# Shiying Xiao

Department of Statistics University of Connecticut 215 Glenbrook Rd. U-4120 Storrs, CT 06269 Email: shiying.xiao@uconn.edu GitHub: Carol-seven

Website: https://shiying-xiao.com

Google Scholar

Taiyuan, China

### Education

Ph.D. in Statistics

August 2023 – August 2027 (expected)

University of Connecticut Storrs, CT

Advisor: Prof. Jun Yan

M.Econ. in Statistics September 2019 – July 2022

Shanxi University of Finance and Economics

Advisor: Prof. Tao Wang

B.Econ. in Insurance September 2015 – July 2019

Shanxi University of Finance and Economics Taiyuan, China

### Research Interests

Applied Econometrics, Input-Output Analysis, Macroeconomic Statistical Analysis, National Economic Accounting, Network Analytics

## Experience

### Teaching Assistant

August 2022 - July 2023

Fuzhou University of International Studies and Trade

Fuzhou, China

- Teaching Activities
  - 1. Financial Statistics (C010500810): 3 credit undergraduate level; Fall 2022.
  - 2. Public Finance (C010200160): 2 credit undergraduate level; Fall 2022.
  - 3. Investment Banking (C010402720): 2 credit undergraduate level; Spring 2023.
  - 4. Data Visualization Design (C010405620): 2 credit undergraduate level; Spring 2023.
  - 5. Business Data Mining & Analytics (C010402930): 2 credit undergraduate level; Spring 2023.
- Research Program

The National Social Science Fund of China, 23CGJ018, Research on the Reconstruction of China-ASEAN Foreign Trade Industry Value Chain and Resilience Enhancement Strategies. PI: Chen Chen.

- Student Awards
  - 1. First prize, China University Business Elite Challenge Brand Planning Competition, 2023.
  - Third prize, the 13th "Zhengda Cup" National College Students Market Research and Analysis Competition, 2023.
  - 3. Third prize, the 14th China Students Service Outsourcing Innovation and Entrepreneurship Competition, 2023.
  - 4. First prize in Fujian Province, the 13th National College Student "Innovation, Creativity and Entrepreneurship" E-commerce Challenge Competition, 2023.
  - 5. Third prize, National Competition of Business Administration for College Students, 2023.
  - 6. Third prize, the 18th "Challenge Cup" National College Students' Extracurricular Academic and Technological Works Competition, "Unveiling the List of Commander-in-Chief" Special Competition, 2023.

#### Research Assistant

June 2019 - July 2022

Shanxi University of Finance and Economics

Taiyuan, China

 Projects in the area of network analysis and national economic accounting: development of methodology, management activities to maintain research data, implementation of the computer code, and data presentation.

- 1. The National Social Science Fund of China, 21BTJ013, Research on the Compilation and Application of the International Flow of Funds Table. PI: Tao Wang.
- 2. National Bureau of Statistics of China, 2018LZ33, Research on the Compilation and Model Application of Inter-Provincial Input-Output Tables in China. PI: Tao Wang.
- Projects in the area of network analysis, input-output analysis, and macroeconomic statistical analysis: ideas, data collection and cleaning, application of statistical to analyze data, and visualization.
  - 1. Shanxi Provincial Federation of Social Sciences, SSKLZDKT20211075, Study on the Index System of High-Quality Tourism Development in Shanxi Province.
  - 2. Shanxi Academy of Social Sciences, 2020YY119, Study on the Index System of High-Quality Development in Shanxi.
  - 3. Shanxi Provincial Bureau of Statistics, KY[2020]046, Study on the Scale Benefit of High-Tech Industry in Shanxi.
  - 4. Shanxi Provincial Bureau of Statistics, KY[2019]151, Study on the Evaluation Index System of Industrial Competitiveness in Shanxi Province.
  - 5. Shanxi Academy of Social Sciences, 2019B100, Study on the Monitoring and Evaluation Index System of Rural Social Undertakings in Shanxi Province.

## **Publications**

- 1. Wang, T.\* and Xiao, S. (2022). A Comparative Study of Domestic Industrial Circulation between China and the United States from the Perspective of Input-Output Network. *Statistical Research*, 39(11): 32-43. URL (in Chinese with English abstract)
- 2. Xiao, S.\*, Yan, J. and Zhang, P. (2022). Incorporating Auxiliary Information in Betweenness Measure for Input-Output Networks. *Physica A: Statistical Mechanics and its Applications*, 607: 128200. DOI
- 3. Wang, T., Xiao, S., Yan, J. and Zhang, P.\* (2021). Regional and Sectoral Structures of the Chinese Economy: A Network Perspective from Multi-Regional Input-Output Tables. *Physica A: Statistical Mechanics and its Applications*, 581: 126196. DOI

# Preprint

• Wang, T., Xiao, S., and Yan, J. (2023). Comparison of Sectoral Structures between China and Japan: A Network Perspective. Submitted to Socio-Economic Planning Sciences.

## Software

- 1. Xiao, S., Yan, J. and Zhang, P. (2023). ionet: Network Analysis for Input-Output Tables. R package version 0.2.2, https://github.com/Carol-seven/ionet.
- 2. Xiao, S., Moore, T. and Watt, C. (2023). msDiaLogue: Analysis + Visuals for Data Independent Acquisition Mass Spectrometry Data. R package version 0.0.1, https://github.com/uconn-scs/msDiaLogue.
- 3. Xiao, S., Yan, J. and Zhang, P. (2023). fcstat: Statistical Methods for Estimating Functional Connectivity in fMRI Data. R package version 0.1.0, https://github.com/Carol-seven/fcstat.

# Computer Skills

- Languages: R, Stata, Python, C++ (basic)
- Applications: Git, LATEX, Markdown