

Liyu Dou

Contact Information

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Current Position

Assistant Professor of Economics, *Singapore Management University*, July 2023–present

Assistant Professor in Economics, *The Chinese University of Hong Kong, Shenzhen*, Aug. 2019–present (on unpaid leave from July 2023)

Education and Former Positions

Ph.D. Economics, *Princeton University*, Sep. 2013–Sep. 2019

Thesis committee: Ulrich Müller (Chair), Michal Kolesár, Mark Watson

Research Associate, *Nanyang Technological University*, Aug. 2012–July 2013

M.Sc. Econometrics and Mathematical Economics with Distinction, *LSE*, Sep. 2011–July 2012

B.Sc. Mathematics and Economics, *Nanyang Technological University*, 1st Class Honours, Aug. 2007–July 2011

Teaching and Research Fields

Primary Fields Econometric Theory, Time Series Econometrics
Secondary Fields Applied Econometrics

Working Papers

Optimal HAR Inference. Revise and Resubmit, *Quantitative Economics*.

Quantifying Delay Propagation in Airline Networks. (Joint with Jakub Kastl and John Lazarev.)

Quasi-property rights against data misappropriation. (Joint with Tat-How Teh, Yang Yang, and Yunyun Diao.)

Forthcoming and Published Papers

Generalized Local-to-Unity Models. *Econometrica*, 89 (2021), 1825-1854. (Joint with Ulrich Müller.)

Catalyst of Business Cycle Synchronizations in East Asia. *The Singapore Economic Review*, 62 (2017), 703-719. (Joint with Hui-Ying Sng and Pradumna B. Rana.)

Trial and Error in Influential Social Networks. In *Proceedings of the 19th ACM SIGKDD Conference on Knowledge, Discovery, and Data Mining (KDD)*, ed. by Inderjit S. Dhillon et al., ACM (2013), 1016-1024. (Joint with Ning Chen, Xiaohui Bei, Xiangru Huang and Ruixin Qiang.)

Selected Work in Progress

Robust Inference with Clustering Dependence Structures. (Joint with Wenjie Wang (Nanyang Technological University) and Jungbin Hwang (University of Connecticut).)

Network Dependence Robust Inference. (Joint Wenjie Wang (Nanyang Technological University) and Xinghao Yu (CUHK-Shenzhen).)

Auto BELIEF in Serial Dependence. (Joint with Kai Zhang (UNC Chapel Hill).)

Minimax Theory in Binary Time Series Predictions. (Joint with Kai Zhang (UNC Chapel Hill).)

Presentations

- 2023 Nanyang Technological University, Singapore Management University
- 2021 Shanghai University of Finance and Economics (School of Economics, School of Statistics and Management), Singapore Management University (Virtual), 2021 China Meeting of the Econometric Society (Virtual), Nanyang Technological University (Virtual)
- 2020 Nanyang Econometrics Conference
- 2019 The Chinese University of Hong Kong (Shenzhen), The Chinese University of Hong Kong (Shatin), Simon Fraser University, Econometric Society North American Summer Meeting (Seattle, WA), NBER-NSF Time Series Conference (Hong Kong), Nanyang Technological University, Jinan University (IESR), University of Maryland, University of Connecticut, Shanghai University of Finance and Economics
- 2018 Princeton University

Teaching Experience

- Spring 2022, 2023 Machine Learning in Finance, *CUHK-Shenzhen*
- Spring 2020, 2021, 2022, 2023 Ph.D. Econometrics II, *CUHK-Shenzhen*
- Spring 2020, 2021 Basic Statistics, *CUHK-Shenzhen*
- Summer 2016, 2017, 2018 Preceptor for graduate math camp, *Princeton University*
- Fall 2015, 2016, 2017 Preceptor for graduate econometric theory I, *Princeton University*
- Fall 2012, Spring 2013 Tutor for various undergraduate economics courses, *Nanyang Technological University*

Prizes and Awards

- 2022–2024 PI, NSFC Young Scholar Research Grant #7210030250 “Robust Modelling and Inference for Strongly Autocorrelated Time Series: Theory and Applications” (Award amount: RMB 300,000)
- 2022–2026 Co-PI, NSFC Key Research Grant #7213000103 “Machine Learning Methods for High-Dimensional Econometric Models and Their Applications in Economics” (PI: Chunrong Ai, Award amount: RMB 2,599,000)
- 2023–2026 Co-PI, NSFC-RGC Research Grant #T2261160400 “Machine Learning in Decision Rule Design” (PI: Chunrong Ai, Award amount: RMB 1,285,000)
- 2021–2023 Presidential Young Fellow, *CUHK-Shenzhen*
- 2020–2022 University Development Fund, *CUHK-Shenzhen*
- 2013–2019 Graduate Fellowship, *Princeton University*
- 2012 Ely Devons Prize, *LSE*
- 2012 Institute of New Economic Thinking Scholarship, *Copenhagen*
- 2011 Lee Kuan Yew Gold Medal, *Nanyang Technological University*

Professional Activities

- Journal referee for *Econometric Reviews, Econometric Theory, Economic Modelling, Journal of Econometrics, Journal of Empirical Finance, Journal of the American Statistical Association, Physica A: Statistical Mechanics and its Applications, Quantitative Economics, Review of Economics and Statistics*

Grant reviewer for	National Natural Science Foundation of China
External reviewer for	Advanced Econometrics II (Ph.D. course, IESR, Jinan University)
Co-Chair for	Transdisciplinary Econometrics & Data Science Seminars (TEDS)
Local organizing committee for	Asian Meeting of the Econometric Society in China 2022

May, 2023