Xiaoying Liu

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Education

Cornell University Sep 2019 – May 2025 *(Expected)*
Ph.D. Candidate in Applied Economics *GPA: 3.73/4*

Cornell University Sep 2019 – May 2022
M.S. in Applied Economics *GPA: 3.73/4*

Peking University Sep 2016 – Jul 2019
M.S. in Economics *GPA: 3.62/4*

Central University of Finance and Economics Sep 2011 – Jul 2015
B.A. in Project Management (major), Finance (minor) *GPA: 90.34/100*

Experience

Economist Intern, *Amazon* May 2024 – Aug 2024
- Evaluated biases in observational studies by comparing them with RCTs using causal machine learning techniques in Python, including double machine learning and causal forest.
- Provided significant insights that contributed to more informed decision-making within the business and finance teams, enhancing the accuracy of causal inferences in observational data analysis.

Research Assistant, *Cornell University* May 2023 – May 2024
- Co-designed an employee survey focused on job satisfaction, job match, and workplace relationships, gathering both quantitative and qualitative data.
- Applied NLP techniques and GPT models in Python to analyze employee survey data, identifying key attributes influencing job satisfaction.

Survey Coordinator, Fieldwork Team Leader, *Peking University* Jun 2018 – Mar 2019
- Led two teams of 8 enumerators each in ESIEC 2018, an enterprise survey that involved 58,500 samples across 6 provinces in China. Managed sample assignments and route planning for a total of 800 enterprise interviews.
- Handled pre-survey enumerator recruitment and post-survey logistics including reimbursement issues.
- Utilized previous fieldwork experience and research insights to contribute to the design of ESIEC 2019 survey.

Research Assistant, *Peking University* Jun 2017 – May 2018
- Partnered with China's State Administration for Industry and Commerce (SAIC) to evaluate 2013 Business Reform. Secured unique access to SAIC's exhaustive database, covering historical and current registration and annual reports data for every registered enterprise in China.
- Conducted on-site data collection at SAIC using SQL, leveraging the full enterprise database. Exported key statistics like firm entry and exit, assets, employment, and tax payments. Later analyzed the data in Stata and drafted a policy-informing report.

Research Assistant, *Peking University* May 2017 – Mar 2018
- Conducted an in-depth analysis of environmental inspections in China, focusing on firm-level impacts.
- Employed Difference-in-Differences and Event-Study strategies to evaluate the effects of environmental inspections. And wrote a research paper detailing the findings.

Working Papers

Teleworkability: Weakened Tie between Workplace and Residential Place
- Uses Survey of Income and Program Participation 2014 panel data to study the impact of teleworkability on workers' work-home location decision and labor market outcomes. Shows that teleworkable workers live farther from their workplace, in communities with better amenities, and earn higher wages.
- Builds a spatial general equilibrium model incorporating worker heterogeneity in teleworkable jobs, and emphasizing local area consumption.
- Numerically simulates the model to demonstrate the general equilibrium effects of increased teleworkability.

Are Businesses Doing Business in China? *with Ruochen Dai, Shuo Liu, Xiaobo Zhang*
- Shows that nearly 40% of registered firms are not doing business in China, using enterprise survey data.
- Constructs an XGBoost model to detect these inactive companies. The precision rate of the model is 0.71 and recall rate is 0.65.

Publications

Measuring the Quality of a Match (*Labour Economics* 2024) *with Michele Belot, Vaios Triantafyllou*

- Reviewed and compared five different measures of match quality using data from a Prolific survey of U.S. employees and the NLSY79 dataset.
- Highlighted the importance of using multiple measures to assess job match quality, demonstrating that common measures often lack correlation.

Teaching Experience

Faculty, *Elmira College* Jan 2024 – Apr 2024

- ECO 3200: International Trade and Finance

Teaching Assistant, *Cornell University* Aug 2019 – May 2023

- AEM 4300: International Trade Policy, Spring 2023
- AEM 4421: Research and Strategy in Emerging Markets, Spring 2021 2022
- AEM 7010: Applied Microeconomics (Ph.D. core), Fall 2020 2021 2022

Skills

Data Analysis: Causal Inference, Causal Machine Learning, Machine Learning

Programming: Python, Stata, SQL, R, Matlab

Tools and Platforms: AWS, Jupyter Lab, Git