Zhou Qingping

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Work Experience

07/2019.07-	Lecturer, School of Mathematics and Statistics, Central South University
07/2019-05/2020	Machine Learning Engineer, Meituan

Education

2015-2019	Shanghai Jiao Tong University, Shanghai, China
	Ph.D. in Mathematics (Supervisors: Jinglai Li and Xiaoqun Zhang)
	Thesis: "Bayesian inference and Uncertainty Quantification for Medical Image Reconstruction"
2012-2015	Lanzhou University, Gansu, China
	M.A. in Probability and Mathematical Statistics (Supervisor: Jianzhou Wang)
2008-2012	Lanzhou University, Gansu, China
	B.S. in Mathematics and Applied Mathmatics

Research Interests

Bayesian inference, uncertainty quantification, inverse problems

Professional Services

Reviewers	Journal of Computational and Applied Mathematics, Statistics and Computing, IEEE Transactions on Signal Processing

Selected Publications

- A MCMC Method Based on Surrogate Model and Gaussian Process Parameterization for Infinite Bayesian PDE Inversion, Zheng Hu , Hongqiao Wang , and Qingping Zhou, *Journal of Computational Physics*, 2024.

- Deep unrolling networks with recurrent momentum acceleration for nonlinear inverse problems, Qingping Zhou, Jiayu Qian , Junqi Tang , and Jinglai Li, *Inverse Problems*, 2024.

- Bayesian imaging inverse problem with SA-Roundtrip prior via HMC-pCN sampler, Guixian Xu , Huihui Wang , and Qingping Zhou, *Journal of Scientific Computing*, 2024.

- Enhancing electrical impedance tomography reconstruction using learned half-quadratic splitting networks with Anderson acceleration, Jiayu Qian, Yuanyuan Liu, Jingya Yang, Qingping Zhou, *Computational Statistics & Data Analysis*, 2024.

- A comparative study of variational autoencoders, normalizing flows, and score-based diffusion models for electrical impedance tomography, Huihui Wang, Guixian Xu, Qingping Zhou, *Journal of Inverse and Ill-posed Problems*, 2024.

- An Uncertainty-Guided Deep Learning Method Facilitates Rapid Screening of CYP3A4 Inhibitors, Ruixuan Wang , Zhikang Liu , Jiahao Gong , Qingping Zhou, Xiaoqing Guan , and Guangbo Ge, *Journal of Chemical Information and Modeling*, 2023.

- Nonlocal TV-Gaussian prior for Bayesian inverse problems with applications to limited CT reconstruction, Didi Lv, Qingping Zhou, Jae Kyu Choi, Jinglai Li, and Xiaoqun Zhang, *Inverse Problems & Imaging*, 2020.

- Bayesian Inference and Uncertainty Quantification for Medical Image Reconstruction with Poisson Data, Qingping Zhou, Tengchao Yu, Xiaoqun Zhang, and Jinglai Li, *SIAM Journal on Imaging Sciences*, 2020.

- An approximate empirical Bayesian method for large-scale linear-Gaussian inverse problems, Qingping Zhou, Wenqing Liu , Jinglai Li , and Youssef M Marzouk, *Inverse Problems*, 2018.

- A Hybrid Adaptive MCMC Algorithm in Function Spaces, Qingping Zhou, Zixi Hu , Zhewei Yao , and Jinglai Li, *SIAM/ASA Journal on Uncertainty Quantification*, 2017.

- A hybrid model for $\mathrm{PM}_{2.5}$ forecasting based on ensemble empirical mode decomposition and a general regression neural network, Qingping Zhou, Haiyan Jiang, Jianzhou Wang, Jianling Zhou, *Science of the Total Environment* , 2014.

Teaching

Central South University

2020-2023	Advanced Mathematical Statistics
2023-2024	Nonparametric statistics

Teaching Assistant at Shanghai Jiao Tong University

2017-2019	Probability and Mathematical Statistics