

Xiamen University Xiamen, Fujian, China 361005 # +86 18906052847 ⊠ zhangguo@stu.xmu.edu.cn 🗓 zhangguo.me https://github.com/Guo-Zhang



Education

08/2014- Bachelor of Economics, Xiamen University, GPA - 3.62/4.0, major GPA - 3.72/4.0.

- 07/2018 Undergraduate Accelerated Program in Economics at WISE, advanced economic theory with mathematical analysis methods, all-English international program, 45/600 selected;
 - Undergraduate Academic Top Plan in Economics, 10 exceptional students potential in economic academics and learning in advance each year, recruited as first order in 2016.

08/2015 - Bachelor of Statistics, Xiamen University, GPA - 3.77/4.0.

07/2018 • Double Degree in Mathematical Statistics at WISE

Courses

Economics Microeconomics, Game Theory, Industrial Organization, Economic History, Macroeconomics, Economic Growth, Chinese Economy, Financial Economics, Corporate Finance, Econometrics, Microeconometics(Machine Learning, Discrete Choice Model, Model Selection etc), Mathematical Economics

Statistics Mathematical Analysis, Ordinary Differential Equations, Real Analysis, Linear Algebra, Probability, Stochastic Processes, Mathematical Statistics, Bayes Statistics, Time Series Analysis

Programming MATLAB, Mathematica, LaTeX, C, Python, Stata

Working Papers

2016-Present Consumer Quality Search on Online Retailer Platforms: A Structural Approach, Work in Progress, Collaborating with Prof. Jiaming Mao.

> This paper extends the model proposed by Levin et al.(2014) to describe consumer search on prices and qualities proxied by historical sales, dynamic pricing of sellers and market equilibrium and look for the direction of improving algorithms with structural approach. The data is supported by China's Prices Project.

- Paper and Slides: https://github.com/Guo-Zhang/MyPapers/tree/master/online_quality_search
- Codes: https://github.com/Guo-Zhang/online_quality_search

2016-Present Making China's CPI-like Daily Online Price Index with Scraped Data, Working in Progress, Collaborating with Prof. Jiaming Mao and Prof. Wanlei Zhao.

> This paper constructs China online daily CPI index with scraped data from China online retailer platforms following Billion Prices Project (BPP) at MIT, and makes predictions on short-run and long-run online price indexes and price changes with deep learning methods. The data is supported by China's Prices Project.

- Paper and Slides: https://github.com/Guo-Zhang/MyPapers/tree/master/online_price_indexes
- Codes: https://github.com/Guo-Zhang/online price patterns
- Funding: Principal fund of Xiamen University for Professors in 2018 with 300,000 yuan

Work Experience

02/2016- Founder and CEO, China's Prices Project (iGuo Data Inc.), Xiamen University, http://www.xmucpp.com.

- Present o Academic initiative and technical start-up on economic and business big data research and practice with 40 staff. Responsible for long-run strategy and leading research, technology, marketing, public relation, law, finance, human resource and management groups.
 - o Most advanced team on big data technology and Python programming for social science in the university. Developed a distributed and automated operated system for web scraping and data storage; developed 12 web scraping programs, 1 data cleaning and management system, 3 data analysis programs. Published 100+ technical tutorials on self-media. Trained dozens of Python programmers.
 - Well-known undergraduate economic research team and unique team on academic services in the university. Supported a dozen of academic programs on web scraping, data cleaning and data analysis for Prof. Prof Xiaofang Dong, Prof. Xin Fu, Prof Mouhua Liao Xiaoning Long, Prof Lina Meng, Prof Luhang Wang, Prof Jiaxing You; organized a dozen of data collection programs with 400+ volunteer research assistants.
 - Leader of undergraduate projects and clubs in the university. Supported Business Elite Club on business analytics training and WISE R Club on building undergraduate team and Python team; consulting for Electronic Commerce Association and Software House on big data technology; consulted on research methods and team building for undergraduate field research teams on Airbnb-like platforms, Zhihu community, share bike market, data transaction platforms, green car, etc.

- 06/2016- Data And Business Analytics Intern, *Headquarters*, YumChina.
- 12/2016 Analyzed big data of transactions from KFC and Pizza Hut in China to make data reports and provide suggestions for marketing departments on consumer relation management.
 - Improved algorithms of food preparation of stores and raw material preparation of logistics with machine learning and time series methods.

Projects

- 03/2017- Research Assistant, Prof. Thomas Sargent (2011 Nobel Price in Economics), New York University.
- Present Long-run collaboration. Studying the economic application of SVM. Responsible for studying QuantEcon courses and SVM theories with related economic practices.
 - Responsible of development of copula sub-package QuantEcon.py by QuantEcon Team supervised by Prof Sargent. https://github.com/xmucpp/quantecon.copula
- 12/2016- Consultant, Prof. Xin Fu, School of Management, Xiamen University.
- Present Long-run collaboration. Consumer behavior modeling, dynamic pricing and two-sided market modeling of Zhihu Live (online voice lectures with questions and answer on China's Quora with more than 100 million users) as share economy. Responsible for consulting and training on empirical research methods, econometric methods, digital technology knowledge and programming skills for professors and graduates. Brought research team into contact with Zhihu Live Team.
- 09/2016- Consultant, Prof. Jiaxing You, School of Manangement, Xiamen Unversity.
 - Present Long-run collaboration. Responsible for designing plans for organizing volunteer research assistants. Organized more than 10 sub-projects with more than 300 volunteer research assistants, extracting data from various sources including company annuals, news, resumes and questionnaires.
- 03/2016- Collaborator, Prof. Zhigang Qin, School of Economics, Xiamen University, https://github.com/xmumcmp.
- Present Long-run collaboration. Text mining on annual reports of listed companies to predict their performances. Responsible for data cleaning, data mining and econometric modeling. Organized 50 volunteer research assistants working on extracting text information from annual reports.
- 10/2015- Research Assistant, China's Social-economic Development Analysis Tournament, Harvard University.
- 11/2015 Consist of two parts: data collection from Chinese county annals, academic report given data from processed annals. Responsible for academic report, participate in data collection. Academic report ranked 20/400+ among undergraduates and graduates; certificated by Prof Richard Freeman.
- 08/2015- Member, 985 Staffs Database Project, School of Public Affairs, Xiamen Univerity.
- 02/2016 Built database and case library for leaders and professors at Chinese top universities, led by Prof Yu Ding. Responsible for text mining and technique supporting. Approved by Prof. Ding for active participation and instructive discussions on literatures and research problems among graduates in weekly seminars. Program stopped by objective reasons.
- 06/2015- Organizer, WISE Book Club, Xiamen University, http://bookclub2015.strikingly.com.
- 01/2016 Organize reading and discussion seminar in economics weekly, supervised by Prof Jiaming Mao and Prof Xiaoning Long.
- 05/2015- Research Assistant, China Internet Project, University of California-Berkeley.
- 09/2015 Responsible for collecting Internet and judicial variables from statistical yearbooks and bulletins. Firstly enrolled for careful intent among 60 applicants over the country, approved by charger Wei Lin for high-quality work, certificated by Prof Victor Couture and Benjamin Faber.
- 04/2015- Member, China Uber-like Market Research Project, Xiamen University.
- 12/2016 Field research on current and future development of China Uber-like market. Participate in selecting topics, writing proposals, making field study at Xiamen and Shenzhen, writing research reports and papers, and present results. Wining the first order on the university level social practice competition for the team.
 - Funded by top 15 of South Reviews in 2015 with 10000 yuan and National University Student Innovation Program (National Level) in 2016. Rewarded as the only provincial excellent field research team in the school and ranked as 75th in the country level social practice appraisal in 2015. Commented as one of most excellent undergraduate field research project in recent years in the school.
- 03/2015- **Member**, *New Angle Project*, Xiamen University.
- 05/2015 Start-up project on smart scenery aerial photography APP. Responsible of APP design and support on technology. First order of the provincial entrepreneur competition in 2015.

Volunteer

 $06/2016 \quad \textbf{Venue Service}, \ \textit{2016 Greater China Area Finance Conference}, \ \textbf{X} iamen \ \textbf{University}.$

The organization and service on the venue of main meeting and parallel sessions.

12/2014 Logistics Service, The 9th Confucius Institute Conference, Xiamen University.

Arrangement and repackage of conference documents.

Programming Skills

- Advanced Python, R, SQL(Hive, MySQL), Tableau, LaTeX; Web Scraping, Data Cleaning, Data Analysis, Visualization
- Intermediate MongoDB, Hadoop, Stata, MATLAB, C, HTML
 - Basic C++, Julia, JavaScript, CSS, Java

Language Skills

Chinese Native

English TOEFL - 87; GRE - 150+168+2.5