Curriculum Vitae

Professional Experience

- 09/2021 Associate Professor with Tenure, The University of Hong Kong, Business present School, Hong Kong.
- 08/2018— **Assistant Professor**, The University of Hong Kong, Business School, Hong present Kong.
- 01/2017
– Affiliated Faculty, University of Florida, Center for Big Learning, Gaines
ville. 06/2018
- 09/2015— Assistant Professor, University of Florida, Department of Economics, present Gainesville.

Education

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

Awards and Grants

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

Publications and Papers under Review

- "Shape Restricted Operators", 2021, Journal of Machine Learning Research, with Xi Chen, Victor Chernozhukov, Ivan Fernandez-Val and Scott Kostyshak
- [2] "EIV on LHS Variable in Quantitle Regression", 2021, *Econometrica*, with Jerry Hausman, Haoyang Liu and Christopher Palmer
- [3] "SortedEffects: Sorted Causal Effects in R", 2020, *The R Journal*, with Shuowen Chen, Victor Chernozhukov and Iván Fernández-Val
- [4] "Accelerate training of restricted Boltzmann machines via iterative conditional maximum likelihood estimation", 2019, *Statistics and Its Interface*, with Mingqi Wu and Faming Liang
- [5] "A Blockwise Consistency Method for Parameter Estimation of Complex Models", 2019, Sankhya B, with Runmin Shi, Faming Liang, Qifan Song and Malay Gosh
- [6] "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
- [7] "The Sorted Effect: Discovering Heterogeous Effect Beyond Their Averages", 2018, *Econometrica*, with Victor Chernozhukov and Ivan Fernandez-Val
- [8] "Core Determining Class and Inequality Selection", 2017, American Economic Review, papers and proceedings, with Hai Wang
- [9] "L2-Boosting for Economic Applications", 2017, American Economic Review, Papers and Proceedings, with Martin Spindler

Working Papers

- [1] "High Dimensional IV regression via L2Boosting", 2020, Revise and Resubmit, *Journal of Econometrics*, with Jannis Kueck and Martin Spindler
- [2] "Causal Reinforcement Learning: An Instrumental Variable Approach", 2021, Revise and Resubmit, *Econometrica*, with Jin Li and Xiaowei Zhang
- [3] "L2Boosting: Rate of Convergence", 2021, Revise and Resubmit, *Journal of Machine Learning Research*, Martin Spindler
- [4] "Self-fulfilling Bandits: Endogeneity Spillover and Dynamic Selection in Algorithmic Decision-making", Under Revision, with Jin Li and Xiaowei Zhang
- [5] "Do Entrepreneur Behavior Traits Explain Small Business Credit Outcomes", Under Revision, with Chen Lin, Hao Sun and Mingzhu Tai
- [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 and Xiaowei Zhang
- [9] "Selecting Informative Moments via LASSO"

- [10] Core Determining Class: Approximation, Estimation and Inference, with Hai Wang
- [11] Firm Growth and Promotion Opportunities, with Jin Li, Michael Powell and Rongzhu Ke

Invited Seminars and Public Talks

Academic Institutions

- 12/2020 Artifically 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
- 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 Causal Reinforcement Learning, Noah's Ark AI Lab, HuaWei, Shenzhen
- 2019-2020 Individual credit ceil modelling with life cycle income forecast, China Construction Bank Beijing HQ
- 2019-2020 Dynamic risk prediction for small and micro enterprises by hyerachial 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