# 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 denormalization, 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 1<sup>st</sup> prize in the year-round school sports competition (1<sup>st</sup> 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