

# 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 - Present

- **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

### Private Boutique Trading Firm

Beijing, China

*Intern, Quantitative Trading Department*

10/2016 - 5/2017

- **Back Testing:** Loaded, washed and denormalized raw market data from exchanges; Developed a back tester to record transaction information and evaluate performances by Matlab and C++; improved calculation efficiency by more than 50%
- **Trading Strategy:** Developed trading strategies based on pending order imbalance and cumulated return of different futures; used PCA, Ridge, LASSO regression methods to find statistic relationship and arbitrage opportunities. Optimized the strategy by tuning entry & exit thresholds

### DongXing Securities Co., Ltd.

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

### “Real Estate Market Transaction and Bubbles Since 2015” Research Project, THU

Beijing, China

*Research Assistant*

5/2016 - 7/2016

- **Programming:** Wrote an object-oriented trading experimental program, including English auction, free trade market, and utility settlement; wrote experiment instruction, 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 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> SEM victory in the past 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