

Dongyang He

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EDUCATION

The Pennsylvania State University College of the Liberal Arts <i>Ph.D. Candidate in Economics (STEM)</i> <ul style="list-style-type: none">Fields: Spatial Economics, Applied Econometrics, Applied Microeconomics	Expected May 2025 GPA: 3.73/4
The Pennsylvania State University Schreyer Honors College <i>M.A. in Economics, B.S. in Mathematics (Schreyer Scholar)</i>	May 2019 GPA: 3.83/4

SKILLS

Economics

- Structural Estimation: Discrete Choice Model, Dynamic Demand, BLP, Spatial Model
- Causal Inference: Diff-in-Diff, A/B Testing, Regression Discontinuity, Instrumental Variable
- Machine Learning: Regularized Regression, Clustering, Random Forests, Synthetic Control

Programming

- Modeling: R, Python, Stata, Matlab, SQL, Shell, ArcGIS, SQL

WORK EXPERIENCE

Research Assistant , Department of Economics, the Pennsylvania State University <ul style="list-style-type: none">Conducted estimations on the effects of cash transfers on school enrollments using a dynamic education demand model.Leveraged high-performance computing infrastructure, ArcGIS, Git, R, and Python for data analysis and modeling.	May 2022 - Aug 2022
Short-Term Consultant , European Bank for Reconstruction and Development <ul style="list-style-type: none">Compiled, cleaned, visualized, and analyzed maps and census data from Mumbai, India.Ensured timely delivery of results through regular coordination with fellow researchers.Recognized and awarded Bates White Research Funding for significant contributions to the project.	Jan 2019 - May 2019

RESEARCH EXPERIENCE

Distributional Impacts of Exclusionary Zoning Policies <ul style="list-style-type: none">Investigated the differential impacts of density and height regulations across income groups in the greater Boston area, using large-scale parcel-level housing data covering 1 million residential properties.Employed spatial discontinuity design to examine the impact of zoning restrictions on housing supply and demographic composition.Formulated a theoretical housing production model to rationalize the impacts and interactions of density and height regulations on housing supply.Developed a discrete choice model to estimate preferences of heterogeneous households over locations and housing.	2023
Migration and Proximity Preference in Fertility Decision <ul style="list-style-type: none">Examined how distance from hometown might impact people's fertility decision, using large-scale survey data covering 5 million households in the U.S. from 2000 to 2019.Constructed a discrete choice model to estimate households' preferences over locations, fertility choices, and consumption.Discovered that changes in migration pattern can account for 5% of the changes in fertility rate since 2000.	2022
Industrial Payments and Physicians' Prescriptions <ul style="list-style-type: none">Explored the impact of industrial payments on physicians' prescription choices in the Statin market, using over 10 million prescription records from 16,000 physicians during 2016 and 2017.Applied a split-sample Lasso approach to systematically select controls and instruments from a vast potential set for demand estimation.	2020

LEADERSHIP EXPERIENCE

Founder and Organizer , International Trade Reading Group, Penn State <ul style="list-style-type: none">Orchestrated weekly research presentations, attracting participation from 11 Ph.D. researchers in the field.Fostered a vibrant platform for promoting research discussions and collaboration.	2020 – Present
Instructor , Department of Economics, Penn State <ul style="list-style-type: none">Guided and instructed a cohort of seventy undergrad students on Intermediate Microeconomics and International Trade.	Summer 2021, Summer 2023
Fellow , Mathematics Advanced Study Semesters Program, Penn State <ul style="list-style-type: none">Recognized for sustained passion in mathematics and actively engaging with program participants from across the nation.	Fall 2017