

Jing Gan

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Profile

Ph.D. candidate in Resource Economics at the University of Massachusetts Amherst with research interests in applied microeconomics, health economics and policy, industrial organization, and firm behavior. Experienced in using large-scale product-level and market data with causal inference and spatial methods to study how public policies affect firms, product offerings, and local market outcomes, with additional interdisciplinary training in computer science.

Education

Ph.D. Resource Economics, University of Massachusetts Amherst	Dissertation Defended August 2026
M.S. Computer Science, Georgia Institute of Technology	2024
M.S. Economics, University of Wisconsin-Madison	2018
B.S. Economics, Southwestern University of Finance and Economics, China	2016

Research

US Restaurants' Quality and Spatial Competition (Job Market Paper)

- Examines how quality differentiation, population concentration, and local market conditions shape restaurant location patterns across major U.S. cities using city-level, pairwise, and multilevel spatial analyses; finds systematic differences in the spatial behavior of high- and low-quality restaurants.

Reactions to FDA Sodium Reduction Guidance: Demand and Supply

- Selected Paper, 2023 AAEA Annual Meeting
- Uses a 2016–2019 panel of more than 400,000 chain-restaurant menu-item observations and fixed-effects and event-study specifications to evaluate firm responses to the FDA's voluntary sodium reduction guidance; finds selective rather than broad-based reformulation, with stronger reductions among limited-service restaurants and specific menu categories.

Local Competitive Density and Voluntary Policy Compliance

- Combines longitudinal menu data, store-level Yelp reviews, and spatial measures of restaurant competition to examine how local market structure conditions responses to voluntary health policy; finds greater sodium reductions among chains with higher urban exposure and stronger consumer-response associations in denser local markets, particularly among limited-service restaurants.

Work in Progress

- Reactions to NYC's Calorie Labeling Rule for Food Service Establishments
- Investigating the Role of Entry Barriers in Shaping Competition among Food Companies

Skills

Econometric & Quantitative Methods:	Panel Data Econometrics, Causal Inference, Structural IO Modeling, Discrete Choice Models, Multilevel/Hierarchical Models, Spatial Competition Modeling, Heterogeneity Analysis
Data & Computational Methods:	Large-scale data collection and cleaning, web scraping, record linkage, spatial analysis, text analysis, sentiment analysis, machine learning
Software:	R, Python, Stata, SQL, MATLAB, L ^A T _E X, MS Office
Languages:	English, Mandarin Chinese

Professional Experience

Research Assistant, University of Massachusetts Amherst	2021 – 2025
- Research assistant for Prof. Emily Yucai Wang and Prof. Nathalie Lavoie on applied research projects examining restaurant markets, consumer responses, nutrition policy, and calorie-labeling regulation. - Collected, cleaned, merged, and managed large-scale restaurant menu, consumer review, and market datasets using Python, R, and SQL for empirical policy analysis. - Applied econometric and computational methods, including panel-data analysis, record linkage, text processing, and sentiment analysis, to study firm and consumer responses to food and nutrition policies.	
Bank of China, Hubei Branch, China	2019
<i>Credit Asset Analyst Intern</i> - Analyzed the development and risk profiles of non-standard credit asset businesses across 37 state-level branches. - Evaluated macroeconomic conditions and financial market trends to support analysis of corporate financing strategies and credit-market risk.	
Yichang Municipal Development and Reform Commission, China	2017
<i>Data Analyst Intern</i> - Analyzed economic and social development data using SPSS to support regional policy evaluation and economic planning. - Interpreted macroeconomic indicators and statistical evidence to inform local policy analysis and public-sector decision-making.	

Teaching Experience

Instructor

RES-ECON 323: Financial Analysis for Consumers and Firms (<i>in person</i>)	Spring 2025 & Fall 2024
- Designed and taught a full undergraduate course integrating financial decision-making, firm behavior, and broader economic conditions. - Developed all lectures, assignments, and exams and used current market data and policy developments to connect economic and financial theory with real-world applications.	
RES-ECON 213: Intermediate Statistics for Business and Economics (<i>online</i>)	Summer 2023
- Designed and delivered an accelerated online course covering statistical inference, hypothesis testing, and regression analysis. - Developed original lectures, assignments, and assessments emphasizing applied quantitative reasoning in economic and business settings.	

Substitute Instructor (Smith College)

ECO 364: Seminar: The Economics of Future Technology

Spring 2024

- Led seminar discussions and mentored semester-long student research projects on the economic implications of technological change.

ECO 125: Game Theory

Spring 2024

- Delivered lectures and problem-solving sessions on strategic behavior and applied game-theoretic reasoning.

Teaching Assistant

RES-ECON 452 Industrial Organization

Fall 2019, Spring 2020, Fall 2025, Spring 2026

RES-ECON 212 Intro to Statistics for Social Sciences

Fall 2023, Spring 2026

RES-ECON 313 Decision Analysis, Sections 01 & 02

Fall 2025

RES-ECON 312 Introductory Econometrics

Spring 2024

RES-ECON 428 Managerial Economics

Spring 2021

RES-ECON 453 Public Policy in Private Markets

Spring 2021

RES-ECON 202 Price Theory

Fall 2018, Spring 2019, Summer 2020

Conference Presentations

Agricultural & Applied Economics Association (AAEA) Annual Meeting, Washington, D.C.

2023

Presented “Reactions to FDA Sodium Reduction Guidance: Demand and Supply”

UMass Resource Economics Graduate Conference, Amherst, MA

2019 – 2025

International Conference on Service Science and Management

2015

Awards and Fellowships

University of Massachusetts Amherst

Research Enhancement and Leadership (REAL) Fellowship (\$22,000)

2018 – 2022

Vijay Bhagavan Teaching Assistant of Distinction Award

2022

Graduate Student Travel Fund

2019

Southwestern University of Finance and Economics, China

Award for Academic Research and Innovation

2015

Second Prize, “Challenge Cup” National College Student Business Plan Competition

2014

Service

Graduate Employee Organization (GEO) Steward, UMass Amherst

2022 – 2024

- Represented and supported graduate employees in matters related to university policies, workplace concerns, and equitable treatment.

Graduate Student Senate (GSS) Senator, UMass Amherst

2022 – 2024

- Represented the Department of Resource Economics in university-wide governance and policy discussions.