

# YUJUAN GAO

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## EDUCATION

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**University of Florida, Food and Resource Economics Department** *August 2021 - Current*  
Ph.D., Econometrics and Quantitative Economics

**Stanford Center on China's Economy and Institutions** *August 2018 - August 2019*  
Visiting Graduate Research Fellow, Supervised by Scott Rozelle

**Shaanxi Normal University** *August 2016 - December 2020*  
M.A., Economics

**Shanxi University of Finance and Economics** *September 2012 - July 2016*  
B.S., Statistics

## PREVIOUS EMPLOYMENT

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**Minzu University of China**, Research Assistant for Yu Bai *July 2020 - January 2021*  
Consultant for *Save the Children Yunnan Ludian 0-3 Years Early Childhood Development Project*

## PROFESSIONAL SUMMARY

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Data scientist and economist specializing in causal inference, machine learning, and experimental design with expertise in:

- Production-grade ML solutions for large-scale data analysis (Python, R, Stata)
- Advanced econometric & causal inference methods for behavioral analysis
- End-to-end data pipelines for high-dimensional datasets
- Robust laboratory and field experiment design with rigorous statistical evaluation

## SKILLS

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**Programming:** R, Stata, Python, SPSS, SAS, ArcGIS, L<sup>A</sup>T<sub>E</sub>X, GitHub

**Software:** Survey Solutions, Qualtrics

**Package:** Econ ML, AutoGluon, Scikit-learn, PyTorch, Causal ML

**Research Filed:** Behavior Economics, Causal Inference, Social Networks, Spatial Economics

## PUBLICATIONS

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Chen, Xuqi, Lisa House, Zhifeng Gao, **Yujuan Gao** (2024). "Do Color-Coded Nutrition Facts Panels Nudge the Use of Nutrition Information on Food Packaging?" *Food Policy*. [click here]

Ma, Yue, Xinwu Zhang, Lucy Pappas, Andrew Rule, **Yujuan Gao**, Sarah-Eve Dill, Tianli Feng, et al. (2023). "Associations between Urbanization and the Home Language Environment: Evidence from a LENA Study in Rural and Peri-urban China." *Child Development*. [click here]

**Yujuan Gao**, Derek Hu, Even Peng, et al. (2020). "Depressive Symptoms and the Link with Academic Performance among Rural Taiwanese Children." *International Journal of Environmental Research and Public Health*. [click here]

Ma, Yue, **Yujuan Gao**, Jason Li, et al. (2020). "Maternal Health Behaviors during Pregnancy in Rural Northwestern China." *BMC Pregnancy and Childbirth*. [click here]

Ma, Yue, **Yujuan Gao**, Wang, Yue, et al. (2018). “Impact of a Local Vision Care Center on Glasses Ownership and Wearing Behavior in Northwestern Rural China: A Cluster-Randomized Controlled Trial.” *International Journal of Environmental Research and Public Health*. [\[click here\]](#)

## MACHINE LEARNING PROJECT

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**Traffic Sign Classification** (with Thiago de Andrade, Rui Guo and Cody Haby)

- Developed CNN for multi-class image classification using TensorFlow
- Implemented various architectures with convolution, pooling, and dense layers
- Achieved 94%+ accuracy through systematic hyperparameter tuning
- Applied data augmentation to improve performance with limited training data

## JOB MARKET PAPER

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**Unintended Consequences of Best Intentions: Examining Spillover Effects in Targeted Supplementary Education Interventions**

- Designed and implemented a cluster-randomized field experiment across 130 schools (n=6,500)
- Developed predictive models to analyze user engagement patterns and interaction dynamics
- Employed causal forest methods to uncover heterogeneous treatment effects across user segments
- Implemented production-grade code to analyze real-time engagement metrics and network effects

## WORKING PAPERS

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**Using Text Messages to Improve Parenting Knowledge and Early Childhood Development in Rural China** (with Yue Ma and Susanna Loeb), under review at *Journal of Comparative Economics*

- Deployed a real-time optimization platform serving 1,096 users across seven research sites
- Implemented automated workflows in R to analyze user behavior patterns
- Tracked engagement metrics, response rates, and behavioral changes in real-time
- Achieved 0.222 SD improvement in key metrics with heterogeneous effects across user segments

**The Impact of 3G Network Coverage on Fertility Decisions and Infant Mortality in Nigeria** (with Conner Mullally, Xinde “James” Ji, and Jared Gars)

- Matched geo-referenced DHS survey data with mobile coverage data
- Used two-way fixed effects models to establish causal relationships
- Conducted spatial buffer analyses (20-40km) to identify dose-response effects
- Applied sample selection correction methods for unbiased estimation
- Found 3G coverage reduces fertility rates, with doubled impact for adolescents

## AWARDS, SCHOLARSHIPS, AND GRANTS

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University of Florida Graduate School Fellowship, University of Florida	2021-2025
J. R. Greenman Memorial Scholarship from CALS, University of Florida	2022, 2024
Best Paper Awards in 2021 Agricultural & Applied Economics Association Annual Conference	2021
Scholarship for Graduate Researcher at Stanford, China Scholarship Council	2018-2019