

Professional Experience

- 2021–present **Associate Professor**, *The University of Hong Kong, Business School*, Hong Kong.
- 2025–present **Director of AI-Agent Lab of CAMO**, *The University of Hong Kong*, Hong Kong.
- 2025–present **Honorary Associate Professor**, *University of Queensland*, Brisbane, Australia.
- 2022–present **Director, Institute of Financial Technology at SZRI**, *The University of Hong Kong, Business School*, Hong Kong.
- 2022–present **Associate Director, Institute of Digital Economy and Innovations**, *The University of Hong Kong, Business School*, Hong Kong.
- 2018–2021 **Assistant Professor**, *The University of Hong Kong, Business School*, Hong Kong.
- 2017–2018 **Affiliated Faculty**, *University of Florida, Center for Big Learning*, Gainesville.
- 2015–2018 **Assistant Professor**, *University of Florida, Department of Economics*, Gainesville.

Education

- 09/2010–06/2015 **Ph.d in Economics**, *Massachusetts Institute of Technology*, Cambridge.
Thesis Title: High Dimensional Econometrics and Model Selection
- 09/2007–06/2010 **B.S. in Mathematics and Economics**, *Massachusetts Institute of Technology*, Cambridge.
- 09/2005–07/2007 **Candidate for B.S. in Mathematics**, *Peking University*, Beijing.

Awards and Grants

- [1] “Enhancing Hong Kong’s Role in Sustainable Supply Chain Finance via Technology Transformation”, T32-615/24, Co-PI, Total Grant of 56M HKD (1.5M HKD entitled), 2024
- [2] “Causal Reinforcement Learning in Dynamic Games”, PI, SZRI Research Grant, Total Grant of 3M RMB, 2023
- [3] “Dynamic Learning Mechanism Design”, PI, RGC-NSFC Joint Grant, Total Grant of 1.2M HKD+1M RMB, 2022

- [4] “Statistical Inference on High Dimensional Linear Programming”, PI, RGC Grant, Total Grant of 480K HKD, 2021
- [5] “Financial Technology, Stability and Inclusion”, Co-PI (data science), Theme-Based Research Scheme, Total Grant of 24M HKD (3M HKD entitled), 2020
- [6] “Dynamic Pricing Models via Deep Learning”, One out of Five Research Proposals Accepted and Sponsored by Didichuxing.com, Total Grant of 100K RMB, 2017
- [7] MIT Economics Department Fellowship, 2010-2012
- [8] Mingde Fellowship, Peking University, 2005-2007
- [9] Gold Medal and 1st Rank with Perfect Score, 45th International Mathematical Olympiad, 2005
- [10] Gold Medal and 1st Rank with Perfect Score, 20th Chinese Mathematical Olympiad, 2004

Publications and Forthcoming Papers

- [1] “AI Persuasion, Bayesian Attribution, and Career Concerns of Decision-Makers”, 2026, Forthcoming, *Management Science*, with Hanzhe Li, Jin Li and Xiaowei Zhang
- [2] AgentGit: A Version Control Framework for Reliable and Scalable LLM-Powered Multi-Agent Systems, *AAAI 2026*, with Yang Li, Siqi Ping, Xiyu Chen, Xiaojian Qi, Zigan Wang, and Xiaowei Zhang
- [3] Selecting Inequalities for Sharp Identification in Models with Set-Valued Predictions, 2026, Forthcoming, *Review of Economic Studies*, with Kirill Ponomarev and Hai Wang
- [4] “High-Dimensional L_2 Boosting: Rate of Convergence”, 2025, *Journal of Machine Learning Research*, with Jannis Kueck and Martin Spindler
- [5] “Estimation and Inference of Treatment Effects with L_2 -Boosting in High-Dimensional Settings”, 2023, *Journal of Econometrics*, with Jannis Kueck, Martin Spindler and Zigan Wang
- [6] “Shape-Enforcing Operators for Generic Point and Interval Estimators of Functions”, 2021, *Journal of Machine Learning Research*, with Xi Chen, Victor Chernozhukov, Ivan Fernandez-Val and Scott Kostyshak
- [7] “EIV on LHS Variable in Quantile Regression”, 2021, *Econometrica*, with Jerry Hausman, Haoyang Liu and Christopher Palmer
- [8] “SortedEffects: Sorted Causal Effects in R”, 2020, *The R Journal*, with Shuowen Chen, Victor Chernozhukov and Iván Fernández-Val
- [9] “Accelerate training of restricted Boltzmann machines via iterative conditional maximum likelihood estimation”, 2019, *Statistics and Its Interface*, with Mingqi Wu and Faming Liang
- [10] “A Blockwise Consistency Method for Parameter Estimation of Complex Models”, 2019, *Sankhya B*, with Runmin Shi, Faming Liang, Qifan Song and Malay Gosh

- [11] “An Imputation-Consistency Algorithm for High-Dimensional Missing Data Problems and Beyond”, 2018, *Journal of Royal Statistics Society Series B*, With Faming Liang, Bochao Jia, Jingnan Xue and Qizhai Li
- [12] “The Sorted Effect: Discovering Heterogeneous Effect Beyond Their Averages”, 2018, *Econometrica*, with Victor Chernozhukov and Ivan Fernandez-Val
- [13] “Core Determining Class and Inequality Selection”, 2017, *American Economic Review, papers and proceedings*, with Hai Wang
- [14] “L2-Boosting for Economic Applications”, 2017, *American Economic Review, Papers and Proceedings*, with Martin Spindler

Working Papers

- [1] “Causal Reinforcement Learning: An Instrumental Variable Approach”, 2026, Revise and Resubmit, *Journal of Econometrics*, with Jin Li and Xiaowei Zhang
- [2] “Selecting Informative Moments via LASSO”, 2025, Revise and Resubmit, *Journal of Econometrics*, with Hanmo Wang and Pu Wang
- [3] “Do Entrepreneur Behavior Traits Explain Small Business Credit Outcomes”, 2024, Revise and Resubmit, *Journal of Banking and Finance*, with Chen Lin, Hao Sun and Mingzhu Tai
- [4] “Self-fulfilling Bandits: Endogeneity Spillover and Dynamic Selection in Algorithmic Decision-making”, with Jin Li and Xiaowei Zhang
- [5] AI-based Value Investing: A Hierarchical Multi-Agent Approach with Experiments on A Share Market, Submitted, with Allen He, Mike Ma, Xiangguo Li, Mingyang Zhao and Xiaowei Zhang
- [6] “Adaptive Discrete Smoothing”, with Xi Chen, Victor Chernozhukov and Martin Spindler
- [7] “Textual Analysis on Earning Call QA Sections in American Stock Exchange”, with Xu Li
- [8] “Complementary Experimentation”, with Jin Li, Xiaowei Zhang and Hanmo Wang
- [9] Promotion Opportunities and Production Dynamics, with Jin Li, Michael Powell and Rongzhu Ke
- [10] Learning to Compete or Learning to Collude? Emergent Behavior of AI Market Makers, with Jin Li, Yannan Sun and Xiaowei Zhang
- [11] Collusive Market Making and Retail Investor Attention, with Jin Li, Yannan Sun and Xiaowei Zhang
- [12] Can AI Master Econometrics? Evidence from Econometrics AI Agent on Expert-Level Tasks, with Qiang Chen, Tianyang Han, Jin Li, Yuxiao Wu, Xiaowei Zhang, and Tuo Zhou.
- [13] Shrinking-Tube Concentration for Adaptive Markovian Stochastic Approximation, with Jin Li and Xiaowei Zhang

- [14] Linear Programming Inference in High Dimensions, with Victor Chernozhukov, Ivan Fernandez-Val and Hao Sun.
- [15] Supermodular Enforcing Operator , with Ivan Fernandez-Val and Hao Li.
- [16] Agent-UCT: Upper Confidence Bounds Applied to Trees for Agentic Workflow Optimization with Cost-Awareness, submitted to AAAI 2027, Yang Li, hai liu, Dian Shao, Yu wang, Xiyu Chen, Sergey Volkov, Bozhi Wang, Ziyu Sun, Sihang Liu, Ye Luo*, Xiaowei Zhang*
- [17] Algorithmic Game with Belief Towers, With Zhonghao Huang
- [18] MDP state test and selection, with Xu Hao, Tianyang Han and Zicheng Wang
- [19] State Learning in MDP, with Xu Hao, Tianyang Han and Zicheng Wang
- [20] Financial High-Frequency World Model with High Frequency, with Yuheng Lei, Yike Wang
- [21] StateFuse: Deterministic Conflict-Preserving Memory for Multi-Agent Systems, with Sergey Volkov, Yang Li

Invited Seminars and Public Talks

Academic Institutions

- 09/2025 Conference of Center of AI for Management and Organizations, Shenzhen
- 05/2025 Workshop of AI and Biotechnology, Shenzhen
- 12/2024 Workshop of AI and Next Generation Organization, Shenzhen
- 05/2024 Workshop of AI and Financial Technology, Hong Kong
- 11/2022 Workshop of Financial Technology and Financial Inclusion, Beijing
- 10/2021 Workshop of Causal Machine Learning in Economics, Shenzhen
- 12/2020 Artificially Intelligence Seminar Series, Guanghua School of Management, Peking University
- 11/2020 Seminar in Big Data and AI methods, Shenzhen Institute of Big Data
- 11/2020 Economics Department Seminar, Boston University
- 10/2020 IEDA Department Seminar, HKUST
- 04/2019 Seminar in Big Data and AI methods, Shenzhen Institute of Big Data
- 03/2018 Economics Department Seminar, HKU Business School
- 03/2018 Statistics Department Seminar, HKUST Business School
- 01/2017 IOMS Department Seminar, New York University
- 06/2016 Economics Department Seminar, Chinese University of Hong Kong
- 09/2015 Statistics Department Seminar, University of Florida
- 05/2015 Economics Department Seminar, Singapore Management University

Conferences and Industry Talks

- 08/2026 Lecture of AI in Financial Applications, China Merchant Bank, HK
- 07/2026 Lecture of AI in Financial Applications, China Construction Bank, HK
- 11/2025 Lecture of AI in Financial Applications, Bank of China, HK
- 09/2025 Lecture of AI in Management and Human Resources, Baidu, Beijing HQ

826 K.K.L. Building – Pok Fu Lam – Hong Kong

☎ 3917 0063 • ✉ kurthuo@hku.hk

🌐 <https://www.fbe.hku.hk> › people › academic › ye-luo

12/2024 1st Annual Econometrics Meeting of the Greater Bay Area, Macau
 09/2024 AI Agent and Its Development, Bank of China, Hong Kong
 08/2024 Keynote Speech, 1st China Conference of Econometrics and Machine Learning, Shandong
 10/2023 Conference in Economics and AI, Hangzhou
 08/2023 Keynote Speech, 8th International Conference of Smart Finance, Dubai
 03/2023 HuaWei AI Lab, Hong Kong
 07/2022 Asian Econometric Society Meeting, Session Chair, Shenzhen
 07/2021 China Econometric Society Meeting, Shanghai
 01/2021 Noah's Ark AI Lab, HuaWei, Shenzhen
 07/2019 Tongdun Financial Technology, Hangzhou
 11/2018 Shunfeng Express, Shenzhen
 10/2018 Novartis APMA meeting, Hong Kong
 06/2017 Asian Econometric Society Meeting, Hong Kong
 01/2017 American Economic Association, Chicago, IL
 11/2015 Informs, Philadelphia, PA

Knowledge Exchange Activities

2021-2023 Causal Reinforcement Learning, Noah's Ark AI Lab, HuaWei, Shenzhen
 2019-2020 Individual credit ceiling modelling with life cycle income forecast, China Construction Bank Beijing HQ
 2019-2020 Dynamic risk prediction for small and micro enterprises by hierarchical machine learning, China Construction Bank Beijing HQ
 2017-2018 Identification and correction of product mis-labelling, JD.com Beijing HQ
 2016-2017 Dynamic pricing by double deep learning, Didichuxing.com Beijing HQ