

LEI QIAN

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Peking University, Beijing, China, 100871

EDUCATION

Peking University

M.Sc in Data Science, Academy for Advanced Interdisciplinary Studies

Advisor: Prof. Song Xi Chen

Sep. 2023 - Present

East China Normal University

B.Sc in Statistics, School of Statistics

Sep. 2018 - Jul. 2023

RESEARCH INTERESTS

Diffusion Models, High-dimensional Statistics, Machine Learning

RESEARCH EXPERIENCE

Diffusion Model Statistical Theory

Sep. 2023 - Present

Optimal Selection for Kalman Filter

May. 2024 - Present

WORKING PAPER

1. Xiong, H., **Qian, L.**, & Hu, Y. (2026). Schrödinger bridge decomposition. Manuscript. (Submitted to ICML)
2. **Qian, L.**, Qiu, Y. Chen, S. X.(2024). Block ensemble kalman filter with optimal block-width selection under high dimension. Manuscript.

PUBLICATIONS

1. **Qian, L.**, Wu, S., Huang, Y., & Chen, S. X. (2026). Likelihood matching for diffusion models. arXiv preprint arXiv:2508.03636.
2. Liu, X., **Qian, L.**, Chen, S. X., & Tang, N. (2025). Partial functional dynamic backdoor diffusion-based causal model. arXiv preprint arXiv:2509.00472.
3. Sun, M., **Qian, L.**, Mukherjee, A., & Xiang, D.(2023). An EWMA chart for high dimensional process with multi-class out-of-control information via random forest learning. Quality Technology & Quantitative Management, 1-27.

AWARDS AND SCHOLARSHIPS

Outstanding Research Award of Peking University

Sep. 2025

Merit Communist Youth League Cadres of East China Normal University

Apr. 2022

Second Prize of the China Undergraduate Mathematical Contest in Modeling

Dec. 2021

Second Prize of the Chinese Mathematics Competitions

Nov. 2020

Baidu Star Programming Competition Finals

Oct. 2020

Merit Scholarship of East China Normal University

2019/2020/2021

SKILLS

Programming Languages: Python, R, Matlab, C++, SQL

Machine Learning Tools: Pytorch, Tensorflow, Sklearn, Numpy, Pandas

Languages: Mandarin(native), English

Hobbies: Badminton, Fitness, Running