data within 20 years in Eviews
- Tested stationary data with white noise and calculated ACF and PACF
- Built model with ARMA to predict the Chinese population in coming years. The error of the model was within one in a million

## SKILLS

**Programming Languages:** MATLAB, SAS, Python, R, C++.
**Communication:** Mandarin - Native speaker, English - Fluent.

**YAO ZHOU**

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## EDUCATION

**University of Michigan-Ann Arbor** **09/2017-12/2018**

- Master of Quantitative Finance and Risk Management
- GPA: N/A

**University of Michigan-Ann Arbor**
**01/2015-05/2017**

- Bachelor of Science in Financial Mathematics
- GPA: Major: 3.8/4.0, Cumulative: 3.6/4.0
- Courses: Mathematics of Finance, Probability Theory, Numerical Methods with Financial Application, Discrete State Stochastic Processes, Intermediate Microeconomic Theory, Corporate Finance.
- Nominated for Golden Key International Honour Society by being top 5% of class

**University of Tulsa**
**01/2013-12/2014**

- Majored in Finance, GPA: 3.90/4.0
- Awarded $8000 scholarship each semester for ranking in top 5% of class

## EXPERIENCE

**HUARONG XIANGJIANG BANK** **Changsha, China**
**Intern, Credit Management Department** **07/2016-09/2016**

- Attained comprehensive understanding of Bank's credit extension loan business, and basic property, and learned how to assess operational situation and assets condition.
- Contributed in conducting risk evaluation by visiting and investigating, checked about registration record in the Administration of Industry and Commerce and reputation in business, audited financial documents that the company posted, evaluated the potentiality of the field and level of competition between the company and other rivalries.
- Programmed four investment decision criteria method via Matlab, including Net Present Value, Probability Index, Payback Period, and Internal Rate of Return. Evaluated dozens of projects' cash flow and reported to supervisor.

**GUOTAI JUNAN SECURITIES** **Hengyang, China**
**Intern, Investment Department** **05/2015-08/2015**

- Collected thousands of unstructured customer's data, analyzed customer's behavior based on their age, gender, martial status, and investing preference, participated in advising customers on investing strategies based on behavioral analysis.
- Programmed Dividend Discount Model and Discounted Cash Flow Model via python. Estimated stocks' prices, analyzed stocks' risks based on historical data, and reported to senior manager.
- Programmed Monte-Carlo simulation via python. Analyzed historical data, determined standard deviation, average price movement for a security, and then predicted the future price movement. Compared this method with DDM and DCF model.

## EXTRACURRICULAR ACTIVITIES

**Ross Chinese Business Club, Ross Business School**
**Member** **03/2015-05/2017**

- Met weekly to exchange business ideas and worked on real-world business cases, including stock market, consulting cases and recent business news. Provided a real life experience about the world of business.

## SKILLS & ADDITIONAL

- **Computer Skills:** Matlab, C++, C, Python, R, Java, Mathematica, Microsoft Office: Spreadsheets, Access, PowerPoint
- **Languages**: Chinese (Native), English (Fluent), Spanish (Basic)
- **CFA Level 1 candidate**

# Xinyue Zhang

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## EDUCATION

**University of Michigan** Ann Arbor, MI
*M.S.* in Quantitative Finance and Risk Management 2017 - Present

- *Courses*: Advanced Financial Mathematics, Stochastic Analysis, Statistical Models and Methods for Financial Data

**Central University of Finance and Economics** Beijing, China
*B.S.* in Economics (Mathematical Economics and Finance) GPA:3.9/4.0 2013 - 2017

- *Courses*: Stochastic Process, Econometrics, Fixed Income Securities Analysis, Accounting, Micro/Macroeconomics
- *Awards*: Merit-Based Scholarship in Academic Research and Innovation

**University of Cambridge** Cambridge. UK
Exchange Program GPA:3.9/4.0 Jan. 2015 – Feb. 2015

- *Courses*: International Commercial Law, Bank Debt Crisis

## EXPERIENCE

**DataYes** Beijing, China
*Product Manager Assistant* Mar. 2017 – Jun. 2017

- Assisted product manager with designing RoboR Research Platform to extract important information from company announcements using machine learning programming; investigated and analyzed different types of company announcements; visualized and determined keywords
- Conducted product query testing;~~,~~ recorded its correct rate and recall rate
- Directed an outsourcing team with data annotation;~~,~~ evaluated their working effect and kept the product manager informed

**Soochow Securities** Beijing, China
*Research Assistant* Oct. 2016 – Feb. 2017

- Collected and organized auto industry data and listed companies' data from WIND, CAAM, MIIT and companies' statements onto Excel spreadsheets
- Used Excel to draw charts, calculate increase rates, predict their future scales, and evaluate future stock price of companies using PE method
- Completed in-depth analysis reports on industry and listed companies; presented results to Chief Analyst regularly
- Wrote daily and weekly automobile market updates;~~,~~ summarized news and data from various sources to study recent market movements, trends, and outlooks

**Shenzhen HengTaiHuaSheng Asset Management** Beijing, China
*Quantitative Intern* Nov. 2016 – Dec. 2016

- Retrieved and organized data from statements of listed banks concerning loan data, held-to-maturity investments and receivable investments; assisted fund manager with formulating quantitative strategies
- Used MATLAB to derive fundamental data of over 3,000 stocks in Shanghai and Shenzhen stock markets

**China National Tourism Administration** Beijing, China
*Research Assistant* Jun. 2016 - Mar. 2017

- Collected data from UNWTO, WTTC, CNTA and other sources concerning tourism in Hong Kong and tourism development trends worldwide; completed the eventual analysis reports
- Contributed to *Annual Report of China Inbound Tourism Development* published in Tourism Education Press in June 2016

**Zhongqin Wanxin Public Accounting Firm** Taiyuan, China
*Audit Assistant* Jul. 2015 – Aug. 2015

- Transcribed significant forms, including balance sheets and cash flow statements
- Engaged in audit project of Xishan Coal Electricity Group to audit accounting statements

## SKILLS & ACTIVITIES

- Programming Languages: Excel, Python, Matlab, C++ (certificate from Baruch College), Stata
- Teaching Assistant in Mathematical Analysis, Ordinary Differential Equations and International Finance
- CFA I candidate

# Jiayi Zhang

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(612) 205-9542 Zjiayi@umich.edu

## EDUCATION

**UNIVERSITY OF MICHIGAN** *Ann Arbor, MI*

**Master of Science in Quantitative Finance and Risk Management** *September 2017-Expected May 2019*

*Course Highlights*: Advanced Financial Mathematics, Stochastic Analysis for Finance, Computational Finance, and Applied Statistics

**UNIVERSITY OF MINNESOTA, TWIN CITIES** *Minneapolis, MN*

**Bachelor of Science in Mathematics-Actuarial Science Specialization** GPA:3.71 *September 2014-May 2017*

*Course Highlights*: Partial Differential Equation, Complex Analysis, Numerical Analysis, Stochastic Process, Mathematics Modeling, Ordinary Differential Equation, Database System, Econometrics, Risk Management, Advanced Programming, and Probability Theory

## WORK EXPERIENCE

**CHINA MERCHANTS SECURITIES** *Shenzhen, China*

***Investment Bank Division Intern*** *May 2016-August 2016*

- Use MATLAB to build models to predict future cash flows of 10 securitization projects for clients who are Big Four commercial banks, including the first credit card bad-asset securitization case worldwide, resulting in the models to be leading references for future securitization projects
- Enhanced interpersonal skills by participating in the due diligence of 5 securitization projects and facilitating cross-parties communication, and performed business model analysis to study the trend of the securities market and new derivatives

**CENTER FOR EDUCATIONAL INNOVATION-UNIVERSITY OF MINNESOTA** *Minneapolis, MN*

***Undergraduate Teaching Assistant*** *September 2015-May 2016*

- Reinforced leadership skills and English speaking skills by hosting discussion sections, and developed course plans contributing to student's better understanding of the materials

**CHINA SCIENCE & MERCHANTS VENTURE CAPITAL MANAGEMENT** *Shenzhen, China*

***Private Equity Investment Analyst Intern*** *June 2015-August 2015*

- Drafted a merging and restructuring scheme for a nonferrous metal company in Hong Kong (HKEx: 8306), including stock price calculation, equity distribution, and financing capital analysis
- Managed a financing project between a local company called Love & Love and Zoomlion Logistics, and analyzed risk and return of 5 investment projects predicting clients' probability of loss and securing clients' over $80M investment

**AGRICULTURAL BANK OF CHINA** *Shenzhen, China*

***Risk Management Intern*** *May 2015-June 2015*

- Controlled bad-debt risk by evaluating clients' qualifications to secure a loan, including investigating their credit using internal credit reference system, and calculating their monthly installment payments under current interest rate with varying maturities

## PROJECTS

**INVESTIGATION ON OPTIMAL BETTING STRATEGIES IN TEXAS HOLD'EM** *April 2015, MN*

- Designed a model to simulate Texas Hold'em from the real life by using MATLAB, randomizing pairs of cards to players and putting second players' betting strategies into a normal distribution
- Calculated probabilities that the first players would win with 78 selected starting hands, computed expected value for different betting amounts, and determined the maximum expected values resulting in solving the optimal betting strategies for each hands

## SKILLS AND CERTIFICATIONS

**Programming skills*:*** MATLAB, C ++, Java, SQL, Clojure (functional programming languages)

**Certifications*:*** Exam Probability, Exam Financial Mathematics, and Exam MFE (Associate of the Society of Actuaries)

# Rick (Yuankang) Xiong

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## EDUCATION

**University of Michigan** Ann Arbor, MI

*Master of Science in Quantitative Finance and Risk Management* 2017-present

Course Highlights: Advanced Financial Mathematics I. Discrete State Stochastic Processes and Stochastic Analysis for Finance. Numerical Analysis with Financial Applications and Computational Finance. Applied Statistics I

**Singapore Management University** Singapore

*Master of Science in Financial Economics · GPA: 3.91/4.0* 2015-2016

Course Highlights: Financial Econometrics. Computational Statistics in Finance. Advanced Microeconomics. Advanced Macroeconomics

**Huazhong University of Science and Technology** Wuhan, China

*Bachelor of Finance and Bachelor of Engineering in Thermal and Power Engineering · GPA: 3.65/4.0* 2011-2015

Course Highlights: Financial Engineering. Econometrics. Accounting. Insurance. Portfolio Management. Linear Algebra. Complex Function & Integral Transformation. Numerical methods of Engineering. C++ Program Designing. Database System Technology. Engineering Thermodynamics

## EXPERIENCE

**Bank of China, Singapore Branch** Singapore

*Operation Assistant* May, 2016- June, 2016

- Processed more than 5,000 individual and corporate client files by using a database management system
- Maintained database system by DBMS (Database Management System) and team collaboration with 16 colleagues to protect confidentiality of client information by complying to PIPA (Personal Information Protection Act)
- Arranged KYC Review, Dow Jones RiskCenter results and anti-money laundering reports in order to meet Anti Money Laundering, Bribery, Corruption & Sanctions regulatory obligations and identified 6 high risk individual and corporate clients

**Shenzhen Qianhai Zunfu Capital Management Co., Ltd.** Shenzhen, China

*Quantitative Analyst Intern* July, 2015

- Conducted financial analysis of 10 public parent and 4 affiliated companies in the energy industry and wrote an industrial analysis report
- Operated MATLAB to identify arbitrage opportunities in the structured fund market when the stock market plumped and corresponding tranches are overpriced
- Identified top 20 combinations of tranches and corresponding parent funds, which presented the largest arbitrage opportunities by using MATLAB on a daily basis

## SKILLS

- **Programming and data processing tools:**

  C, C++ (with Advanced C, C++ Programming Coursera certification via Peking University)

  Python (with Python Programming Coursera certification via University of Michigan)

  Matlab, R, SQL, SAS, Bloomberg, Wind
- **Communication:** Native in Mandarin; Fluent in English
- **Finance:** Level II CFA Candidate

# Roxanne (Yuan) Yin

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## EDUCATION

**University of Michigan** Ann Arbor, MI
*Master of Science in Quantitative Finance and Risk Management* 2017-Present
**Beijing Normal University** Beijing, China
*Bachelor of Mathematics and Applied Mathematics, GPA: 3.42/4.0* 2013-2017
Course Highlights: Mathematical Analysis, Advanced Algebra, Mathematical Modeling, C Programming, Real Analysis, Functional Analysis, Topology, Time Series Analysis
**College of William&Mary** Williamsburg,VA
*Exchange student, GPA: 4.0/4.0* Summer 2016
Course: Intl Finance/Open Economics

## EXPERIENCE

**Benxi City Commercial Bank** Liaoning, China
*Manager Assistant – Intern* Jul. 2017 – Aug. 2017

- Completed rotational position in accounting, credit and financial market department
- Gained exposure to data entry and opening checking accounts for clients
- Audited checks and applications from clients with full attention on details
- Negotiated return rates with clients with communication skills

**Horizon Robotics** Beijing, China
*Data Specialist – Intern* Jan. 2017 – Apr. 2017

- Mined online video data; extracted periodic images from hundreds of video data; recorded data properties with Excel
- Classified online data, managed and inspected the quality of tagged tasks to prepare data for use in developing smart security monitoring network

**Image segmentation based on geodesic active contours model** 2015 – 2016
*Innovation & Entrepreneurship Program – Team Member*

- Derived PDE to determine segmentation on 2D images; solved it on MATLAB with iterative algorithm
- Demonstrated dynamic process of segmentation with MATLAB to recognize different shapes in images

## SKILLS

- Programming Languages: MATLAB, EViews, C, Excel, LATEX
- Languages: English - Fluent; Mandarin - Native speaker

# XIAOXUE XIN

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## EDUCATION

**University of Michigan** Ann Arbor, MI
Master of Science in Quantitative Finance and Risk Management 2017.9- present
*Course Highlights: Computational Finance, Statistical Models and Methods for Financial Data, Machine Learning, Advanced Financial Mathematics, Stochastic Analysis, Numerical Methods with Financial Application*

**Nanjing University** Nanjing, China
Master of Science in Fundamental Mathematics 8. 2014- 6.2017
*Course Highlights: Probability, Random Process, Stochastic Differential Equations, Stochastic Dynamics, Stochastic Partial Differential Equations*

**Nanjing University of Finance and Economics** Nanjing, China
Bachelor of Science in Mathematics and Applied Mathematics 9. 2010- 6. 2014
*Course Highlights: Mathematical Modeling & Experiment, Data Structure & Algorithm Design, Mathematical Statistics, Finance Engineering, Actuarial Mathematics, Object Oriented Programming*

## PROFESSIONAL EXPERIENCE

**Analytics & Learning for Financial, Social and Human Dynamics Laboratory** Nanjing, China
*Research Assistant,* Big Data and Machine Learning Training Workshop 7. 2017- 8. 2017
• Learned foundations of machine learning and their applications in finance and society with Python
• Gathered and organized articles about point processes, machine learning, and finance; collaborated on an overview paper about the application of point processes and deep learning in finance

**Industrial and Commercial Bank of China** Langfang, China
*Assistant Account Manager* 7. 2016- 8. 2016
• Introduced financial products to clients and collected applicants' financial information; used Excel to analyze data in balance sheet

## RESEARCH

**Stochastic Averaging Principles in Option Pricing** 9. 2016- 4.2017
• Built multidimensional option pricing model with stochastic volatility that considers the interactions between relevant stocks; adopted stochastic averaging principles in slow-fast systems to compute approximation solution and obtained the effective pricing formula

## ACADEMIC EXPERIENCE

**University of Oxford** Oxford, U.K.
Mathematical Finance Training Week Certificate 10. 2016
*Course Highlights: Algorithmic Trading, Financial Data Analytics, Behavioral Finance, Monte Carlo Methods, Optimal Execution, Limit Order Books*

**Workshop on Stochastic Partial Differential Equations and Stochastic Dynamics** Shanghai, China
*Shanghai Normal University* 7. 2016
• Comprehended the cutting-edges of stochastic partial differential equations and stochastic dynamics; interviewed application questions with scholars

## SKILLS & CERTIFICATE

**Computing Skills**: C Programming, Python, Java, MATLAB, Lingo
**Certificate**: CFA Level Ⅰ Candidate
**Language**: Mandarin (Native), English (Fluent)

# Sijie (Isabel) Wu

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**(734) 239-4566 | sijiewu@umich.edu**

## Education

**University of Michigan** — *Ann Arbor, MI*
*M.S. in Quantitative Finance and Risk Management* — *Sep 2017 – present*

**Course Highlights:** Advanced Financial Mathematics, Discrete State Stochastic Processes, Applied Statistics, Numerical Analysis, Computational Finance

**Wuhan University** — *Wuhan, China*
*B.S. in Mathematical Finance and B.S. in Applied Mathematics* — *Sep 2012 – Jun 2016*

**Course Highlights:** MATLAB, Math Analysis, Linear Algebra, Probability Theory, Statistics, Stochastic Processes, Time Series Analysis, Advanced Micro/Macro Economics, Econometrics, Investment, Financial Theory, Options, Futures & Other Derivatives

## Work Experience

**Huiliu Investment** — *Beijing, China*
*Data Analyst Intern* — *Mar 2017 – Jul 2017*

- **Built self-updating dashboards displaying national macroeconomic indicators of China, the U.S., Japan, and Eurozone**
  - ✓ Imported time series from Wind and Bloomberg into Excel, and computed other needed indicator series
  - ✓ Built hundreds of dashboards demonstrating trends of macroeconomic indicators and correlations between them
  - ✓ Facilitated my boss to look up indicators by category and learn the trends in recent decade
- **Used MATLAB to analyze the profitability of futures trading strategies**
  - ✓ Imported historical series of interest rates and prices of target futures from Wind into MATLAB
  - ✓ Wrote scripts and functions in MATLAB to find entry and exit points based on given strategies
  - ✓ Drew cost curves, and computed profit rates in each strategy

**Ipsos China** — *Wuhan, China*
*Research Assistant Intern* — *Feb 2016 – Mar 2016*

- **Wrote market analysis reports for pre-IPO clients**
  - ✓ Collected information of market and rivals using internet, emails, and phone calls
  - ✓ Forecasted future trends of national economy and upstream and downstream industries based on historical data
  - ✓ Estimated market size and market share, and analyzed competitive force of clients based on known information

## Research Experience

**Analysis of Factors Affecting Urban Household Investment in Risky Financial Assets** — *Jan 2016 – May 2016*

- ✓ Determined main influencing factors and introduced a new factor ‘house-buying pressure’
- ✓ Integrated and pre-processed over 20,000 observations in 4 sub-databases of CHIP database
- ✓ Established Probit participation model and Tobit distribution model, and ran the regression in R
- ✓ Analyzed economic interpretation of the regression results

**SARIMA Model Analysis Method and Its Application in GDP Forecasting** — *Jan 2016 – May 2016*

- ✓ Analyzed the historical seasonal Chinese GDP sequence in R, and chose the appropriate SARIMA model
- ✓ Ran the SARIMA regression in R using lnGDP sequence before 2014, and verified it with lnGDP value from 2014 to 2016
- ✓ Using the SARIMA model to forecast seasonal GDP trend from 2016 to 2018

## Skills

**Programming:** MATLAB, R
**Language:** Chinese – native speaker, English – fluent

# YINGZHONG WANG

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## EDUCATION

**University of Michigan** Ann Arbor, MI
*M.S in Quantitative Finance and Risk Management* Sept. 2017 -present

**Renmin University of China**, Suzhou, China
*Bachelor of Economics*, GPA: 3.65/4.00, Sept. 2013-Jun. 2017
Select Coursework: Financial Mathematics, Financial Accounting, Options, Futures and Derivatives, Business and Management of Commercial Bank, Hedge Funds

**Kedge Business School**, Bordeaux,France
*Exchange Program,* GPA: 3.63/4.00 Sept. 2015-Jun. 2016
Select Coursework: Entreprise Finance, Risk Control in Trading, Financial Market and Portfolio Management, Forecasting Financial Market

## PROFESSIONAL EXPERIENCE

**Bank of East Asia**, Suzhou, China
*Corporate Banking Intern*, Jun 2016 – Aug 2016

- Conducted data collection from financial statements and inspection of any abnormality appeared on them
- Performed credit risk review on the bank's risk assessment system and prepared related reports to show the risk rating of the borrowers.
- Assisted in other procedures of the loan approval process such as the authenticity verification of documents and the on-spot investigations so that the credit risk was under control
- Acquired knowledge on designing hedge products of foreign exchange options for an export enterprise

**Changjiang Futures Company**, Zhengzhou, China
*Intern*, Jun 2015 – Aug 2015

- Mastered knowledge of the securities trading process and the usage of some chinese trading softwares as WebStock and Esunny
- Acquired basic knowledge on programming trading and trading strategies by assisting senior colleagues
- Partnered with sales people to deliver excellent customer service and manage the needs of the customers

## SKILLS

**Computer:** SPSS, STATA, Microsoft Office, Eviews

**Spoken Languages:** French, English, Mandarin, and Cantonese

# Steven (Baixiang) Wang

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Mobile: 612-707-5940 Email: baixiang@umich.edu


## EDUCATION

**University of Michigan, Ann Arbor, Michigan (August 2017-Present)**

Financial mathematics, applied statistics, numerical method for finance

**University of Minnesota Twin Cities, Minneapolis, Minnesota** (August 2014 – August 2017)

- GPA 3.84/4.00

Probability, Fourier analysis, stochastic process, numerical method, partial differential equation, programming in python and C++.

## HONORS AND CERTIFICATIONS

- "Best project in Classical Mechanics and Calculus of Variation", The Pennsylvania State University, University Park, Dec. 2015.
- Dean's List, University of Minnesota Twin Cities, 2014, 2016
- Machine Learning Coursera Certification, July ,2017.

## PROFESSIONAL EXPERIENCE

***Biostatistics Intern, CyteTherapeutics, Inc.*** ***Irvine, California and Beijing, China***

January 2015-January 2017

- Performed clinical outcome data verification and analysis using Kaplan-Meier Product Estimates (for survival, mortality curves and relapse rate), cumulative incidence, univariate and multivariate analysis (to search for variables that affect clinical outcome and compare methods of producing stem cells) in programing language R.
- Reviewed various drafts for publications, book chapters, papers and conference presentation, adding to visual presentations for the group.

***Underwriting Intern***, ***Quantum Capital Partners.*** ***Beverly Hill, California, United States***

February 2016-June 2016

- Performed discounted cash flow analysis for evaluating real estate investments by using Argus.
- Derived Internal Rate of Return (IRR) of various investments by analyzing spread sheets.

***Undergraduate Teaching Assistant, Basic Theory of Probability and Statistic, University of Minnesota, Twin Cities***

June 2016 -December 2016

***Visiting Student Researcher, Undergraduate Research Program 'MASS', Pennsylvania State University, University Park, Pennsylvania***

Aug.2015 - Dec.2015

- Completed three computer-based (Matlab) independent projects on lie theory, classical mechanics and algebraic geometry. Presented each project at the end of the semester.
- Joined in discussions on weekly colloquia sponsored by local and invited mathematicians.

## PUBLICATIONS

1. Chow, R., Li, Q., Chow, C., Guo, V., Dang, T., Rao, A., Zeng, T., Chow, D.T.L., **Wang, B.**, and Chow, M., "Cord Blood Stem Cell Processing, Banking and Thawing" in Umbilical Cord Blood (ISBN 978-953-51-4885-2) Ed. Maurício, Ana Colette, Intech Publishers, Rijeka, Croatia, 2016 (Chapter In Press).
2. Chow, C., Dang, T., Guo, V., Chow, M., Li, Q., Chow, D.T.L., Rao, E., Zeng, T., **Wang, B.**, and Chow, R. "Optimization of Unrelated Donor Cord Blood Transplantation for Thalassemia - Implications for other Non-Malignant Indications such as HIV Infection or Autoimmune

Disease”, in Umbilical Cord Blood (ISBN 978-953-51-4885-2) Ed. Maurício, Ana Colette, Intech Publishers, Rijeka, Croatia, 2016 (Chapter In Press).

# Masaya Tsukamoto

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## EDUCATION

**University of Michigan** Ann Arbor, MI

*Master of Science in Quantitative Finance and Risk Management* Sept 2017-Present

**University of Tokyo** Tokyo, Japan

*Master of Mathematical Informatics* Apr 2009 – Mar 2011

Course Highlights: Numerical Analysis, Finite Element Method, C++ Programming, Actuarial Science

**University of Tokyo** Tokyo, Japan

*Bachelor of Engineering* Apr 2005 – Mar 2009

Course Highlights: Aeronautics and Astronautics, Fluid Dynamics, Mechanics, C Programming

## EXPERIENCE

**Dai-ichi Life Insurance** Tokyo, Japan

*Investment Planning Department - Assistant Manager* Apr 2015 – Jun 2017

- Determined the asset allocation of the Guaranteed Interest Contract Fund of $3 billion, invested mainly into BBB and A corporate bonds based on cashflow matching strategy, gained 0.7% investment return against 0.6% assumed interest rate of liability
- Planned and conducted investment into Global Real Estate Funds of $100 million to gain 4% dividend yield despite extremely low interest rate in Japan
- Awarded full financial support for graduate study abroad in MSc (the sole employee sponsored for MSc in the last three years, selected through the competitive process)

*Mizuho Dai-ichi Financial Technology – Financial Engineer* Apr 2011 – Mar 2015

- Developed pricing models of derivatives and securitized products by VBA and C++ to improve risk management and promote further investment on these assets
  - Built Hull-White model of interest rate, Local Volatility model of FX rate, and CIR++ model of default intensity to evaluate Credit Linked Notes
- Developed the Economic Scenario Generator (ESG) by VBA, R, C++ to decide the asset allocation strategy consistent with macroeconomic forecasted scenario
  - Determined AR-X model of macroeconomic variables, VAR-X model of term structure of interest rate, EGARCH model of stock price, and Heston-like model of FX rate in the ESG

*Mizuho Dai-ichi Financial Technology – Intern* Aug 2009 - Sep 2009

- Investigated dynamics of short term interest rates using Squared Gaussian model and GMM to examine risk-return characteristics of Hedged Foreign Bonds

## SKILLS

- Fellow of the Institute of Actuaries of Japan
- Programming Skills: C/C++, R, Python, VBA

# TANG Xiaoxiao

**Tel:** 734-709-2970 **Email**: tangxx@umich.edu **Add.:** 927 S. Forest #301, Ann Arbor, MI 48104

**EDUCATION**

**School of Mathematics, University of Michigan, Ann Arbor** 09/2017-

Master of Science in Quantitative Finance and Risk Management

**School of Mathematics, Shandong University (SDU)** 09/2013-07/2017

Bachelor of Science in Statistics

GPA:4.4/5.00

**RESEARCH PROJECTS**

Study on the Complex Networks Theory-based Modeling of Adaptive Market Hypothesis and Its Evolution

- Established a complex network-based Adaptive Market Hypothesis (AMH) to simulate the evolvement of financial market under various constraint conditions

Analysis on Investors' Short-term Herd Behavior

- Established a general BHW model which can analyze the short-term& long-term herd behavior by introducing market sentiment factors into risk-averse BHW model

**WORK EXPERIENCE**

**LENOVO, HQ** 08/2016-10/2016

Division: Financial Management Department, Business Analysis

- Analyzed huge internal financial data from all branches in China using excel and SPSS
- Assisted to deliver profit-and-loss statement and updated finance system monthly

**China Everbright Bank, Hefei Branch** 06/2015-08/2015

- Gained familiarity with government bonds and business debts
- Offered account, wire transfer and foreign currency exchange services
- Communicated with potential customers and promoted sales volume

**Zebra Crossing Cultural Communication Co.Ltd** 2014-2015

Co-founded and served as Chief Financial Officer for an education company aiming to recruit on-campus undergraduates for academic tutorial service;

- Assisted CEO raising RMB 500,000 from venture capital in the round B
- Devised profit sharing plan among teachers, teaching assistants and the company

**EXTRACURRICULAR ACTIVITIES**

Financial Mathematics Association, Vice-chairman 01/2015-06/2016

- Conducted financial mathematics-themed seminars in cooperation with school of economics; Organized financial knowledge contests

AIESEC, Vice-chairman of Ji'nan Chapter 11/2014-02/2015

- Kept in touch with project leaders from over 10 countries and updated project setting; Found proper projects for applicants in consideration of their strength and intention

Mathematical Modeling Association, Deputy Director 02/2014-09/2015

- Planned and carried out many mathematical modeling seminars and competitions

**HORNORS**

SDU Advanced Individual for Exceptional Social Activities& Scholarship 2016&2015

Honorable Mention in Mathematical Contest in Modeling (MCM/ICM) 04/2016

First Prize in SDU Mathematics Contest 2015

**COMPUTER SKILLS**

C, C++, R, LINUX, MATLAB, SPSS

# XIAOFENG [Sabrina] NIE

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📇: 2361 Bishop Apt 05, Ann Arbor, MI 48105


## EDUCATION

| | |
|---|---|
| 2017- | **University of Michigan** [Ann Arbor, MI]<br>***Master of Science in Quantitative Finance and Risk Management***<br>**Courses Highlights:** Discrete State Stochastic Processes; Stochastic Analysis for Finance; Numerical Analysis with Financial Applications; Computational Finance; Statistical Analysis of Financial Data |
| 2013-2017 | **Wuhan University, Economics and Management School** [Wuhan, China]<br>***Bachelor of Economics, Major in Financial Engineering***<br>**Courses Highlights:** Securities Investment Analysis; Fixed Income Securities; Probability Theory; Financial Engineering; Stochastic Process; Financial Derivatives; C Programming Language |

## EXPERIENCE

| | |
|---|---|
| 7.2016–10.2016 | **Hubei Provincial High Technology Industry Investment Co., Ltd** [Wuhan, China]<br>***Investment Analyst - Intern***<br>• Collected target clients' financial and operation information and established small-sized database with Excel for searching and browsing<br>• Built time-series models and regression models with Eviews and SPSS to analyze influencing factors and to make predictions on the future demand of dental services; wrote industrial analysis reports for investment projects approval |
| 4.2016-3.2017 | **Risk Management and Strategy Decision of Chinese Pension Fund Investment in Securities Market**<br>***Team Leader***<br>• Established CVaR model to select optimal portfolio<br>• Built incomplete information dynamic model to simulate the real market, thereby deciding the ideal time for the Pension Fund investment |
| 1.2016-2.2016 | **Industrial Bank Co., Ltd** [Wuhan, China]<br>***Business Assistant - Intern***<br>• Analyzed client companies' financial data for risk rating, such as asset-liability ratio and current ratio<br>• Dealt with corporate loan transactions for 6 corporations |
| 1.2016-2.2016 | **Mathematical Contest in Modeling**<br>***Team Leader***<br>• Fitted debris into proper distribution model to simplify the orbit model of debris-collector using<br>• Employed Monte-Carlo method to simulate the distribution of debris, and simulated the orbit of withdrawer with MATLAB<br>• Synthesized findings into report that earned Honorable Mention |
| 3.2015–2.2016 | **Feasibility Research of Small-Sized Enterprises Financing through P2P Platform**<br>***Team member***<br>• Interviewed small-sized enterprises about their debt financing modes and financing scales<br>• Utilized LOGISTIC model with R to measure the debt paying ability of enterprises<br>• Analyzed the correlation among loan interest, enterprise scale, and debt paying ability of enterprises |

## SKILLS

**Programming and Data Processing Skills:** Python, R, MATLAB, SAS, EViews, SPSS

**Languages:** English - Fluent, Mandarin - Native speaker

# Yifei Lu

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## EDUCATION

**University of Michigan** **Ann Arbor, MI**
*Master of Science in Quantitative Finance and Risk Management* *Sept. 2017-Present*
**Courses:** Stochastic Processes, Numerical Methods, Financial Mathematics, Statistical Learning

**Shandong University** **Jinan, China**
*Bachelor of Economics in Financial Mathematics and Financial Engineering GPA 3.83 Sept. 2013-Jun. 2017*
**Courses:** C++ Programming, Accounting, Time Series Analysis, Mathematical Analysis, Probability Theory, Ordinary Differential Equations, Options Futures and Other Derivatives

**University of California, Berkeley** **Berkeley, CA**
*Exchange Student in Economics Semester Abroad Program* *Aug. 2015-Dec. 2015*
**Courses:** Econometrics with Python, Investment

## EXPERIENCE

**Forex Capital Markets** **Shanghai, China**
*Intern Trader* *Jul. 2016 – Aug. 2016*

- Studied foreign exchange trading rules; learned about risk management and capital control and operated a simulation account under competitive ranking scheme
- Enhanced C++ programming skill in expert advisor system, designed automated trading programs under specific requirements
- Drafted trading reports and made briefing each day

**Asymmetric Beta Co-movement and Market Skewness in** **Jinan, China**
**Forecasting Chinese Stock Market Return** *Jan. 2016-Jun. 2016*
*Research Assistant*

- Carried out raw data collection and screening with Matlab and assisted in model adjusting
- Using Python during the operation of cluster in big data processing and simulation result computation

**Risk Analysis of Unsecured Small Business Loan Companies** **Jinan, China**
*Team member* *Jul. 2015-May 2016*

- University research project funded by national science innovation funding focusing on collecting and analyzing risk management mechanisms of unsecured small business loan companies
- Collected raw data and initially screened out and processed the valuable one
- Collaborated with teammates to choose, apply and modify mathematical models; coordinated with three teams to monitor project's progress

## AWARDS AND CERTIFICATES

**C++ Certificate** **2016**
Algorithm and Program Design [4 courses], Peking University

**National Scholarship** **2014, 2015**
Full scholarship for a college year based on superior GPA

## SKILLS

**Programming Languages:** C++, Python, Matlab, Excel
**Languages:** English-Fluent, Mandarin- Native Speaker

# Ms. Shixu LU

lushixu@umich.edu / (734) 926-7294
726 Packard Street, Ann Arbor, MI 48104

## EDUCATION

**University of Michigan** **Ann Arbor, MI**
Master of Science in Quantitative Finance and Risk Management *Sept. 2017-Expected Dec. 2018*
**Imperial College London** **London, UK**
Bachelor of Science in Mathematics with Statistics for Finance GPA: 3.5/4.0 *Sept. 2013-Jun. 2016*

## EXPERIENCE

**Analyst Assistant Intern of Wealth Management Center** **Shanghai, China**
***Haitong Securities Co., LTD*** *Jul. 2016-Sep. 2016*

- Researched strategies of quantitative hedge investment including Market Neutral Strategy and Arbitrage Strategy, supervised the operation status of 16 FOF under different investment strategies.
- Conducted funds management of select private equity companies and assisted clients with different risk appetites in picking up funds.
- Analyzed the status of funds and presented to team members weekly.
- Contacted investors and fund managers to sign contracts as the third party fund trustee.

**Account Manager Intern of Retail Department** **London, UK**
***Industrial and Commercial Bank of China (ICBC) London*** *Jul. 2015 - Aug. 2015*

- Entered and classified clients' personal information, compiled financial reports and analysis .
- Organized design and translation of bank's leaflet, ensured that every client get intimate service.
- Assisted in producing accurate accounting information for every client, contacted and reminded clients to update their information.
- Worked quickly as part of a team to minimize clients' waiting time, resulting in high client satisfaction.

**Credit Scoring Project** **London, UK**
***Imperial College London*** *Jun. 2015*

- Used R to build a scorecard to model risk of default for individuals within a 24-month period
- Processed the raw data of 40,000 individuals and fitted the data into generalized linear models with quantitative methods, including adding interaction terms of variables by looking at the p-value and creating logistic regression tree of segmentation
- Used statistical measures such as the area under the ROC curve and Akaike's information criterion(AIC) to analyze models and determine the best

**Team member of Feedback Control of Dynamics System** **London, UK**
***Imperial College London*** *May. 2015-Jun. 2015*

- Researched mathematical methodology of feedback control including Laplace Transform.
- Built models on MATLAB to analyzed practical application for the feedback control system of dynamic system in the lateral control of a Boeing 747.

## PUBLICATIONS *Jul. 2016*

I am the sole author of the thesis *Application of Financial Derivatives in Interest Rate Management,* which published in the Economic Management Journal. In the July 2016 Issue.

## QUALIFICATIONS

- Financial Risk Manager (FRM) Level I *Nov. 2016*
- Chartered Financial Analyst (CFA) Level I *Jul. 2017*

## SKILLS

- Programming: MATLAB, R, Latex.
- Language: Mandarin-Native speaker, English-Fluent.

# Di (Patrick) Lu

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## EDUCATION

**University of Michigan** — Ann Arbor, MI
*Master of Science in Quantitative Finance and Risk Management* — *Sept.2017 - Dec.2018*

- Key Courses: Stochastic Analysis for Finance, Computational Finance, Applied Statistics, Advanced Financial Mathematics, Continuous Optimization, Machine Learning

**Peking University** — Beijing
*Bachelor of Economics in Finance, Minor in Psychology* — *Sept.2013 - Jul.2017*

- Cumulative GPA: 3.6/4.0, Merit Student at Guanghua School of Management(top 5%)
- Selected Coursework: Analysis of Financial Time Series, Mathematical Finance, Fixed Income Securities, Quantamental Investment, Financial Derivatives
- Thesis: Long Term Abnormal Return of High Split Ratio Stocks on Chinese A share Market

## PROFESSIONAL EXPERIENCE

**China Securities** — Beijing
*Strategy Research Intern* — *Sept.2016 - Dec.2016*

- Contributed to macro hedging strategy report by collecting macroeconomic data, conducting Excel Visualization for foreign currency flow, main economic indices, commodity price figures
- Utilized SAS to examine stock market mean reversion trend and diagnose the volatility structure for trending strategy
- Conducted consumer industry research, computed relative strength analysis of CSI consumer index, made scenario analysis and earnings forecasts on specifc companies in the investment strategy report

**China International Capital Corporation** — Beijing
*Summer Analyst, FICC* — *Jul.2016 - Aug.2016*

- Conducted due diligence for proprietary venture lending to fast growing companies on NEEQ market
- Designed statistical monitoring spreadsheet for techonology startups, prepared statistical analysis of industry landscape and policy impact
- Assisted designing of Financial Structured Products by tailoring yield structure and risk characteristics to clients' needs, participated in tentative pricing and issuing feasibility research on an Exchangeable Bond

**PricewaterhouseCoopers Zhongtian LLP** — Zhengzhou, Henan
*Audit and Assurance Intern* — *Dec.2015 - Feb.2016*

- Performed auditing procedures for subsidiary of China State Construction Engineering Corporation, managed liquid liabilities assurance including accounts receivables, bank loans and corporate bonds

## RESEARCH EXPERIENCE

**Accounting Department, Business Statistics Department** — Peking University
*Researcher, Huisheng-Guanghua Research Fund* — *Mar.2017 - Jun.2017*

- Extracted trading strategies by tracking frontier academic papers; backtested risk-managed momentum strategy, combined with value and quality factors, on Portfolio123 platform to attain annualized alpha 8.7% and Sharpe Ratio 1.8; conducted style analysis on Barra Portfolio Manager

*Business Analytics Assistant* — *Mar.2017 - Jun.2017*

- Performed database merging and cleaning of KPI indices from a medium size software company, drew statistical inference, digged into demographic factors mediation effect of employer behavior; predicted employee performance with random forest, used PCA to help improve home system and offered management suggestions

## SKILLS AND INTERESTS

**Skills:** CFA Level II Candidate, C++, Python, SAS, R, Bloomberg
**Languages:** English (fluent), Mandarin (native)

# Jinsha Liu

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434-326-8133 | Jinsha.Liu.ZH@Gmail.com

## Education

**University of Michigan** Ann Arbor, MI
*Master of Science in Quantitative Finance and Risk Management* 2017 -PRESENT

**University of Michigan** Ann Arbor, MI
*Bachelor of Science in Mathematics of Finance and Risk Management* 2015-2017
Course Highlights: Advanced Calculus, Probability Theory, Numerical Methods, Stochastic Process, Econometrics
GPA: 3.95/4.00
Awards: University Honors (Fall 2015, Winter 2016), Graduated With Highest Distinction (top 3% of the school)

## Experience

**Morgan Stanley Huaxin Funds** Shenzhen, China
*Intern, Financial Quantification Department* June 2015 - July 2015

- Studied and explored the correlation between the large-cap market and the small-cap market in China stock market.
- Constructed a timing model based on several signals from prices of stocks in large-cap market and small-cap market to assist decision makings for fund managers.
- Evaluated the timing model by conducting the simulation of a portfolio which adjusted its position according to the timing model based on China stock market data between 2009 and 2015.

**CCB Principal Asset Management** Beijing, China
*Intern, Financial Quantification Department* May 2017 - July 2017

- Researched factors modeling of bank stocks to rebuild the factors models of non-bank financial intermediaries stocks.
- Programmed portfolio models in MATLAB to examine the effectiveness of selecting stocks of nine common factors(BP, CFP, EP, SP, Debt2Asset, GNetProfitTtm, GOperProfitTtm, GOperRevTtm, Net Profit) and a set of momentum factors(with period 2 weeks, 1 month, 2 months, 4 months, 6 months).
- Created a multiple factors model combining two factors and simulated its outcome based on China stock market data between 2009 and 2016 to improve the stock selection in non-bank financial intermediaries.
- Enhanced communication skills by presenting results to department managers and other researchers during the department meeting.

## SKILLS & Affiliations

- Chinese(Mandarin) - Native Speaker, English - Fluent
- Coding in C++, Matlab, STATA, R&R Commander
- Active Member of Golden Key International Honor Society
- Active Member of The Honor Society of Phi Kappa Phi

# YARI LI

E-mail: yaril@umich.edu Phone: (734) 709 9895 117 E. Davis, Ann Arbor, MI 48104

## EDUCATION

**University of Michigan**, Ann Arbor, MI 2017-Present

*Master of Science* in Quantitative Finance and Risk Management

- *Courses:* Advanced Financial Mathematics, Statistical Models and Methods for Financial Data, Machine Learning

**Xiamen University**, Xiamen, China 2014-2017

*Master of Arts* in Economics GPA: 3.61/4.0

- *Courses:* Advanced Econometrics, Advanced Financial Economics, Fixed Income Analysis, Time Series Analysis, Financial Econometrics, Statistical Learning with Big Data

**Central University of Finance and Economics**, Beijing, China 2010-2014

*Bachelor of Science* in Mathematics and Applied Mathematics GPA: 3.92/4.5

- *Courses:* Mathematical Statistics, Ordinary Differential Equations, Mathematical Modeling, C Programming, Stochastic Process, Financial Statistics, Investment

## PROFESSIONAL EXPERIENCE

**QuantGroup**, Beijing, China 01/2017-07/2017

*Business Analyst Intern*

- Calculated the default rate and returns on clients' loans and evaluated clients' credit risk by the number of times and days past due with MySQL to adjust their credit line
- Used Python to assist in completing an automated system to send daily reports by email to reduce the company's cost and improve business efficiency
- Collected transactional data and analyzed the effect (growth rate of orders) of the company's communications with clients to decide whether to continue the business strategies

**The Wang Yanan Institute for Studies in Economics**, Xiamen, China 06/2016-12/2016

*Research Assistant*

- Extended the use of a simple Portmanteau test from ARMA models to GARCH models
- Compared the simple Portmanteau test with traditional Portmanteau tests results of finite samples
- Completed an application to the Shanghai Stock Exchange Composite Index using data from 2007 to 2016
- Performed numerical calculations using R and MATLAB and wrote main manuscript text with LaTex

**The Wang Yanan Institute for Studies in Economics**, Xiamen, China 03/2016-07/2016

*Teaching Assistant,* Mathematical statistics

**Fubon Property & Casualty Insurance Co. Ltd**, Xiamen, China 10/2015-01/2016

*Assistant Actuary Intern*

- Assisted in the completion of insurance index calculation by evaluating different kind of risk with Excel under China's 2nd generation solvency regulation system to adapt to the regulatory change
- Prepared presentations, reports about new risk classifications , and updated quarterly data
- Drafted and summarized statistical report forms on the daily expense of 5 different branches of the company with Access

## SOCIAL ACTIVITIES

**Youth Volunteers Association,** the Wang Yanan Institute for Studies in Economics 09/2015-06/2016

*Minister of the Organization Department*

- Coordinated a new activity and led participants to understand the influence of social expectations on their daily life
- Communicated with leaders of NPOs to obtain financial and technical support and organized about 30 students to raise funds for disabled children

## SKILLS

**Programming and data processing tools**: C, R, MATLAB, LATEX, MySQL, Access, Stata, Python, Eviews

**Certifications**: CFA Level 1, Legal Professional Qualification Certificate of the People's Republic of China, MLC (SOA)

# Beixi Jia

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734-881-0468 | beixijia@umich.com

## EDUCATION

**University of Michigan**, Ann Arbor, MI 2017-Present
*Master of Science in Quantitative Finance and Risk Management*
Course Highlights: Discrete State Stochastic Processes, Numerical Analysis, Computational Finance, Applied Statistics

**Wuhan University**, Wuhan, China 2013-2017
*Bachelor of Financial Engineering* GPA:3.55/4.0
Course Highlights: Ordinary Differential Equations, Financial Engineering, Time Series Analysis, Real Analysis, Stochastic Processes, Econometrics

## PROFESSIONAL EXPERIENCE

**Changjiang Securities Company** Wuhan, China
*Research Intern* Jul. 2016 – Sept. 2016,

- Gathered and analyzed data on domestic gold ETF, used MATLAB to calculate tracking error and bid-ask spread of ETF
- Contributed to building ETF investment research platform which measures risks by taking tracking error and mobility into consideration, then ranks the ETFs
- Performed macroeconomics analysis, equity valuation analysis and industry analysis
- Assisted fund manager with investment portfolio optimization, risk management, and researching rebalancing investment strategies

**Minsheng Bank of China, Shenzhen Branch** Shenzhen, China
*Intern, Department of Micro Marketing* Aug. 2015 – Sept. 2015

- Utilized Excel to collect, analyze and sort regional clients' credit demands, synthesized findings in business report
- Conducted due diligence for credit granting by analyzing clients' financial statements and calculating credit ratings according to Internal Rating System

## PROJECT EXPERIENCE

**ARMA and ARIMA Forecasting Model for settlement of Shanghai Composite Index Based on SAS** Dec. 2015

- Collected Shanghai Composite Index's closing prices from Mar. 2009 to Apr. 2013 with Wind
- Used SAS to check stability of data by ADF-test, established ARMA and ARIMA models to predict future data
- Compared results with actual data during May. 2013- Apr. 2014

## SKILLS

- Programming Languages: Excel, SAS, Eviews, Matlab.
- Languages: English - Fluent, Mandarin - Native

# Mengyao Huang

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## EDUCATION

**University of Michigan** **Ann Arbor, MI**
*M.S. in Quantitative Finance and Risk Management* *Sept.2017-Present*
**Dalian University of Technology (DUT)** **Dalian, China**
*B.S. in Mathematics and Applied Mathematics & B.S.in Finance GPA:3.6/4.0* *Sept.2013-Jun.2017*

- Courses: C/C++ Programming, R Programming, Stochastic Process, Optimization Method, Financial Mathematics, Time Series, Econometrics, Micro/Macroeconomics, Financial Risk Management
- Awards: First Prize in Mathematical Modeling Contest; Technological Innovation Scholarship
- Thesis: Prey-predator models affected by water resource (Revised and Accepted by Physical Review A)
  Optimal Model of Asset Liability Management based on Risk Control of Stock and Increment
  Dynamics of Organizational Routines----Evolutionary Theory of Economic Behaviors

## PROFESSIONAL EXPERIENCE

**BOHAI Securities Co., Ltd** **Tianjin, China**
*Researcher, Quantitative Trading Division* *Jul.2016-Aug.2016*

- Contributed to prices' trend period estimation by introducing weighted Fourier Transform Algorithm
- Improved trading strategies and profitability of quantitative timing model algorithm by adopting year-on-year series, choosing optimal parameters like length of subsequences and judging the trend cycle of financial market

**AXA Group, Hong Kong Branch** **Hong Kong, China**
*Assistant Analyst, Market Research Department* *Jan.2016-Feb.2016*

- Selected stocks according to industries, balance sheets, cash flow statements and income statements
- Contributed to stock-trading strategies based on MACD, KDJ, SAR, price-volume relationship and other indicators
- Used EVIEWS to analyze stability of time series, implemented both multivariate linear regression model and GARCH & ARCH model to predict Hang Seng Index

## RESEARCH EXPERIENCE

**Optimal Model of Asset Liability Management based on Risk Control of Stock and Increment**
*Researcher, Department of Management and Economics* *Nov.2015-present*

- Combined kernel estimation, credit rating transition matrix, robust optimization concerning uncertainty of return's distribution (mixture and elliptical), and Worst-CVAR to set up optimal models
- Realized Monte Carlo simulation and determined portfolio selection

**Quantitative Trading Research Laboratory, DUT**
*Researcher, Department of Mathematics & Department of Innovation and Entrepreneurship* *Sept.2016-Jun.2017*

- Combined Macro factors like PMI index and Monetary factors to determine normal intervals of Futures' prices
- Considered mean reversion properties of stationary series and spread, chose optimal parameters, realized statistical arbitrage trading strategy and implemented simulation for risk analysis

**Mathematical Modeling Training Program, DUT**
*Researcher, Department of Mathematics & Department of Innovation and Entrepreneurship* *Sept.2013-Jun.2016*

- Learned models covering Ecosystem Evolution, Dissemination of Opinions and Public Goods Games
- Established Stochastic Diffusion models and realized Monte Carlo computational simulation

**Complex Ecosystem Evolution Model Construction**
*Researcher, Department of Innovation and Entrepreneurship* *Mar.2015-May.2016*

- Considered influence of external factors on stability of ecosystem, adopted Partial Differential Equations, introduced Energy Distribution to measure the complexity and realized Monte Carlo computational simulation

## SOCIAL ACTIVITIES

**Mathematical Modeling Association, DUT**
*President* *Sept.2015-Sept.2016*

- Set up publicity and technology committees, organized lectures on campus and recruited new members

## SKILLS

**Programming and data processing tools:** MATLAB, R, C/C++, Python, Lingo, EVIEWS, Minitab
**Communication:** Native in Mandarin; Fluent in English

# Chengcheng Gu

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## EDUCATION

**University of Michigan, Ann Arbor, MI** Sept. 2017-Present

*M.S. in Quantitative Finance and Risk Management*

Courses: Computational Finance, Applied Statistics, Stochastic Analysis, Numerical Methods

**East China Normal University, Shanghai, China** Sept. 2013-Jun. 2017

*B.S. in Mathematics and Applied Mathematics (Minor in Finance)* *GPA: 3.69/4.00*

Courses: C++/Python Programming, Probability, Statistics, Real/Complex Analysis, Micro/Macroeconomics

## PROFESSIONAL EXPERIENCE

**Nielsen Co, Shanghai, China** Sept. 2016-Mar. 2017

*Financial Market Analysis Assistant*

- Researched to learn about financial products, wrote proposal for a prospective project
- Designed questionnaires to be distributed before and after the project, revised questionnaires for logical mistakes, distribution of participants with different features and wording in English questionnaires
- Used PowerPoint charts and graphics to conduct horizontal and vertical comparisons, analyzed the project effects through data comparisons, made recommendations for improvement

**Guolian Securities Company, Wuxi, China** Jun. 2016-Aug. 2016

*Sales Intern*

- Collected stock market data and news on daily basis
- Calculated monthly sales volume, sorted out sales data and produced charts for summaries in Excel
- Applied knowledge of security investment to forecast the market's moves and simulate investments, profited 10% within a month

**China Minsheng Bank, Wuxi, China** Jun. 2015-Aug. 2015

*ITFIN Assistant*

- Drafted successful proposals for new products, including new features, distinctions, edges and target clients of new products
- Adapted existing hierarchical client model to the features of our branch's ITFIN clients, based on their deposits, loans and usage of other functions
- Summarized information of ITFIN clients, conducted telephone follow-ups
- Drafted guides for clients to purchase financial products online

## PROJECT EXPERIENCE

**Bathtub Water Efficiency Model** Feb. 2016

- Built a temperature-water velocity model, a double-layer media model, and a grid segmentation model in Matlab to study heat conduction and determine the position and velocity for adding hot water
- Compared the heat dissipating capacity to decide the shape of bathtub
- Won Meritorious Winner Prize in MCM/ICM

**Feasibility Research on Corporation's Issuance of Perpetual Capital Securities** Oct. 2014-Oct. 2015

- Designed mathematical models to calculate costs for issuing perpetual capital securities using GD Power's data
- Used C++ to compare yields of perpetual capital securities with those of common corporate bonds and stock products
- Summarized operation and development features of perpetual capital securities, wrote an 80-page report

## SKILLS

- Programming tools: C++, Python, Matlab
- Communication: Native in Mandarin; Fluent in English

# Yuan (Vera) Gao

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## EDUCATION

**Department of Mathematics, University of Michigan** Ann Arbor, MI
*M.S. in Quantitative Finance and Risk Management* 8/2017 - 12/2018

- **Relevant Courses**: Numerical Methods, Stochastic Processes, Financial Mathematics

**School of Economics and Management, Tsinghua University (THU)** Beijing, China
*B.A. in Economics and Finance & B.S. in Pure and Applied Mathematics* 8/2013 - 6/2017

- **GPA: 3.88/4.00;** Freshman Scholarship in 2013
- **Relevant Courses**: Probability Theory, Statistical Inference, Linear Regression, Optimization, C++, Data Structure, Fixed Income Securities, Econometrics, Corporate Finance, Investment, Micro/Macroeconomics, Accounting

## PROFESSIONAL EXPERIENCE

**BJ ZYHJ Information Technology Company (Private Boutique Trading Firm)** Beijing, China
*Intern, Quantitative Trading Department* 10/2016 - 5/2017

- **Data Processing & Back Testing:** Designed and implemented a framework for data-cleaning and denormalizaion, which processed high-frequency market data from futures exchanges on daily basis; developed a back tester to record transaction information and compute performance measures by Matlab and C++, improving calculation efficiency by more than 50%
- **Research & Strategies:** Developed trading strategies based on order book of different futures; used PCA, Ridge, and Lasso regression methods to find statistical arbitrage opportunities; optimized strategies by after-hour analysis, tuning entry & exit thresholds, and superposing signals; achieved positive P&L and low market sensibility in Chinese market

**DongXing Securities Company** Beijing, China
*Summer Intern, Investment Bank Department* 6/2016 - 8/2016

- **Due Diligence:** Participated in IPO of A shares of a city commercial bank and its on-site due diligence
- **Compliance Analysis:** Filed historical evolution working papers; participated in compliance analysis based on Chinese laws and regulations; interviewed natural person shareholders and edited transcripts
- **VBA:** Applied functions, links, and VBA in Excel to extract useful information from 130,000+ transaction details and generate automatic confirmation, resulting in time saving of more than 90%

**"Real Estate Market Transaction and Bubbles Since 2015" Research Project, THU** Beijing, China
*Research Assistant* 5/2016 - 7/2016

- **Programming:** Wrote an object-oriented experimental trading program, including English auction, free trade market, and utility settlement; wrote experiment instructions, organized experiments, and processed experimental data
- **Experiment Design:** Designed experimental variables and risk aversion measurement based on literature review
- **Regression Analysis:** Used Matlab for regression analysis and data visualization of real estate bubble influence factors

**PricewaterhouseCoopers China** Beijing, China
*Winter Intern, Assurance Department* 1/2016 - 2/2016

- **Auditing Evidence:** Participated in reorganization of one of the largest state-owned corporations; contacted and followed up on 14 subsidiaries to collect auditing evidence, including auditing reports and bank confirmations
- **Compliance Report:** Sorted auditing evidence by correcting various materials and dealing with client non-compliances

## LEADERSHIP EXPERIENCE

**Student Union in School of Economics and Management (SEM), THU** Beijing, China
*Director of Sports Department* 6/2014 - 6/2015

- Led SEM sports team to win 1st prize in the year-round school sports competition (1st victory in five years)
- Established and operated the first official WeChat account for SEM sports, attracting more than 80,000 views in total; edited the first edition of a 62-page SEM sports team brochure

## ADDITIONAL INFORMATION

**Languages:** Mandarin Chinese (native), English (fluent)

**Certificates:** CFA Level I, Society of Actuary (SOA) Exam: Probability, Financial Mathematics

**Computer Skills:** C++, Matlab, R, VBA, SQL, Wind, Microsoft Office

# Yuanhao FANG

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## EDUCATION

**UNIVERSITY OF MICHIGAN** Ann Arbor, MI
*Master of Science in Quantitative Finance and Risk Management* August 2017-Present

- Course Highlights: Financial Mathematics, Stochastic Analysis, Numerical Methods

**SUN YAT-SEN UNIVERSITY** Guangzhou, China
*Bachelor of Economics in Finance; Minor in Statistics* August 2013-June 2017

- GPA 3.8/4.0 , 2016 National Scholarship (Ranking 1/242)
- Course Highlights: Machine Learning and Data Mining, Data Structure and Algorithms, Time-Series Analysis, Econometrics, Intermediate Micro/Macroeconomics, Futures and Options

**HEC MONTREAL** Montreal, Canada
*Exchange Student in Business and Administration* August 2015-December 2015

- GPA 4.3/4.0

## EXPERIENCE

**Center for Financial Engineering and Risk Management, Sun Yat-sen University** Guangzhou, China
Research Assistant January 2017-May 2017

- Researched implied volatility smirk and option-contained information of the informed traders, programmed in Python to resample SPX option data and screen contracts to be examined, and developed trading strategies to verify the predictability of index return by volatility smirk in US and Chinese markets
- Examined revised versions of the GARCH, ARFIMA, and HAR-RV models, used R to implement the fitting of these volatility models to Shanghai Stock Exchange 50 Index, and established the model's predictive power index based on their rolling-windows prediction results to compare model performance

**GuangFa Securities** Guangzhou, China
Quantitative Equity Research Summer Analyst July 2016-August 2016

- Mined sector rotation rules of different sectors in China's A-share market from 2007 to 2016 with a sequential pattern mining algorithm (cSPADE) in R, gave supporting economic proof, developed the GUI
- Studied the smart-beta investment strategy, used the optimization tool in MATLAB to construct a low volatility strategic portfolio chosen from China's A-share market, and performed a backtest, reaching an annualized return of 16% and a Sharpe ratio of 0.74
- Investigated FinTech performance domestically and abroad, forecasted the prospects of FinTech based on technological and regulation trends, presented findings in a research report

**KPMG (China)** Guangzhou, China
Auditor, Summer Intern July 2015-August 2015

- Attended KPMG's 3-day training sessions, learned and practiced key points of audit, advanced Excel functions and techniques for communicating with clients
- Coordinated several interns to complete the review of last 3 years' original vouchers of unearned revenue in the IPO audit of a real-estate company, assisted them in handling ERP finance module and Excel
- Discovered anomalies that certain accounting vouchers did not tally with the accounts and that sales contracts had been nullified by viewing original vouchers word by word, talked with managers in order to ascertain the causes

## ADDITIONAL INFORMATION

- Earned CFA Level I; CFA Level II Candidate
- Bloomberg Market Concepts (BMC) Certificate
- Mastery in programming languages: C++, Python, MATLAB, R, Stata, Excel VBA
- 2017 Peer Career Coach for junior students: assisted them in discovering career interests related to quantitative finance, and advised them of future developments based on their interests and ability
- For more details of my research projects, please visit yuanhaofang.com

# Zhiduo Chen

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## EDUCATION

**University of Michigan** **Ann Arbor, MI**
*Master of Science in Quantitative Finance and Risk Management* 2017-Present

- Course Highlights: Advanced Financial Mathematics, Discrete State Stochastic Processes and Stochastic Analysis for Finance, Numerical Analysis with Financial Applications, Applied Statistics

**Jilin University** **Changchun, China**
*Bachelor of Economics, GPA:3.66/4.00* 2012-2016

- Course Highlights: Mathematical Statistics, Actuarial Aspects of Non-life Insurance in Mathematics, Time Series Analysis, Micro/Macroeconomics, Computer Science and C programming

## EXPERIENCE

**Threshold Arbitrage of Cross Commodity Futures research**
Personal Project Apr.2016-Dec.2016

- Used Bayesian analysis to build TAR and TVECM model of Dalian Commodity Exchange core futures and soy meal contract
- Tested threshold co-integration and evaluated parameters of TAR and TVECM using R
- Applied TAR model and threshold value to test the threshold arbitrage effect based in Matlab

**College Students Innovative Venture Project**
Team Leader, National Project Apr.2014 –Apr.2015

- Established an evaluation model of capital raising on P2P platform in Excel; explored the context and motivations of middle and small-sized enterprises for internet finance development
- Made three recommendations to introduce regulations, establish the detection system, and organize seminars about internet finance; established a creative credit model of middle and small-sized enterprises

**Economic Evaluation Research of High-Tech Enterprises**
Team leader Sept.2014-Dec.2014

- Established economic evaluation indexes of high-tech enterprises in China's major development zones; determined the index weight with principal components analysis
- Calculated synthesis scores of high-tech enterprises economic development

**Permanent Life Insurance Participation Case Study**
Team member Oct.2014-Dec.2014

- Calculated the index of participating in permanent life insurance; analyzed the variation of the index given changes in death rate, expense ratio, and failure rate with Excel and Matlab

**ICBC,Xingcheng Branch**
Intern, Personal Credit Department Jan.2014 –Feb.2014

- Reviewed personal credit application, examined the eligibility of borrowers and reported results
- Applied knowledge of R to build Logistic Regression model and calculated the probability of potential bad debts with personal credit data to mitigate the default risk

## SOCIAL ACTIVITIES

**Red Cross Society of China (Jilin University Chapter)**
Vice Chairman Sept.2013-Sept.2014

- Organized visits to orphanages and nursing homes; coordinated with other committees for each activity

## SKILLS

**Programming Languages:** R, Matlab, Eviews, Python, SPSS, Excel
**Language:** English-Fluent, Chinese-Native

# Zhengtao Cai

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## EUDCATION

**THE UNIVERSITY OF EXETER** **Exeter, UK**
College of Engineering, Mathematics and Physical Sciences **2014.10-2017.06**
**Bachelor of Science in Mathematics**
- CGPA: 3.7

**Courses**
The C family, Advanced Statistical Modeling, Statistical Inference, Bayesian Statistics, Philosophy and Practice.
(and other pure Mathematics modules)

## RESEARCH EXPERIENCE

**Predictability of quasi-biennial oscillation** **Exeter, UK**
**2016.09-2017.01**
- Studied the quasi-biennial oscillation (QBO) by looking into the "Quasi-Binomial generalized linear model (GLM)", the "Gaussian Process (GP) model" and the "Delay-embedding model" based on data of 60 years.
- Independently developed the Delay-embedding model.
- Developed strong teamwork skills through making plans and decisions together and helping each other with the different models.
- Analyzed the effects of QBO in diverse industries, for example hedge fund and insurance, via referring to literatures and discussing with the industry experts; looked for scientific principles of the occurrence of QBO.
- Increased the abilities of gathering, processing and analyzing data as well as presentation.

## INTERNSHIP EXPERIENCE

**SHANGHAI SUNTIME INFORMATION TECHNOLOGY** **Shanghai, China**
**Member of Product Researching & Developing Department** **2016.07-2016.08**
- Conducted research on Risk Parity Portfolio by reading related literature and explained the principle of the portfolio to colleagues.
- Gained composure to operational information for financial products, including fund managers' background, corporations' type and state of operation.
- Assisted the supervisor to compile business reports.

## SKILLS

- Language skills: Native in Chinese; Fluent in English.
- Experience in R, C, C++ and Python,
- Work confidently in a team as well as independently.
- Strong time management skills.

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# Hui Cai

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huicai@umich.edu

## EDUCATION

**University of Michigan, Ann Arbor, MI** Sept. 2017-Present

- Master of Science in Quantitative Finance and Risk Management

**Shanghai Jiao Tong University (SJTU)** 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

## INTERNSHIP EXPERIENCES

**Shanghai Zenithmacer Assets Management Co. Ltd. (Shanghai)**, *Quantitative Trading Assistant* Jan. 2017-Jul. 2017

- Developed trading strategy including option volatility trading strategy and technical analysis on stock choosing as well as did back test on them via Python
- Built risk management model based on factors such as interest rate (Shibor) and the average close price of the market
- Identified important news at home and abroad on every trading day and reported to trader to make them have an overview on the market

**China Hedge Fund Research Center (Shanghai),** *Research Intern* Sept. 2016-Dec. 2016

- Built Python web crawler to capture information from Wechat media platform and researched the abnormal return of recommended stocks using event study methodology
- Realized ARMA-GARCH models with R to study arbitrage opportunities between *CSI 300 Index* Futures and *Singapore A50 Index* Futures

**Singapore Goldpebble Research Pte. Ltd. (Shanghai),** *Research Assistant* 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

**Graduation Project** Mar. 2017-May 2017

- Utilized VARMA-MGARCH models to forecast the variance-covariance matrices of HS300 industry indices, and found risk index through VaR based on them
- Researched a variety of optimization methods and developed python program to perform parameter estimation

**HTC Investment Value Analysis (Guanghua School of Management Case Competition)** 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, AND PERSONAL INTERESTS

**Qualifications:**

- Securities Association of China (SAC) Securities Qualification Exams: Securities Analysis, Securities Transaction, Fundamental Knowledge of Securities Marketing
- CFA Level II Candidate

**Languages:** Chinese- native; English- fluent

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