






# Zhan Gao

 Department of Economics, University of Southern California  
 Kaprielian Hall, 300, 3620 S. Vermont Ave, Los Angeles, CA 90089, USA.  
 +1 (424) 316-9216  [zhangao@usc.edu](mailto:zhangao@usc.edu)  <https://zhan-gao.github.io>

## Education

Ph.D. Economics, University of Southern California, 2025 (Expected).

### Dissertation committee and references

Hyungsik Roger Moon (Chair), [moonr@usc.edu](mailto:moonr@usc.edu)

Cheng Hsiao, [chsiao@usc.edu](mailto:chsiao@usc.edu)

Geert Ridder, [ridder@usc.edu](mailto:ridder@usc.edu)

### Placement committee

Nicolas Lambert, [lambertn@usc.edu](mailto:lambertn@usc.edu)

Marianne Andries, [andries@usc.edu](mailto:andries@usc.edu)

Robert Dekle, [dekle@usc.edu](mailto:dekle@usc.edu)

Simon Quach, [simonqua@usc.edu](mailto:simonqua@usc.edu)

M.Phil. Economics, The Chinese University of Hong Kong, 2018.

B.S. Mathematics, The Chinese University of Hong Kong, 2016.

## Research Interests

Econometrics, machine learning, biostatistics & health economics, empirical micro.

## Peer-Reviewed Publications

'23 [Identification and estimation of categorical random coefficient models](#) (with M. H. Pesaran). *Empirical Economics*, 64(6), 2543–2588.

[Copula graphic estimation of survival function with dependent censoring and its application to an analysis of pancreatic cancer clinical trial](#) (with J. H. Jo, I. Jung, H. R. Moon, G. Ridder, & S. Y. Song). *Statistical Methods in Medical Research*, 32(5), 944-962.

'22 [On LASSO for predictive regression](#) (with J. H. Lee & Z. Shi). *Journal of Econometrics*, 229(2), 322 - 349.

'21 [Implementing convex optimization in R: Two econometric examples](#) (with Z. Shi). *Computational Economics*, 58, 1127-1135.

## Working Papers

1. [Generalized method of moments with grouped heterogeneous validity of moment conditions in panel data models](#). *Job Market Paper*.
2. [Robust estimation of regression models with potentially endogenous outliers via a modern optimization lens](#) (with H.R. Moon). Resubmitted to *Econometric Reviews*.
3. [On LASSO inference for high-dimensional predictive regression](#) (with J.H. Lee, Z. Mei and Z. Shi). *Submitted*.

4. From isolation to compassion: A natural experiment of how stay-at-home orders unleashed a wave of virtual altruism (with M. Liu, A. Bisberg and D. Williams).
5. Heterogeneous return to education and wage inequality in China (with X. Li).

## Software

Selected statistical software as the creator and maintainer: [classo](#), [LasForecast](#).

A full portfolio of open source contributions: [github.com/zhan-gao](https://github.com/zhan-gao) (41 stars as of October 31, 2024).

## Seminars & Conferences

### Seminar Talks

- '24 Peking Univ. Guanghua School of Management, Jinan Univ. IESR (scheduled), Hunan Univ. (scheduled)

### Conference Presentations

- '24 IAAE Annual Conference (Xiamen Univ.), ES-NASM (Vanderbilt), AMES (Zhejiang Univ.), Summer Symposium on the Frontier of Econometric methods (Shandong Univ.), ESEM-EEA (Erasmus Rotterdam)
- '23 IAAE Annual Conference (BI Norwegian Business School), International Symposium on Advance in Panel Data and Time Series Econometrics (Xiamen Univ.)
- '22 California Econometrics Conference (Stanford; poster session), 97th Annual Conference of WEAI (Portland)

### Conference Discussions

- '22 Andreyanov & Franguridi (2022) Nonparametric inference on counterfactuals in first-price auctions (97th Annual Conference of WEAI, Portland)

## Professional Services

### Referee Services

*Australian & New Zealand Journal of Statistics, Econometric Reviews, Journal of Business & Economic Statistics (×2), Journal of Economic Interaction & Coordination*

### Organizing Committee

Southern California Graduate Conference in Applied Economics, 2020.

## Teaching Experience

### Selected Teaching Assistant Experience, USC

ECON 609<sup>†</sup> *Econometric Methods* (Instructor: Roger Moon), Spring 2022, 2023.

ECON 611<sup>†</sup> *Probability and Statistics* (Instructor: Geert Ridder), Fall 2022.

ECON 515\* *Time Series Analysis* (Instructor: Ratika Narag), Fall 2022, 2024.

ECON 570\* *Big Data Econometrics* (Instructor: Roger Moon), Spring 2023.

ECON 419<sup>◊</sup> *Advanced Econometrics* (Instructor: Michael Leung), Fall 2019, 2020.

†: *Ph.D. level*; \*: *master level*; ◊: *undergraduate level*.

## Honors, Fellowships & Awards

Summer Research Award (USC), 2022 - 23.

Center for Applied Financial Economics (CAFE) Graduate Fellowship (USC), 2021.

Zhiyuan Scholarships (Soong Ch'ing-ling Foundation), 2011 - 15.

Champion of International Chinese Debating Competition (team member of CUHK), 2014.

## Skills & Personals Information

**Computing:** R, Python, MATLAB, SQL.

**Languages:** Mandarin (native), English (proficient), Cantonese (conversational).

*Current version: October 31, 2024.*

*Latest online version: <https://zhan-gao.github.io/cv.pdf>.*