

WORKING EXPERIENCE

- ▶ **Fudan University** Shanghai, China
Assistant Professor, Department of Statistics and Data Science June 2026 - now

- University of Michigan, Ann Arbor** Ann Arbor, USA
▶ *Postdoctoral Assistant Professor (Van Loo Postdoc Fellow), Department of Mathematics* May 2024 - May 2025
Postdoctoral Research Fellow, Department of Statistics May 2024 - Jan 2026
Host: Yang Chen

- ▶ **University of Hong Kong** Hong Kong SAR, China
Senior Research Assistant, Department of Mathematics September 2023 - May 2024
Host: Michael Ng

EDUCATION

- ▶ **Hong Kong University of Science and Technology** Hong Kong SAR, China
Ph.D. - Applied Mathematics and Statistics September 2019 - August 2023
Supervisor: Jian-Feng Cai and Dong Xia

- ▶ **Zhejiang University** Hangzhou, China
Bachelor of Science - Mathematics and Applied Mathematics September 2015 - June 2019
Graduated from ChuKoChen Honors College with honor

RESEARCH INTEREST

High dimensional statistical inference; Matrix/Tensor learning; Signal Processing; Non-convex Optimization; Online Learning; Federated Learning.

PUBLICATIONS

- [1] *Online tensor learning: Computational and statistical trade-offs, adaptivity and optimal regret*
Jingyang Li, Jian-Feng Cai, Yang Chen, and Dong Xia
The Annals of Statistics 54 (3), 1153–1177

- [2] *Online policy learning and inference by matrix completion*
Congyuan Duan, Jingyang Li, and Dong Xia
Journal of the American Statistical Association 121 (553), 598–611

- [3] *Computationally efficient and statistically optimal robust high-dimensional linear regression*
Yinan Shen, Jingyang Li, Jian-Feng Cai, and Dong Xia
The Annals of Statistics 53 (1), 374–399

- [4] *Restoration guarantee of image inpainting via low rank patch matrix completion*
Jian-Feng Cai, Jae Kyu Choi, Jingyang Li, and Guojian Yin
SIAM Journal on Imaging Sciences 17 (3), 1879–1908

- [5] *Generalized low-rank plus sparse tensor estimation by fast Riemannian optimization*
Jian-Feng Cai, Jingyang Li, and Dong Xia
Journal of the American Statistical Association 118 (544), 2588–2604

- [6] *Provable sample-efficient sparse phase retrieval initialized by truncated power method*
Jian-Feng Cai, Jingyang Li, and Juntao You
Inverse Problems 39 (7), 075008

- [7] *Image restoration: Structured low rank matrix framework for piecewise smooth functions and beyond*
Jian-Feng Cai, Jae Kyu Choi, Jingyang Li, and Ke Wei
Applied and Computational Harmonic Analysis 56, 26–60

- [8] *Provable tensor-train format tensor completion by riemannian optimization*
Jian-Feng Cai, Jingyang Li, and Dong Xia
Journal of Machine Learning Research 23 (123), 1–77

PREPRINTS

- [1] *Online Riemannian Gradient Descent for Quantum State Tomography with Matrix Product Operators*
Jian-Feng Cai, Jingyang Li, Xiaoqun Zhang, and Yuanwei Zhang
- [2] *Uncertainty Quantification for Noisy Low-tubal-rank Tensor Completion*
Jiuqian Shang, Jingyang Li, and Yang Chen
- [3] *HeteroJIVE: Joint Subspace Estimation for Heterogeneous Multi-View Data*
Jingyang Li and Zhongyuan Lyu
- [4] *Local Interaction Autoregressive Model for High Dimension Time Series Data*
Jingyang Li and Yang Chen
- [5] *Fourier Low-rank and Sparse Tensor for Efficient Tensor Completion*
Jingyang Li, Jiuqian Shang, and Yang Chen
- [6] *Federated PCA and Estimation for Spiked Covariance Matrices: Optimal Rates and Efficient Algorithm*
Jingyang Li, T. Tony Cai, Dong Xia, and Anru R. Zhang
- [7] *Computationally efficient and statistically optimal robust low-rank matrix and tensor estimation*
Yinan Shen, Jingyang Li, Jian-Feng Cai, and Dong Xia

SELECTED INVITED TALKS

- ▶ Related paper: *HeteroJIVE: Joint Subspace Estimation for Heterogeneous Multi-View Data*
Department of Mathematics, East China Normal University, April 2026
Department of Mathematics, Tongji University, March 2026
Department of Mathematics, The Hong Kong University of Science and Technology, February 2026
Department of Mathematics, University of Macau, January 2026
School of Science and Engineering, CUHK-SZ, January 2026
Joint Meetings of 2025 Taipei International Statistical Symposium and the 13th ICSA International Conference, December 2025
IMS Young Mathematical Scientists Forum, NUS, November 2025
- ▶ Related paper: *Online tensor learning: Computational and statistical trade-offs, adaptivity and optimal regret*
Department of Mathematics, Fudan University, June 2026
Hong Kong Baptist University, October 2023
HKUST SIAM Student Chapter Annual Meeting, June 2023
Capital of Statistics, April 2023

SERVICE

- ▶ External Review - University of Macau Multi-Year Research Grant
- ▶ Reviewed Journal (Selected): JASA, JRSSB, JMLR, Statistica Sinica, TPAMI.
- ▶ HKUST SIAM student chapter, 2022-2023

TEACHING

- ▶ Multivariate Calculus (Instructor), 2024
- ▶ Statistical Machine Learning (TA), 2023
- ▶ Introduction to Multivariable Calculus (TA), 2022
- ▶ Matrix Computation (TA), 2021
- ▶ Data Analytic Tools (TA), 2020, 2021
- ▶ Calculus II (TA), 2020
- ▶ Probability (TA), 2019
- ▶ Calculus (TA), 2019