Tianyu Xie

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5th Yiheyuan Road, Haidian District, Beijing 100871, China

Education

Peking University | Bachelor Degree   2017.09 – 2021.07
- School of Mathematical Sciences · B.S. in Statistics
- National School of Development · B.A. in Economics
- GPA: 3.77/4.0; Ranking: 4/38; Selected into the "Top Talent Program in Basic Disciplines" of MOE.

Peking University | Ph.D. Student   2021.09 –
- School of Mathematical Sciences · Statistics
- Research Interests: Bayesian Inference; Generative Models; Computational Biology.

Publications

- **ARTree: A Deep Autoregressive Model for Phylogenetic Inference**
  Tianyu Xie, Cheng Zhang.
  In Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS 2023, spotlight).

- **Hierarchical Semi-Implicit Variational Inference with Application to Diffusion Model Acceleration**
  Longlin Yu*, Tianyu Xie*, Yu Zhu*, Tong Yang, Xiangyu Zhang, Cheng Zhang.
  In Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS 2023).

- **Improving Tree Probability Estimation with Stochastic Optimization and Variance Reduction**
  Tianyu Xie*, Musu Yuan*, Minghua Deng, Cheng Zhang.
  Under review for Computational Statistics & Data Analysis. 2023.

Awards

- **Merit Student**   *Peking University*   2018 & 2022 & 2023
- **Excellent Student Leader**   *Peking University*   2019
- **Excellent Student Leader Pacesetter**   *Peking University*   2020
- **Excellent Graduate**   *Peking University*   2021
- **Freshman Scholarship**   *Peking University*   2017
- **May Fourth Scholarship**   *Peking University*   2018
- **Leo Koguan Scholarship**   *Peking University*   2020
- **NeurIPS Scholar Award**   *NeurIPS*   2023

Competitions

- **11th National College Students Mathematical Competition (Final)**   *First Prize*   2021
- **Contemporary Undergraduate Contest in Mathematical Modeling**   *Second Prize*   2019
- **11th&12th National College Students Mathematical Competition**   *First Prize*   2019 & 2021

Internship

Research Institute, Megvii Technology Inc.   2022.12 –
- Project: Accelerated Sampling Algorithms of Diffusion Models (NeurIPS 2023).
- Project: Flow Matching on Constrained Domains (in progress).

Academic Reports

- **1st Conference on Mathematical Frontiers for Graduates**   *Peking University, Beijing*   2023.10
- **9th National Forum on Statistics for Graduates**   *Renmin University of China, Beijing*   2023.11