Yujuan Gao

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Professional Summary

Ph.D. candidate specializing in **product analytics, causal inference, and A/B experimentation** for large-scale user behavior data. Experienced applying econometric methods and advanced analytics (**SQL, Python, R**) to quantify impact, optimize product features, and drive data-informed strategy. Expertise includes analyzing **Meta's Social Connectedness Index (SCI)** to model peer effect on health behaviros.

Technical Skills

Programming: Python (Pandas, NumPy), R, SQL, LaTeX, GitHub, TensorFlow, PyTorch, scikit-learn

Methods: Randomized Control Trial (RCT), A/B Experiments, Causal Inference (Event Study, Matching), Network Analysis, NLP, Geospatial Analysis

Tools: ArcGIS, Survey Solutions, Qualtrics, LENA Technology

Education

University of Florida, Gainesville, FL	**Aug 2021 – May 2026**
Ph.D., Applied Economics, Food and Resource Economics Department	
Graduate School Fellowship (Merit-based, 2021–2025)	
Stanford Center on China's Economy and Institutions, Palo Alto, CA	**Aug 2018 – Aug 2019**
Visiting Graduate Research Fellow	
Shaanxi Normal University, China	**Aug 2016 – Dec 2019**
M.A., Economics	
Shanxi University of Finance and Economics, China	**Sep 2012 – Jul 2016**
B.S., Statistics	

Research Projects & Analytics Experience

Stanford University, Stanford, CA — **Jul 2025 – Present**

Research Scientist, Freeman Spogli Institute for International Studies

- **Job Market Trend Analysis (NLP)**: Directed research applying NLP algorithms to analyze **500M job posting records from recruitment websites and apps**, quantifying AI exposure effects on regional employment demand and skill shifts.

University of Florida, Gainesville, FL — **Aug 2021 – Present**

Lead Researcher, Food and Resource Economics Department

Social Network User Behavior Analysis (Leveraging Meta Data)

- Processed and analyzed large-scale **Meta Social Connectedness Index (SCI)** with Demographic and Health Surveys (DHS) outcomes to quantify how social ties mediate knowledge diffusion and health behaviors.
- Implemented edge-based linear models with country fixed effects on **2,000+ regional connections** to identify peer influence mechanisms.

Educational Software Efficacy and Network Spillover Analysis [Link]

- Designed and executed a large-scale **cluster-Randomized Controlled Trial (RCT)** across **130 schools (11,000 users)** to benchmark the efficacy of **Game-Based Learning software** against traditional resources.
- Quantified **network spillover effects** to measure ecosystem impact, demonstrating that the **digital product eliminated negative peer** externalities on non-targeted users.

Digital Health Intervention Impact Evaluation (Leverage *Wechat* Plateform) [Link]
- Directed a RCT with 1,096 mothers, utilizing **WeChat** to deliver targeted text messages and evaluate mobile health intervention effectiveness.
- Collected **information feedback** via phone interviews to track user engagement and analyzed how digital content influenced **user behaviors**.
- Achieved statistically significant improvement of 0.22 standard deviations in parenting knowledge through targeted information interventions.

Digital Information and Demographic Trend Analysis (Leverage Good Trend Data) [Link]
- Integrated geospatial 3G coverage with **80,000 Demographic and Health Surveys (DHS) household records** and **Google Trends** to measure how internet access shifts information-seeking and demographic behavior.
- Used **staggered DiD and hazard models** to estimate long-run behavior changes, identifying **11–16% reductions in early fertility**.

Behavioral Economics Consumer Choice Study [Link] *(Published in Food Policy)*
- Designed **randomized A/B experiment** testing a UI framing element (color-coded labels) on consumer decisions.
- Reduced decision time by **18%** and increased healthy selection by **10 pp**.

Child Development and Urbanization Study [Link] *(Published in Child Development)*
- Deployed LENA **audio technology** to process home language environments and estimate urbanization impacts on early childhood development.
- Published findings linking peri-urban transition to reduced adult word counts and conversational turns.

Save the Children, China   **Jul 2020 – Jan 2021**
Consultant, Early Childhood Development Project
- Designed impact evaluation for a **Randomized Controlled Trial (RCT)** and deployed **Survey Solutions** to collect data, significantly improving data quality and reducing field time.
- Drafted comprehensive policy reports and presented data-driven findings to different stakeholders, translating statistical insights into actionable recommendations.

Teaching & Leadership Experience

University of Florida, Gainesville, FL   **Aug 2021 – Present**
Teaching Fellow & Instructional Team Lead
- Led instructional support for **6 undergraduate/graduate courses** (358 students total); facilitated recitations and mentored research.
- Average teaching evaluation **4.6/5.0**, reflecting strong organization and clarity.

Shaanxi Normal University, China   **2016 – 2019**
International Field Research Team Leader
- Managed 15+ enumerators across multi-site field studies; enforced quality control for 13,000+ participants.
- Coordinated stakeholders including schools, hospitals, and local governments.

Selected Presentations & Honors

Conferences: NABE Tech Economics Conference (Seattle, 2025), Allied Social Science Associations (2025, 2026), International Association for Applied Econometrics (Italy, 2025), Advances in Field Experiments (2025), Association for Public Policy Analysis and Management (2024), Harvard NEUDC (2023)

Awards: J.R. Greenman Scholarship (2022, 2024), Best Paper Award – Agricultural and Applied Economics Association (2020)