ZONG HUANG

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EDUCATION

Stanford University, Palo Alto, CA 2025
PhD in *Economics*, PhD minor in *Statistics*

Northwestern University, Evanston IL 2016
BA (with honors) in *Economics* and *Mathematics*

RESEARCH PROJECTS

The Welfare Effects of Property Taxes
- Process the universe of U.S. property tax and transaction data (2TB) from 2006–21 (SQL)
- Estimate housing demand via causal inference methods such as instrumental variable analysis (R)
- Solve structural spatial models via method of simulated moments and homotopy optimization (Julia)

The Unequal Effects of Upzoning (with Rebecca Diamond and Tim McQuade)
- Spatially link millions of properties in Chicago from 2000–23 to track real estate developments (GIS)
- Predict housing values using property descriptions via NLP and neural networks (BERT, PyTorch)
- Estimate discrete choice models of developer behavior via maximum simulated likelihood and bag of little bootstraps (Julia)

The Effect of Public Insurance Design on Pharmaceutical Prices (with Katja Hofmann)
- Construct price metrics using prescription claims data (5TB) from Medicare Part D (SQL)
- Estimate the effects of insurance expansion on drug consumption via causal inference methods such as regression discontinuity design and synthetic difference-in-differences (R)

WORK EXPERIENCE

Microsoft Research, Cambridge, MA
PhD Research Scientist Intern June 2022 – September 2022
- Analyzed cloud utilization by 100,000 firms to study the economics of cloud computing (SQL)
- Contributed to causal machine learning implementations in EconML codebase (Python)

Stanford University, Palo Alto, CA
Predoctoral Research Fellow (for Matthew Gentzkow) July 2018 – June 2020
- Managed experiments (5,000 participants) to study the mental health effects of social media
- Created open-source tools to facilitate research analysis and replicability (Python, Github)

The Brattle Group, San Francisco, CA
Research Analyst, Litigation May 2016 – June 2018
- Select project: Conducted hierarchical Bayesian modeling on prescription claims data for Nobel Laureate in false claims lawsuit against pharmaceutical company (SQL, Stan)
- Oversaw team of 3 analysts and interfaced with expert, counsel, and client on deliverable results and demonstratives; trial ended in favorable settlement of $600+ million

ADDITIONAL

Skills: Python (PyTorch), SQL, R (Stan), Julia (Flux), Git, Matlab, Stata, GIS, LaTeX
Languages: English (native), Mandarin Chinese (fluent)
Clearance: U.S. citizenship, Census Bureau Special Sworn Status