Justin Doty, Ph.D.

EDUCATION

The University of Iowa, Iowa City, IA 52242

2016 - 2022

Ph.D. in Economics

Dissertation: Identification and Estimation of Production Functions with Unobserved Heterogeneity

Advisor: Suyong Song M.A. in Economics

California State University, Fullerton, Fullerton, CA 92834

2011 - 2016

B.A. in Economics, minor in Mathematics

RESEARCH INTERESTS

Econometrics and Data Privacy with applications in Machine Learning and Statistical Inference

EXPERIENCE

U.S. Census Bureau

Washington D.C, 20233

2022 - present

Center for Enterprise Dissemination - Disclosure Avoidance, Research and Applications Group Job Title: Research Economist

- Modernized statistical disclosure methodology for protecting data confidentiality
- Developed formally private algorithms for heavy-tailed, business establishment level data
- Developed and tested statistical programs to protect categorical data using local differential privacy
- Developed and tested statistical programs to correct for inferences made on privacy-protected data
- Tested experimental iterations of the Disclosure Avoidance System (DAS)
- Collaborated on research papers that developed formally private algorithms for different data release scenarios
- Reviewed and approved internal working research papers for public release
- Provided subject-matter expertise on statistical disclosure methods for planned external data releases

The University of Iowa, Iowa City, IA 52242

2016 - 2022

Job Title: Graduate Teaching Assistant

- Assisted professors in teaching the following courses: Ph.D. Econometrics, Statistics for Strategy, Principles of Microeconomics, Principles of Macroeconomics, Global Economics
- Assisted professors in grading the following courses: Ph.D. Econometrics, Ph.D. Statistics for Economics, Ph.D. Applied Econometrics, Economic and Business Forecasting, Managerial Economics
- Assisted economics graduate students in their econometric theory questions and assignments
- Provided supplemental instruction in econometric theory to economics graduate students
- Assisted both undergraduate and graduate students in learning statistical programming languages
- Held office hours and review sessions for students outside of discussion sessions

Working Papers

- "Slowly Scaling Per-Record Differential Privacy" (with Brian Finley, Anthony Caruso, Ashwin Machanavajjhala, Mikaela Meyer, David Pujol, William Sexton, and Zachary Terner)
- "A Dynamic Framework for Identification and Estimation of Nonseparable Production Functions"
- "Estimating Quantile Production Functions: A Control Function Approach" (with Suyong Song)

Works in Progress

- "Multinomial Randomized Response for Data Sharing (with Caleb Floyd and Rolando Rodriguez)"
- "Identification of Gross-Output Production Functions with Mismeasured Inputs"
- "Estimating Industry Competitor Network Effects on Firm-Level Productivity"

AWARDS AND FELLOWSHIPS

Ballard and Seashore Dissertation Fellowship, University of Iowa	2021
Summer Fellowship, University of Iowa	2020
Post-Comprehensive Research Fellowship, University of Iowa	2020
GSS/Graduate College Presentation Travel Funds, University of Iowa	2019

INVITED SEMINARS AND PRESENTATIONS

American Economic Association (AEA/ASSA) Annual Meeting	January 2025
North America Summer Meeting of the Econometric Society (NASMES)	June 2022
European Winter Meeting of the Econometric Society (EWMES)	December 2021
Southern Economic Association (SEA)	November 2021
Joint Statistical Meetings (JSM)	August 2020
Midwest Econometrics Group (MEG)	October 2019

Computation and Software

Experienced: R

Intermediate: Python, Matlab

JOURNAL REFEREE EXPERIENCE

Journal of Empirical Economics

References

Suyong Song

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David Frisvold

Associate Professor of Economics University of Iowa W374 PBB Iowa City, IA 52242 319-335-0957 david-frisvold@uiowa.edu

Seongjoo Min

Assistant Professor of Economics University of Iowa S296 PBB Iowa City, IA 52242 319-467-1591 seongjoo-min@uiowa.edu