Zhentao Shi

- 928 Esther Lee Building, the Chinese University of Hong Kong,
 Shatin, New Territories, Hong Kong SAR, China
- Tel: (852) 3943-1432
- Email: zhentao.shi@cuhk.edu.hk

Positions

- Associate Professor, the Chinese University of Hong Kong, 2022—
 - Department of Economics
 - Department of Decisions, Operations and Technology (by courtesy)
- Co-Director, Big Data and the Digital Economy Program of the Lau Chor Tak Institute of Global Economics and Finance, the Chinese University of Hong Kong, 2021—
- Associate Professor, Georgia Institute of Technology (Atlanta, GA), 2021—2022
- Associate Professor, the Chinese University of Hong Kong, 2020—2021
- Assistant Professor, the Chinese University of Hong Kong, 2014—2020

Degrees

- Ph.D., Economics, Yale University, 2014
 - Committee: Peter C.B. Phillips (chair), Donald W.K. Andrews, Yuichi Kitamura
- M.A., Economics, Peking University, 2008
- B.A., Finance, Zhejiang University, 2005

Fields of Concentration

• Econometric Theory (machine learning)

Editorial Activities

- Associate Editor: Journal of Econometrics, January 2025 present
- Associate Editor: Journal of Business & Economic Statistics, October 2024 present
- Associate Editor: *Econometric Review*, October 2024 present
- Editorial Board: China Finance Review International, June 2024 present

Publications

"#" marks supervised postgraduate students

- Zhentao Shi, Liangjun Su and Tian Xie (2025): "L2-Relaxation: With Applications to Forecast Combination and Portfolio Analysis," Review of Economics and Statistics.
- Yue Qiu, Shaoguang Qu, Zhentao Shi, and Tian Xie (2025): "Forecast Combination in Cryptocurrency Realized Volatility," *Economic Modelling*, 144, 106986.
- #Ziwei Mei and Zhentao Shi (2024): "On LASSO for High Dimensional Predictive Regression," *Journal of Econometrics*, 242(2), 105809.
- #Ziwei Mei, Peter C.B. Phillips and Zhentao Shi (2024): "Boosted HP Filter Is More General Than You Think," Journal of Applied Econometrics, 39(7), 1260-1281.
- Jinyuan Chang, Zhentao Shi and Jia Zhang (2023): "Culling the Herd of Moments with Penalized Empirical Likelihood," *Journal of Business & Economic Statistics*, 41, 791-805.
- Zhentao Shi and #Jingyi Huang (2023): "Forward-Selected Panel Data Approach for Program Evaluation," *Journal of Econometrics*, 234, 512-535.
- Wei Lin, Zhentao Shi, #Yishu Wang and #Ting Hin Yan (2023): "Unfolding Beijing in a Hedonic Way," Computational Economics, 61, 317–340.
- Cheng Hsiao, Zhentao Shi and Qiankun Zhou (2022): "Transformed Estimation for Panel Interactive Effects Models," Journal of Business & Economic Statistics, 40(4), 1831-1848.
- Ji Hyung Lee, Zhentao Shi and #Zhan Gao (2022): "On LASSO for Predictive Regression," Journal of Econometrics, 229(2), 322-340.
- Stephen L. Ross and Zhentao Shi (2022): "Measuring Social Interaction Effects when Instruments Are Weak," Journal of Business & Economic Statistics, 40:3, 995-1006.
- Peter C.B. Phillips and Zhentao Shi (2021): "Boosting: Why You Can Use the HP Filter," *International Economic Review*, 62(2), 521-570.
- #Kayan Cheng, Naijing Huang and Zhentao Shi (2021): "Survay-Based Forecasting: To Average or Not To Average," in Vladik Kreinovich, Songsak Sriboonchitta, Woraphon Yamaka (eds.), Studies in Computational Intelligence: Behavioral Predictive Modeling in Economics, vol. 897, pp 87-104, Springer-Verlag.
- #Zhan Gao and Zhentao Shi (2021): "Implementing Convex Optimization in R: Two Econometric Examples," Computational Economics, 58, 1127-1135.
- Zhentao Shi and Huanhuan Zheng (2018): "Structural Estimation of Behavioral Heterogeneity," *Journal of Applied Econometrics*, 33(5), 690-707.
- Liangjun Su, Zhentao Shi and Peter C.B. Phillips (2016): "Identifying Latent Structures in Panel Data," *Econometrica*, 84(6), 2215-2264.
- Zhentao Shi (2016): "Econometric Estimation with High-Dimensional Moment Equalities," *Journal of Econometrics*, 195, 104-119.

- Zhentao Shi (2016): "Estimation of Sparse Structural Parameters with Many Endogenous Variables," *Econometric Reviews*, 35(8-10): 1582-1608.
- James Chu, Liping Lu and Zhentao Shi (2009): "Pitfalls in Market Timing Test," Economic Letters, 103(3), 123–126.
- Yuefei Zhang, Zhentao Shi, and Yaogguang Chen (2006): [in Chinese] "A Comparative Research on the Efficiency of China Mainland and Hong Kong Stock Markets," *Journal of Financial Research*, 6, 33-40.
- Liuyong Yang and Zhentao Shi (2004): [in Chinese] "An Analysis of Long-run Gold Price Determinants," *Journal of Statistical Research*, 6 (2), 21-24.

Working Papers

- "Economic Forecasts Using Many Noises," with Yuan Liao, Xinjie Ma, and Andreas Neuhierl, 2024.
- "On LASSO Inference for High Dimensional Predictive Regression," with Zhan Gao, Ji Hyung Lee, and #Ziwei Mei, 2024.
- "Nickell Bias in Panel Local Projection," with #Ziwei Mei and Liugang Sheng, 2024, R&R.
- "Nickell Meets Stambaugh: A Tale of Two Biases in Panel Predictive Regressions," with #Chengwang Liao and #Ziwei Mei, 2024.
- "Unveiling Dynamics in Climate Disaster Information Dissemination: A Variance Decomposition Network Approach," with Sebastien Box-Couillard, Yichun Fan, Yi Huang, Yilan Xu, and Siqi Zheng, 2024
- "Team Persistent or Team Transitory? Sectoral Linkage and Inflation Persistence," with Liugang Sheng and Steve Pak Yeung Wu, 2024.
- "Estimating Large Covariance Matrices with Unobserved Clustering," with Wenxin Huang, Yiru Wang and Baoning Zheng, 2024.
- "Estimation and Inference in Dyadic Network Formation Models with Nontransferable Utilities," with Ming Li and #Yapeng Zheng, 2024.
- "L2-Relaxation for Economic Prediction," with #Yishu Wang, 2024
- "Empirical Likelihood Approach for High Dimensional Moment Restrictions With Dependent Data," with Jinyuan Chang, Qiao Hu, and Jia Zhang, 2024

Awards and Honors

• Recipient of the National Science Fund for Distinguished Young Scholars, 2024

Grants Awarded

- Principle investigator: National Science Fund for Distinguished Young Scholars, RMB 2,800,000, 2025-2029
- Principle investigator: the Research Grants Council of Hong Kong No.14617423, "Generalizing L2-Relaxation," HKD 452,308, 2024-2026
- Co-investigator: the Research Grants Council of Hong Kong No. 14501821, "Identifying the Latent Pattern in Impulse Responses," HKD 479,993, 2022-2024
- Principle investigator: the Research Grants Council of Hong Kong No.14500118, "A Machine Learning Approach to Combination Weights," HKD 247,520, 2018-2021
- Principle investigator: the Research Grants Council of Hong Kong No.24614817, "Boosting Methods in Time Series and Panel Data," HKD 353,000, 2017-2019
- Principle investigator: Social Science Faculty, the Chinese University of Hong Kong Direct Grant No.4052328, "Panel Predictive Regression with Persistent Regressors," 2024-2026
- Principle investigator: Social Science Faculty, the Chinese University of Hong Kong Direct Grant No.4053728, "Constructing Counterfactual from Panel Data with Many Cross-Sectional Units," 2016-2018
- Principle investigator: Social Science Faculty, the Chinese University of Hong Kong Direct Grant No.4052081, "College Roommate Peer Effect on Academic Achievement", 2015-2017

Professional Services

- External reviewer: The Chinese University of Hong Kong (Shenzhen), Central University of Finance and Economics, Research Grants Council of Hong Kong, "National Science and Technology Council" (Taiwan)
- Session organizer: International Conference on Econometrics and Statistics, 2018
- Scientific committee: International Association of Applied Econometrics Conference, 2017; 15th Annual Society of Financial Econometrics (SoFiE) Conference, 2023; 16th Annual Society of Financial Econometrics (SoFiE) Conference, 2024; International Association of Applied Econometrics Conference, 2024
- Referee for Econometrica, Review of Economic Studies, Journal of the Royal Statistical Society (Series B), Journal of the American Statistical Association, Review of Economics and Statistics, International Economic Review, Journal of Econometrics, Econometric Theory, Journal of Business and Economic Statistics, Econometric Journal, Journal of Financial Econometrics, Econometric Review, Journal of Economic Dynamics and Control, Computational Economics, International Journal of Forecasting, Journal of Time Series Analysis, Journal of Multivariate Analysis, Journal of Statistical Planning and Inference, China Economic Review, Empirical Economics, Journal of Business Cycle Research, Journal of Productivity Analysis, Macroeconomic Dynamics, Studies in Nonlinear Dynamics & Econometrics, Korea Economic Review

Supervision

• Ph.D.

- Jingyi Huang (2018, Barclays Capital Asia Limited)
- Yishu Wang (2024, Research Associate at CUHK)
- Ziwei Mei (in progress)
- Chengwang Liao (in progress)
- Yapeng Zheng (in progress)

• M.Phil.

- Hongqi Chen (2017, Ph.D. program at University of Illinois Urbana-Champaign)
- Zhan Gao (2018, Ph.D. program at University of Southern California)
- Jinan Lin (2018, Ph.D. program at University of California Irvine)
- Yang Chen (2019, Ph.D. program at Chinese University of Hong Kong)
- Ka Yan Cheng (2021, Ph.D. program at Emory University)

• Full-time Research Assistants

- Shu Shen (2024, Ph.D. program at Chinese University of Hong Kong)
- Ji Pan (2024, in progress)

• Part-time Research Assistants

- Zhan Gao (2018, M.Phil. program at Chinese University of Hong Kong)
- Cheuk Hei Yip (2019, MSc program at London School of Economics and Political Science)
- Ka Yan Cheng (2019, M.Phil. program at Chinese University of Hong Kong)
- Qiyu Dai (2023, M.Phil. program at Chinese University of Hong Kong)

Invited Talks

- 2024: Peking University, University of Macau, Hunan University
- 2023: University of Cambridge, University of Oxford, Peking University, Tsinghua University
- 2022: London School of Economics and Political Science, Macquarie University, University of California Riverside
- 2021: University of Illinois, Emory University, Hong Kong University of Science and Technology, University of Wisconsin, Tsinghua University
- 2020: Georgia Institute of Technology, City University of Hong Kong
- 2019: Michigan State University, University of Maryland, Texas A&M University, Rice University, Zhejiang University, Yonsei University, Shandong University
- 2018: Fudan University, Shanghai University of Finance and Economics, the Chinese University of Hong Kong (Shenzhen)
- 2017: University of Illinois, Korea University, Xiamen University, Hong Kong Baptist University
- 2016: Academic Sinica (Taipei), Shanghai University of Finance and Economics
- 2015: Zhejiang University, University of Hong Kong
- 2014: Rutgers University, Toulouse School of Economics, Michigan State University, Peking University, the Chinese University of Hong Kong