Liangyu Zhang

https://zhangliangyu32.github.io | zhangliangyu@sufe.edu.cn

ACADEMIC POSITIONS

Shanghai University of Finance and Economics

Assistant Professor in the School of Statistics and Data Science   2024 – Present

EDUCATION

Peking University

Ph.D. in Data Science, advised by Professor Zhihua Zhang   2019 – 2024

Peking University

B.S. in Statistics   2015 – 2019

PUBLICATIONS AND PREPRINTS

Journal publications and preprints

- **Estimation and Inference in Distributional Reinforcement Learning.**
  Liangyu Zhang, Yang Peng, Jiadong Liang, Wenhao Yang, Zhihua Zhang
  Annals of Statistics (AoS), 53 (5), 19872011, 2025.

- **Semi-Infinitely Constrained Markov Decision Processes and Provably Efficient Reinforcement Learning.**
  Liangyu Zhang, Yang, Peng, Wenhao Yang, Zhihua Zhang
  IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 46 (5), 3722 - 3735, 2024.
  Preliminary version appeared in Conference on Neural Information Processing Systems (NeurIPS) 2022.

- **Toward Theoretical Understandings of Robust Markov Decision Processes: Sample Complexity and Asymptotics.**
  Wenhao Yang, Liangyu Zhang, Zhihua Zhang
  Annals of Statistics (AoS), 50(6), 3223-3248, 2022.

Conference publications

- **A Finite Sample Analysis of Distributional TD Learning with Linear Function Approximation.**
  Yang Peng, Kaicheng Jin, Liangyu Zhang, Zhihua Zhang
  Conference on Neural Information Processing Systems (NeurIPS) 2025.

- **Statistical Efficiency of Distributional Temporal Difference.**
  Yang Peng, Liangyu Zhang, Zhihua Zhang
  Conference on Neural Information Processing Systems (NeurIPS) 2024.
  (Oral Presentation, 0.3% acceptance rate)

- **Semi-Infinitely Constrained Markov Decision Processes.**
  Liangyu Zhang, Yang Peng, Wenhao Yang, and Zhihua Zhang
  Conference on Neural Information Processing Systems (NeurIPS) 2022.

GRANTS AND FUNDING

NSFC Young Scientists Fund C (Grant No. 12501707).   2026 – 2029

TEACHING EXPERIENCES

- Empirical Processes, Fall 2025. Shanghai University of Finance and Economics.

- Statistical Learning, Fall 2025. Shanghai University of Finance and Economics.

- Empirical Processes, Fall 2024. Shanghai University of Finance and Economics.

- Introduction to Statistics, Fall 2024. Shanghai University of Finance and Economics.

PROFESSIONAL SERVICES

Conference Reviewer

- Conference on Neural Information Processing Systems (NeurIPS): 2023-2025.

- International Conference on Machine Learning (ICML): 2023-2026.

- International Conference on Learning Representations (ICLR): 2024-2026.

Journal Referee

- Journal of Machine Learning Research (JMLR)

- SIAM Journal on Optimization (SIOPT)