



Yiren WANG

School of Economics, Singapore Management University

<https://sites.google.com/view/yirenwang>

yiren.wang.2018@phdecons.smu.edu.sg

Contact Information

School of Economics
Singapore Management University
90 Stamford Road
Singapore 178903, Republic of Singapore
Handphone/Cell: +65 85316908

Personal Information:

Date of birth: 04/30/1993
Sex: Female
Citizenship: Chinese

Masters Level Work:

Master of Economics, Applied Economics, JINHE Center for Economic Research, Xi'an Jiaotong University, 2018

Undergraduate Studies:

B.E., Biomedical Engineering, School of Life Science and Technology, Xi'an Jiaotong University, 2015

Graduate Studies:

Singapore Management University, 2018 to present
Thesis Title: "Essays on large panel data model with two-way heterogeneity"
Expected Completion Date: June 2023

Thesis Committee and References:

Yichong Zhang (Chair)

Assistant Professor of Economics
School of Economics
Singapore Management University
Singapore 178903
Phone: +65 68280881
Email: yczhang@smu.edu.sg

Liangjun Su (Chair when he was at SMU)

Chair Professor of Economics
School of Economics and Management
Tsinghua University
Beijing China 100084
Phone: +86 10 62789506
Email: sulj@sem.tsinghua.edu.cn

Peter C.B. Phillips

Cowles Foundation for Research in Economics
Yale University
Connecticut USA 06520-8281

Jia Li

Lee Kong Chian Professor of Economics
School of Economics
Singapore Management University

School of Economics
Singapore Management University
90 Stamford Road
Singapore 178903
Phone: (203) 432-3695
Email: peter.phillips@yale.edu

90 Stamford Road
Singapore 178903
Phone: +65 68280890
Email: jjali@smu.edu.sg

Teaching and Research Fields:

Primary fields: Econometric Theory

Secondary fields: Panel Data Models, High-dimensional Econometrics

Teaching Experience:

Teaching Assistant:

2021-2023: Time Series Econometrics (Master)

2019-2020, 2022-2023: Statistical Inference for Data Science (Undergraduate)

2019-2020, 2021-2022: Econometrics II (PhD)

2020-2021: Applied Econometrics (Master)

Research Experience:

Research Assistant for Prof. Yichong Zhang, School of Economics, Singapore Management University, August-December 2022

Visiting Ph.D. Student for Prof. Liangjun Su, School of Economics and Management, Tsinghua University, May-August 2021

Research Assistant for Prof. Liangjun Su, School of Economics, Singapore Management University, March-June 2020

Conference and Seminar Presentations:

SH3 Conference on Econometrics (Virtual), 2022

Honors, Scholarships, and Fellowships:

2021-2022: SMU Presidential Doctoral Fellowship

2019: Best First Year Award, PhD in Economics, Singapore Management University

2018-2022: PhD Full Scholarship, Singapore Management University

2015-2018: Master Full Scholarship, Xi'an Jiaotong University

2015: Merit Graduate of Xi'an Jiaotong University

2013: Suzhou Industrial Park Enterprise Scholarship, Xi'an Jiaotong University

2012, 2014: Siyuan Scholarship, Xi'an Jiaotong University

2011-2014: Merit Student of Xi'an Jiaotong University

Referee Service:

Journal of Econometrics, Econometric Theory

Working Papers:

“Panel Data Models with Time-Varying Latent Group Structures” with Peter C.B. Phillips and Liangjun Su (Job Market Paper)

Abstract: This paper considers the linear panel model with interactive fixed effects such that individual heterogeneity is captured by latent group structure and time heterogeneity is captured by an unknown structural break. We allow the model to have different number of groups and/or different group memberships before and after the break. With the preliminary estimates by

nuclear norm regularization followed by row- and column-wise linear regression, we estimate the breaking point by the idea of binary segmentation and the latent group structure together with the number of groups before and after the break by sequential testing K-means algorithm simultaneously. Asymptotic theory shows that the breaking point and the number of groups as well as the group membership can be estimated correctly with probability approaching one. Finite sample performance of the estimation is illustrated via Monte Carlo simulation and a real dataset application.

“Low-rank Panel Quantile Regression: Estimation and Inference” with Liangjun Su and Yichong Zhang

Abstract: In this paper, we propose a class of low-rank panel quantile regression models which allow for unobserved slope heterogeneity over both individuals and time. We estimate the heterogeneous intercept and slope matrices via nuclear norm regularization followed by sample splitting, row- and column-wise quantile regressions and debiasing. We show that the estimators of the factors and factor loadings associated with the intercept and slope matrices are asymptotically normally distributed. In addition, we develop two specification tests: one for the null hypothesis that the slope coefficient is a constant over time and/or individuals under the case that the true rank of slope matrix equals one, and the other for the null hypothesis that the slope coefficient exhibits an additive structure under the case that the true rank of slope matrix equals two. We also illustrate the finite sample performance of estimation and inference via Monte Carlo simulation and real datasets.

Work in Progress:

“Inference for Quantile Factor Models”

Computer Skills:

MATLAB, R, Stata, LaTeX

Languages:

English (fluent), Mandarin (native)