Jiangwei Liu

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EDUCATION

Renmin University of China   September 2021 - June 2025
B.E. in Data Science & B.A. in Agricultural Economics   Beijing, China

- **Coursework**: Advanced Algebra, Statistics, Data Structures, Principles and Techniques of Data Science, Intermediate Microeconomics, Development Economics, Environmental & Resource Economics
- GPA: 3.67/4.00
- Awarded Special Scholarship for Outstanding Undergraduate Studies

University of California, Berkeley   July 2023 - August 2023
Berkeley Summer Sessions   Berkeley, CA

- **Coursework**: Introduction to Finance , Academic Writing

RESEARCH EXPERIENCE

Impact of Urban Road Expansion on Air Pollution in Chinese Cities   June 2023 - December 2023
Research Assistant

- Collaborated with Prof. H. Allen Klaiber and Assoc. Prof. Wei Chen
- Collected road traffic and economic data across 39 Chinese cities
- Constructed instrumental variables with Mahalanobis distance matching strategy
- Employed regression analysis with IVs and explored various heterogeneities in the impact

Sanitary Infrastructure and Fertilizer Usage in Rural China   June 2023 - September 2023
Research Assistant

- Conducted regression analysis on the Fixed Observation Rural Survey dataset (2009-2018) to investigate the impact of indoor sanitary toilets on rural fertilizer usage
- Wrote results and discussion sections of the paper, highlighting the shift in fertilizer usage and its socio-economic implications

$PM_{2.5}$ and Housing Price in Beijing   August 2022 - September 2023
Research Assistant

- Collaborated with Prof. H. Allen Klaiber and Assoc. Prof. Wei Chen
- Used Python to clean a dataset of 600k+ Beijing housing transactions spanning 120 months and 5,128 communities
- Leveraged ArcGIS to merge geocoded residential coordinates with high-resolution $PM_{2.5}$ satellite data
- Applied a hedonic model with Stata and analysed spatial heterogeneity in air quality's economic impact

WORKING PAPERS

Jiangwei Liu, Wei Chen and H.Allen Klaiber. "Breath of the City: Unraveling the Economic Impact of Air Pollution on Housing Prices in Beijing."

Wei Chen, Zhen Zhong, Jun Guo, Yangyang Gu and **Jiangwei Liu**. "The impact of toilet revolution on fertilizer usages in rural China."

CONFERENCES AND PRESENTATIONS

Presenter. "The General and Spatially Differentiated Effects of Air Pollution on Housing Prices: A Large-sample Hedonic Analysis in Beijing." North American Regional Science Conference. San Diego, California, United States. 2023.

SKILLS

Programming Languages: Python, Stata, R, C/C++, SQL
Geospatial Tools: ArcGIS, GeoDa
AI/ML: PyTorch, sklearn, ChatGPT
Scientific Writing & Visualization: LaTeX, Visio, Gephi
Languages: Chinese Mandarin (mother tongue), English (TOEFL 99)