

# Edward Gilligan

✉ [edwardgilligan6@gmail.com](mailto:edwardgilligan6@gmail.com)

☎ 914-705-1941

🌐 [Website](#)in [edward-gilligan](#)📧 [egilligan30](#)

## Education

### University of Virginia

August 2023 – May 2026

Bachelor of Arts: *Economics, Classics (Greek)*Minor: *Mathematics*

- GPA: 3.67/4.0;
- **Relevant Coursework:** Industrial Organization, Game Theory, Experimental Economics, Labor Economics, Introduction to Econometrics, Differential Equations and Dynamical Systems, Elementary Linear Algebra, Basic Real Analysis, Calculus-Based Probability, Abstract Algebra, Programming in R and Matlab
- College of Arts and Sciences Dean's List: Spring 2024, Fall 2024, Spring 2025, Fall 2025

### Binghamton University (Transferred)

August 2022 – May 2023

- GPA: 3.88/4.0; College of Arts and Sciences Dean's List: Fall 2022, Spring 2023.

## Experience

### Research Assistant *University of Virginia, Department of Economics*

Charlottesville, VA

Supervisor: *Professor Federico Ciliberto*

January 2026 – Present

- Collected, compiled, and standardized thousands of entries on Industrial Revolution cotton spinners, manufacturers, and production sites, constructing a large-scale structured dataset from fragmented historical sources.
- Wrote Python scripts to clean, validate, and harmonize data; implemented reproducible workflows, organized project directories, and maintained detailed documentation to ensure transparency and replicability.
- Transformed industrial directories and archival materials into analyzable datasets; developed comprehensive codebooks and visualizations to identify and present key industrial and economic patterns.

### Research Assistant *University of Virginia, Department of Economics*

Charlottesville, VA

Supervisor: *Assistant Prof. Po-Hsuan Lin*

April 2025 – Present

- Contribute to weekly research meetings by synthesizing relevant literature, sharpening project framing, and informing methodological decisions in behavioral and experimental economics.
- Provide rigorous, constructive feedback on working papers and presentations, evaluating theoretical foundations and strengthening analytical clarity.

## Projects

### Estimating Demand and Market Outcomes of Oatmeal

- Built and estimated a Berry (1994) logit demand model using 752k supermarket scanner observations, recovering own-price elasticities (avg. 1.75) and documenting systematic demand heterogeneity between product varieties.
- Analyzed high-frequency retail panel data spanning 100+ stores and 3,500+ UPCs to identify substitution patterns and quantify demand concentration using high-dimensional fixed effects and revenue-weighted pricing.
- Designed and executed five counterfactual pricing scenarios, demonstrating that modest category-wide increases (+10%) raise revenue \$589k with minimal welfare loss, while targeted discounts generate substantial consumer gains (\$0.10-\$0.20/week) at revenue costs exceeding \$2.5M—quantifying the fundamental profitability-welfare tradeoff.

### Analysis of the Legalization of Sports Betting on Financial Outcomes

- Compiled and structured a county-year panel dataset spanning 2013–2024 by integrating federal court bankruptcy records, mortgage delinquency data, Census socioeconomic indicators, and labor-market and health data, ensuring coverage across counties and constructing a balanced panel suitable for causal analysis.
- Estimated the financial effects of online sports betting legalization and found minor increases in mortgage delinquency rates (about 0.06 percentage points for short-term delinquencies and 0.13 percentage points for long-term delinquencies), with near-zero changes in bankruptcy filings (0.04%).
- Demonstrated through robustness checks and placebo tests that these effects are statistically credible but economically small, providing a nuanced interpretation that informs regulatory discussions without overstating policy risks.

### Basic Experimental oTree Game

- Built oTree-based behavioral simulation in Python to model stochastic betting, mortgage repayment, and bankruptcy dynamics across repeated rounds.
- Devised dynamic state-update mechanisms adjusting player variables based on probabilistic and financial outcomes.
- Designed modular oTree models with parameterized constants for controlled financial decision-making simulations.

## Skills

**Languages and Tools:** Python – Polars (Advanced), Stata (Advanced), oTree, HTML (Advanced), R (Intermediate), MatLab (Intermediate), Tableau (Intermediate), SQL (Intermediate), LaTeX, MS Office Applications