

Tyler Stoeger

Chicago, IL — tstoeg2@uic.edu — tylerstoeger.com — linkedin.com/in/tyler-stoeger

SUMMARY

Economics Ph.D. candidate specializing in environmental and applied microeconomics. Builds causal policy research from data acquisition and engineering through econometric analysis and counterfactual modeling. Advanced R user with experience developing reproducible pipelines for large-scale environmental and mobility data.

EDUCATION

University of Illinois Chicago

Ph.D. in Economics

M.A. in Applied Economics

CMEP Exchange Scholar, University of Chicago Harris School of Public Policy

Ph.D. coursework: Energy and Environmental Economics III (Spring); I (Fall)

Chicago, IL

Expected May 2027

May 2024

2024

Purdue University Northwest

Bachelor of Science in Business, Major in Finance

Minors in Economics and Applied Mathematics; GPA: 4.00/4.00, Highest Distinction

Hammond, IN

May 2022

SELECTED RESEARCH

Behavioral Responses to Air Quality Information: Implications for Optimal Policy

Job Market Paper

- Designed and executed an end-to-end causal study using six years of environmental, forecast, weather, geographic, and mobility data across six U.S. metropolitan areas.
- Built a reproducible R pipeline processing raw data approaching 1 billion records, integrating numerous sources into a 20M+ POI-day panel and an approximately 960,000-observation preferred estimation sample covering roughly 11,000 locations.
- Automated data acquisition through APIs and a custom web scraper; implemented extensive cleaning, merging, spatial joins, distance calculations, and point-in-polygon matching.
- Parallelized computationally intensive data-processing and estimation workflows on a high-memory multicore environment, reducing processing time by multiple days.
- Implemented a fuzzy regression discontinuity design and estimated that air-quality alerts reduce visits to outdoor recreational locations by approximately 9% near the policy threshold.
- Developed an economic model and counterfactual simulation to evaluate how repeated warnings and changing behavioral responsiveness affect welfare-maximizing alert policy.

Air Quality Forecasts in Practice

Working Paper - Draft Expected Oct. 2026

- Constructing a broad multi-year panel of official air-quality forecasts and realized AQI to document systematic differences between predicted and realized pollution.
- Analyzing forecast errors, distributional differences, and serial dependence to investigate the statistical and institutional features of operational environmental forecasting.

TECHNICAL SKILLS

Programming & Data: R (advanced), Git/GitHub, Excel; Stata, MATLAB; familiarity with Python and SQL.

Econometric Methods: Causal inference, regression discontinuity, instrumental variables, difference-in-differences, panel data, time series, economic modeling, simulation, and counterfactual analysis.

Data Engineering: Large-scale data integration and cleaning, APIs, web scraping, parallel computing, and reproducible research pipelines.

Spatial Analysis: Spatial joins, distance calculations, and polygon containment tests in R.

RESEARCH EXPERIENCE

University of Illinois Chicago
Research Assistant to Matthew Tarduno

Fall 2024; Summer 2025
Chicago, IL

- Supported multiple environmental and energy economics projects through literature review, data-source evaluation, data acquisition and cleaning, preliminary analysis, and manuscript editing.
- Identified and evaluated datasets for research on green durable adoption; reviewed relevant literature and investigated utility policies as potential sources of empirical identification.
- Cleaned and linked vehicle make-and-model records with emissions data for research on transportation and environmental outcomes.

Purdue University Northwest
Research Assistant to Amlan Mitra

Jan. 2021 – May 2022
Hammond, IN

- Conducted literature reviews, collected and cleaned data, and supported preliminary empirical analysis across faculty and funded undergraduate research projects.
- Contributed to projects on university budgeting and local economic policy, including data organization, applied analysis, and policy-focused research support.

TEACHING & QUANTITATIVE COMMUNICATION

University of Illinois Chicago
Instructor of Record, ECON 300 - Econometrics

Summer 2024; Spring 2025; Fall 2025
Chicago, IL

- Independently designed and taught three undergraduate econometrics courses with enrollments ranging from approximately 8 to 40 students; supervised a teaching assistant.
- Developed lectures, assignments, exams, solutions, and original R programming labs integrating applied data analysis with core econometric concepts.
- Refined the curriculum across successive offerings to emphasize conceptual understanding, applied statistical programming, and interpretation of empirical evidence.

University of Illinois Chicago
Teaching Assistant / Graduate Assistant, Economics

Fall 2022 – Fall 2026
Chicago, IL

- Supported undergraduate and graduate courses through discussion sections, office hours, grading, assignment and exam review, proctoring, and occasional substitute instruction.
- Developed and led R coding sessions for undergraduate Econometrics and created assignment and exam solutions for graduate Econometrics I.
- Courses: Econometrics; Econometrics I; Microeconomic Theory II; Development Economics; Microeconomics: Theory and Applications; Principles of Microeconomics; Principles of Macroeconomics.

ADDITIONAL PROFESSIONAL EXPERIENCE

Central Bank Illinois
Bank Intern

May 2020 – Aug. 2020
Geneseo, IL

- Analyzed income statements, balance sheets, and tax returns for credit relationships exceeding \$1 million.
- Compiled and reviewed marketing-performance data and prepared recurring financial reports, including bad-debt allowance and prepaid-expense reconciliations.
- Participated in executive-level meetings covering trust investments, asset-liability management, marketing, and shareholder matters.

SELECTED AWARDS & TRAINING

Graduate Silvia Saffrin Award, University of Illinois Chicago - excellence in third-year paper	2026
Award for Graduate Research, UIC Graduate College - \$2,900 competitive research support	2025
Berkeley/Sloan Summer School in Environmental and Energy Economics, UC Berkeley	2025
Chancellor’s Medallion, Purdue University Northwest - highest GPA in academic college	2022