Kyungmin Kang, Ph.D.

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Profile

Economist and data scientist with a Ph.D. in Economics and M.A. in Statistics, specializing in causal inference, structural modeling, and applied machine learning. Experienced in building policy-relevant models using IV, RDD, DiD, and dynamic programming, with additional fluency in reinforcement learning, entity resolution, and LLM applications. Proven ability to drive end-to-end research, experimentation, and product insights across academia, startups, and public policy, with peer-reviewed publications and real-world deployment.

Experience

Assistant Professor of Economics *Sep 2019 – Present*

Shanghai University of Finance and Economics — Shanghai, China

- Taught 15+ undergraduate and graduate courses in microeconomics, econometrics, and Python-based causal inference, earning 4.9+/5.0 teaching ratings and mentoring 10+ students into top MA/PhD programs across cohorts of 30–90+ students.
- Led two grant-funded research programs from hypothesis design through data acquisition, model development, and policy reporting—highlighted by a dynamic decision model of occupational choice using reinforcement learning and signal extraction to evaluate heterogeneous wealth effects under financial constraints.
- Published a causal study in *Review of Economics and Statistics* showing that positive teacher expectations increase college completion by 11%; findings have 200+ citations and inform policy simulations on expectation-driven interventions.
- Applied advanced econometric methods (IV, fixed effects, method of moments, Kalman filtering) to evaluate education and labor policy mechanisms, producing models used for simulation, forecasting, and counterfactual analysis.

Applied Research & Technical Collaboration *Jul 2022 – Present*

Early-Stage Product and AI Teams — Remote

- Built backend infrastructure and data ingestion pipelines for an LLM-powered investment assistant, integrating PostgreSQL, SEC filings, financial APIs, and entity resolution logic to power chatbot-driven stock recommendations.
- Engineered interactive visualizations using D3.js and historical filings to support user-facing exploration of fund-level positions and stock activity trends.
- Led product iteration for a rental operations platform by analyzing work order and payment data from mid-sized landlords; surfaced UI/feature priorities through structured user research and reduced product iteration cycles by ~50% via sprint coordination and process documentation.
- Advised early-stage technical teams on MVP architecture, development sequencing, and early go-to-market analytics; connected student-led founders with industry experts for design and validation.

Research Assistant (USDA-Funded Policy Evaluation) *Jul 2017 – Aug 2018*

National Bureau of Economic Research (NBER) — Boston, MA

- Supported causal analysis of SNAP and school food programs using restricted-access FoodAPS data, addressing underreporting bias stemming from stigma and survey misclassification.
- Applied fixed effects, instrumental variable, and bounding methods to estimate program impacts under reporting error, contributing to a peer-reviewed publication in the *Southern Economic Journal*.
- Presented findings to USDA policymakers and academic stakeholders; insights informed revisions to survey methodology and question design in the development of FoodAPS-2.

Education

Ph.D. in Economics, Johns Hopkins University
Specialization: Applied Microeconomics, Structural Microeconometrics

M.A. in Statistics, Columbia University

B.A. in Economics and Statistics, University of Chicago

Technical Skills

Causal Inference & Econometrics (Expert): IV, DiD, RDD, RCT, Matching Methods, Doubly Robust Estimators, Synthetic Controls, Fixed Effects, Survey Bias Correction

Structural Modeling & Optimization (Expert): Dynamic Discrete/Continuous Choice Models, Demand Estimation, Method of Moments, Kalman Filter, Simulation-based Estimation

Machine Learning & Statistical Modeling (Expert): Reinforcement Learning, Supervised Models, Factor Models, Maximum Likelihood Estimation, Predictive Modeling

Programming & Data Tools: Python (Pandas, NumPy, scikit-learn, matplotlib, SQLAlchemy), SQL, Flask, D3.js, Git, APIs, Stata, MATLAB; Familiar with R, LangChain, Hugging Face LLMs

Data Communication & Collaboration: Data Storytelling, Experiment Design, Agile/Scrum, Technical Communication with Stakeholders