

KEREN (COLIN) FANG

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PLACEMENT CONTACT

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- Placement Director**

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- **Dissertation References:**

- Ruoyao Shi (Chair/Advisor):**

- Assistant Professor

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- Donggyu Kim:**

- Professor

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- Tae-Hwy Lee:**

- Professor

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- Siyang Xiong:**

- Professor

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EDUCATION

- **University of California at Riverside** **2020-Expected June 2026**
 - PhD of Economics, Department of Economics
 - Dissertation: *Inference for Moment Inequalities with Nuisance Functions*
- **Australian National University** **2016-2018**
 - Master of Applied Economics with Merit, Research School of Economics
- **University of California at Berkeley** **2015**
 - Summer Session
- **Macau University of Science and Technology** **2012-2016**
 - B.B.A., Finance, School of Business
 - Dean's List for year 2013-2016

RESEARCH INTERESTS

- **Primary fields:** Econometric Theory, Partial Identification
- **Secondary fields:** Microeconomic Theory, Industrial Organization

RESEARCH EXPERIENCE

- *Inference for Moment Inequalities with Nuisance Functions*
(*Job Market Paper*)

Abstract: This paper develops a method to construct confidence set for partially identified finite-dimensional parameters of interest from a finite number of moment inequalities which involve point identified infinite-dimensional nuisance parameters. We first point identify the nuisance parameters that are mean square projections and then construct the confidence set for the parameters of interest in two-steps. The effect of nuisance parameters on the confidence set is characterized by a corresponding influence function of the sample mean of the moment functions through a reparametrized GMM condition and the general formula of the asymptotic variance of the sample mean is derived. The violation to the moment inequalities while approximating the nuisance parameters is addressed along with the two-step procedure where a Bonferroni-type correction is critical to the uniform asymptotic size. We prove the uniform asymptotic size control property of the constructed confidence set, while the uniform bootstrapping consistency when nuisance parameters are present is derived. We illustrate the method by developing a complete structural model of a static discrete incomplete information game with state-dependent interaction effects among radio stations considered in De Paula and Tang (2012), where there is a need to approximate the true conditional choice probabilities as the nuisance parameters.

- *The Estimates of the Equivalence Scales for Australia* 2017
Master Thesis
- *The Study of the Relationship between the Stock Market and the Macroeconomics of China* 2016
Bachelor Thesis

TEACHING EXPERIENCE

- **UC Riverside as Teaching Assistant**

ECON 002 Introduction to Macroeconomics
(Winter-Spring 2022, Summer 2023, Spring-Summer 2024)
ECON 101 Statistics for Economics (Fall 2022, Winter 2025)
ECON 102 Intermediate Microeconomics (Fall 2021)
ECON 104A Intermediate Microeconomic Theory (Spring 2025)
ECON 104B Intermediate Microeconomic Theory II (Winter-Spring 2023)
ECON 107 Introductory Econometrics (Fall 2023, Winter 2024, Fall 2024, Fall 2025)

AWARDS

- Dissertation Completion Fellowship Award, University of California at Riverside 2026
- Dissertation Program Fellowship, University of California at Riverside 2025
- Dean's Distinguished Fellowship, University of California at Riverside 2020
- First Prize for the Cultural and Academic Excellence, Macau University of Science and Technology 2016
- Champion of Global Management Challenge (Macau S.A.R.) 2015
- Dean's List, Macau University of Science and Technology 2013-2016

SEMINAR PRESENTATIONS

2025: University of California at Riverside

SOFTWARE SKILLS

Matlab, Microsoft Office, E-views, Stata, R-studio and LaTeX.

LANGUAGES

Chinese Mandarin (native), English (fluent), Chinese Cantonese (basic), French(basic)