# Xinze Xu

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#### Education

University of Cambridge, MPhil in Economic Research	Sep 2024 – July 2025
• GPA:82 (Distinction)	
• Coursework: Advanced Econometrics, Advanced Econometrics II: Panel Data, Advanced Series, Advanced Macroeconomics	Econometrics II: Time
University of International Business & Economics, Bs in Economics	Sep 2020 – Jun 2024
• GPA:92.44 (Ranking: 1/398)	
• Coursework: Econometrics, Probability & Statistics, Linear Algebra, C++ Programming, P	ython Programming
Waseda University, Exchange Student	Apr 2023 – Aug 2023
• Coursework: Data Science, Risk and Insurance, Business Analytics and Applications	
Awards	

### • UIBE Integrated First-class Scholarship (Dec. 2023, 2022, May. 2021, 2020) | 20/398

- Xiaomi Scholarship with a stipend quota of \$2800 (Dec. 2022) | 1/398
- UIBE Overseas Exchange Scholarship with a stipend quota of \$2800 (Dec. 2023) | 2/6000
- National Second Prize, The 13th Chinese Mathematics Competitions (2021) | 7%
- National Third Prize, The MathorCup Mathematical Modeling Challenge, Big Data Competition (2021) | 5%

# Research

GMM Confidence Set Estimation with Weak Identification Best Graduation Project for Undergraduates

- Considered the GMM inference when the identifying strength of the moment conditions is weak, e.g., when instrumental variables used to construct moment indicator are only weakly correlated with endogenous covariates
- Given available weak moment inequality constraints, derived the asymptotic distribution of the estimation criterion function and propose an appropriate confidence set estimator. The finite sample performance of the estimator is examined using the Monte Carlo method
- Addressed the case  $\pi_{0n} = u/n^{1/2}$  and  $\gamma_{0n} = c/n^{1/2}$ , where  $Y_i = \beta_0 X_i + \varepsilon_i$  and  $X_i = \pi_{0n} W_i + \gamma_{0n} \varepsilon_{1i} + \varepsilon_{2i}$

### Why did the Coupon Rates Rise after the Bank Deregulation in China?

- Constructed a theoretical model dividing the capital demand side into distorted sectors and normal sectors to depict the changes of equilibrium in the local capital markets after the entry of new banks, finding the further distortion in the real estate market led to the rising coupon rates
- As bank deregulation was a multi-phase policy, employed the event-study and a revised time-varying DID strategy ("Rolling Control Group") to check the impacts of bank deregulation on local coupon rates and real estate industry to examine the rising coupon rates and verify the model assumptions respectively

#### Can Global Value Chains Increase the Domestic Value Added in Exports?

- Using data from the World Input-Output Table and UIBE database, employed the Production Decomposition Model through MATLAB to obtain GVC engagement index for 45 sectors in 65 major countries and regions around the world from 1995 to 2018
- Employing GVC participation index with one-stage lag as IV to control the endogenous problems, the industrylevel panel data regression showed that participating in GVC can increase the overall domestic value added in exports for both developed and emerging economies, with the service sectors benefiting the most

### Projects

## **Used Car Valuation**

National 3rd Prize in MathorCup | top 5%

• To build the retail transaction price valuation model of used cars, our team extracted the timing features of the time variables and constructed reasonable cross features from a dataset containing 74,156 real transactions for used cars in the feature engineering stage. Established a weighted machine learning model based on XGBoost, GBDT and LightGBM through Python, yielding an Accuracy Rate over 87%

• Proposed a pricing model to speed up the sale of vehicles in warehouses, utilized K-means Clustering to divide the data sold within a week after releasing into three categories and fit a multiple regression equation for each category via SPSS, reducing the sales cycle by 12% on average

# **Raw Material Supply Optimization via Genetic Algorithms**

• To solve problems of raw material procurement and transportation, we built a multi-objective mathematical model and employed a genetic algorithm via Python to derive the optimal solution

# Internship

# **COFCO Group**. Trust Division

Macro Analysis Assistant, Liangyi Research Institute

- Assisted in bond research, analysis and issue, performed macro research to facilitate the asset allocation, developed investment plans to generate benefits and support national agricultural development policy
- Evaluated the impact of macroeconomic factors and financial and trust industry trends on the operation of the company

### ING Bank, Beijing Branch

Intern, Operations Department

- Supported Intraday Li quidity management and analysis, modified VBA code of ING Beijing's existing Excel Macro function to improve its Intraday Liquidity statistics methods
- Conducted anti-money laundering information registration via Wolters Kluwer, utilized GBS core system to summarize the records of corporate loan transactions and foreign exchange settlements & purchases

# **China Securities**

Industry Analyst Intern, Research Department

- Conducted correlation analysis through SPSS, utilized Tableau and Python to visualize data and create diagrams, computed various financial indicators such as ROIC, Market Penetration, etc.
- Assisted in writing research reports of CHANGLAN Auto and SAILUN Group by collecting stock data from WIND and analyzing their financial reports, ownership structures, main products, industry status, etc, applied PE, PS and WACC methods to value the stock prices of the selected companies

# Membership

President, UIBE Reading Club

- Planned and organized 4 knowledge contests, 8 academic lectures and 6 reading forums in 2 semesters
- Responsible for the club's daily operation, such as recruitment, membership management, etc.

Academic Lecturer, UIBE Student Development Association

• Taught Econometrics to 90 undergraduates 12 times in a semester, rated as Excellent (4/12) by students

Debater. Debate Club of SITE, UIBE

# Additional Information

- GRE: 331 (O170+V161+W4)
- Language Skills: Chinese (Native), English (Proficient, IELTs 7.5/9.0), Japanese (Basic)
- Technical Skills: Python, C++, MATLAB, STATA, R, &TFX
- Interests: Swimming

1st Prize (Beijing) in CUMCM

Mar 2024 – Jun 2024

Beijing, China

Mar 2022-Jul 2022

Mar 2022-Apr 2023

Beijing, China

Sep 2023 - Dec 2023

Feb 2023 - Apr 2023

Nov 2020-Jun 2024

Beijing, China