Junyu Zhang

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ABOUT ME

Ph.D. in Economics (expected May 2026) specializing in applied econometrics, structural estimation, and machine learning. Proficient in Python, SQL, R, Stata and MATLAB, with experience handling complex datasets including both individual longitudinal survey data and institutional-level data. Strong interest in collaborative, data-driven research with policy implications in labor and health economics.

KEY SKILLS

Programming: Python, SQL, R, MATLAB, Stata, Excel, Fortran.

Econometrics Expertise: Causal inference, time series analysis, structural modeling, Bayesian updating, optimization, simulation, discrete choice model, machine learning.

Tools: Microsoft Office, LaTeX.

Data Management: Large-scale data processing, data cleaning, and visualization.

Languages: English (Fluent), Mandarin (Native), French (Beginner).

WORK EXPERIENCE

Stony Brook University | *Instructor and Teaching Assistant*　　　　　　　　　　　Sep. 2019 - present
- Instructed over 70 students in Econometrics and Corporate Finance, simplifying complex theories through effective presentations and collaborative learning.
- Assisted in Ph.D.-level courses, including Mathematical Statistics and Econometrics, supporting advanced quantitative methods and coding in Python and R.

Academy of Development of Wuhan University | *Research Assistant*　　　　　　　Oct. 2016 - June 2019
- Collaborated on projects for the National Development and Reform Commission (NDRC), employing advanced analytical models (e.g., PCA, SE-DEA) to evaluate development efficiency.
- Designed innovative data solutions using SAS and MATLAB, creating actionable insights from extensive datasets to guide regional innovation strategies.

RESEARCH AND WRITINGS

Human Capital Investment in College Facing the Burden of Tuition. (*job market paper*)
- Developed and estimated a dynamic structural model in Python using maximum likelihood estimation, incorporating both continuous and discrete choices to analyze major selection and human capital investment.
- Identified heterogeneous wage growth trajectories across different college majors, highlighting the long-term earnings impact of educational choices.
- Integrated NLSY97 (individual-level panel data) and IPEDS (institutional data) to simulate college tuition, enabling analysis of students' financial decisions and post-graduation employment.
- Conducted counterfactual policy experiments to evaluate the effects of student loan policies on academic performance and long-term earnings.
- Presented at the Chinese Economists Society (CES) North America Annual Conference.

Spousal Effects: Will You Smoke/Quit Smoking Because of Me? (*with Hualong Diao*)
- Estimated a simultaneous equation model with censored variables in Python, identifying strong positive spousal effects on smoking.
- Presented at the Western Economic Association International (WEAI) 2024 Annual Conference and the ASHEcon 2024 Annual Conference.

School Violence Impact on Mental Health & Academic Outcomes for Immigrant & Native-Born Children (*with Hualong Diao*)
- Estimated a simultaneous equation model of bullying's causal effects on mental health and academic performance.
- Presented at the ASSA 2025 and the Pennsylvania Economic Association (PEA) Annual Conference 2024.

Research on Health Evaluation of Sustainable Regional Innovation Ecosystems Based on Improved Niche Suitability Model (*with Fan Liu & Shaochun Yang*)
- Used principal components analytic method to constructed a new evaluation index system evaluating the innovation ecosystem.
- Published on Innovation and Development Policy.

EDUCATION

Ph.D. in Economics, Stony Brook University (Expected May 2026);

B.A. in Economics, Wuhan University (May 2019).

AWARDS & ACTIVITIES

Graduate Fellowship Award including full tuition waiver and annual stipend payments (Stony Brook University, 2019-present);

Travel Funding for Conference Presentations (Economics Department at Stony Brook University, 2024 & 2025);

Graduate Student Organization (GSO) Professional Development Fund.

CERTIFICATES

CFA (Passed Level I exam and will take Level II exam in May 2025);

Online Teaching Certificate (Center for Excellence in Learning and Teaching at Stony Brook University).