

# Xiaoying Liu

☎ +01 607 319 9215 | @ xl794@cornell.edu | 🌐 Personal Website | in LinkedIn

## EDUCATION

---

|  |  |
|--|--|
| <b>Cornell University</b><br><i>Ph.D. Candidate in Applied Economics</i>   | Sep 2019 – May 2025 ( <i>Expected</i> )<br>GPA: 3.73/4 |
| <b>Cornell University</b><br><i>M.S. in Applied Economics</i>  | Sep 2019 – May 2022<br>GPA: 3.73/4                     |
| <b>Peking University</b><br><i>M.S. in Economics</i>   | Sep 2016 – Jul 2019<br>GPA: 3.62/4                     |
| <b>Central University of Finance and Economics</b><br><i>B.A. in Project Management (major), Finance (minor)</i> | Sep 2011 – Jul 2015<br>GPA: 90.34/100                  |

## EXPERIENCE

---

|   |                     |
|---|---------------------|
| <b>Economist Intern, Amazon</b>   | May 2024 – Aug 2024 |
| <ul style="list-style-type: none"><li>Led an independent project to investigate bias in observational studies by comparing them with historical RCT data, crucial for accurately evaluating feature impacts on high-value actions and seller growth across nearly 90% of projects within the organization.</li><li>Applied Inverse Probability of Sampling Weighting (IPSW) to generalize RCT results to the observational population, and used Propensity Score Matching (PSM) and Double Machine Learning (DML) to estimate treatment effects from observational data.</li><li>Drafted a business report identifying consistent patterns of overestimation in observational studies, provided actionable recommendations, and the findings were communicated by my manager to the business team, leading to improved feature evaluation and resource allocation strategies.</li></ul> |                     |
| <b>Research Assistant, Cornell University</b>   | May 2023 – May 2024 |
| <ul style="list-style-type: none"><li>Addressed gaps in existing job satisfaction research by co-designing a comprehensive survey to uncover what employees truly value in their jobs, gathering both quantitative and qualitative data on job satisfaction, job match, and workplace relationships.</li><li>Applied NLP techniques and GPT models to analyze open-ended responses, identifying key attributes that influence job satisfaction but are often overlooked in traditional studies.</li><li>Co-authored a paper in <i>Labour Economics</i> analyzing job match quality measures using survey data, showing that commonly used measures often lack correlation, and advocating for a more nuanced approach.</li></ul>  |                     |
| <b>Survey Coordinator, Fieldwork Team Leader, Peking University</b>   | Jun 2018 – Mar 2019 |
| <ul style="list-style-type: none"><li>Contributed to the design and execution of China's first large-scale enterprise survey on entrepreneurship (ESIEC), involving 58,500 samples, to address critical gaps in understanding the entrepreneurial landscape.</li><li>Led two teams of 8 enumerators, collecting data from 800 enterprises, ensuring high-quality data through meticulous management and route planning.</li><li>Leveraged fieldwork insights to enhance the ESIEC 2019 survey design, improve data collection methodologies, and analyze the existence of shell companies in China, facilitating collaboration with the State Administration of Industry and Commerce.</li></ul>  |                     |
| <b>Research Assistant, Peking University</b>  | May 2017 – Mar 2018 |
| <ul style="list-style-type: none"><li>Investigated the impact of China's environmental inspections, identifying overreaction by local governments that could harm non-polluting enterprises.</li><li>Used Difference-in-Differences and Event-Study strategies to analyze firm entry data, finding significant declines in both polluting and non-polluting manufacturing entries.</li><li>Findings were communicated to officials from the Ministry of Ecology and Environment, influencing environmental policy discussions.</li></ul>  |                     |

## WORKING PAPERS

---

### Teleworkability: Weakened Tie between Workplace and Residential Place

- Investigates how increased teleworkability affects workers' location choices and labor market outcomes, addressing a growing interest in how remote work reshapes economic geography.
- Finds that teleworkable workers tend to live farther from their workplace, in communities with better amenities, and earn higher wages, suggesting a shift in the traditional work-home dynamic.
- Develops a spatial general equilibrium model incorporating worker heterogeneity and local area consumption to capture these shifts, and simulates the model to demonstrate the broader economic effects of teleworkability.

### Are Businesses Doing Business in China?

*with Ruochen Dai, Shuo Liu, Xiaobo Zhang*

- Addresses the issue of shell companies in China, where nearly 40% of registered firms are inactive, potentially skewing economic data and policy decisions.
- Uses enterprise survey data to construct an XGBoost model that detects these inactive companies, achieving a precision rate of 0.71 and a recall rate of 0.65, offering a more accurate representation of business activity in China.

## 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

---

### Adjunct 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

**Tools and Platforms:** AWS, Jupyter Lab, Git