XIAO FANG

Department of Statistics, Purdue University, IN – 47906, USA E-mail: fang353@purdue.edu / Phone: +1 (407)–269–4964

RESEARCH INTERESTS

- Multivariate and high-dimensional Statistics
- Bayesian method in machine learning
- Nonparametric Bayesian methods
- Inference with Gaussian processes and stable distribution.

EDUCATION AND TRAINING

- Postdoctoral Fellow, Statistics, Purdue University, West Lafayette, September 2022-present. Supervisor: Anindya Bhadra
- Ph.D., Statistics, University of Florida, Gainesville, July 2022. Advisor: Malay Ghosh
- M. A., Mathematics, Peking University, Peking, June 2015.
- Bachelor of Mathematics, Peking University, Peking, June 2012.

PUBLICATIONS

- Fang, X and Ghosh, M (2023). Posterior Consistency for Bayesian Relevance Vector Machines. The Journal of Machine Learning Research **24**(174):1–17.
- **Fang, X** and Ghosh, M (2023). High-dimensional properties for empirical priors in linear regression with unknown error variance, Statistical Papers: 1-26.

PREPRINTS AND WORKING PAPER

- Fang, X. and Bhadra, A. (2023+). Posterior Concentration for Gaussian Process Priors under Rescaled Matern and Confluent Hypergeometric Covariance Functions (submitted). [arXiv:2312.07502]
- **Fang, X** and Ghosh, M (2023+). Bernstein von-Mises Theorem for g-prior and nonlocal prior(submitted).[arXIv:2401.14584]
- **Fang, X**. and Bhadra, A. (2024+). Rates of posterior concentration based on stable distribution prior (in preparation).

TALKS AND PRESENTATIONS

- **Posterior Consistency for Bayesian Relevance Vector Machines** Bayesian Young Statisticians Meeting (virtual), Nov 2023.
- High-dimensional properties for empirical priors in linear regression with unknown error variance- Invited talk in a weekly colloquium at University of Florida, March 2022.

TEACHING EXPERIENCE

Teaching Assistant, University of Florida

- STA4183: Theory of Interest (Fall 2018, Fall 2019, Fall 2020)
- STA4186: Investment and Financial Markets (Spring 2020)
- STA4321: Introduction to Probability (Fall 2016, Spring 2017)

COMPUTER SKILLS

Proficient in R

REFERENCES:

Anindya Bhadra Department of Statistics, Purdue University

Phone: (765) 496-9551 Email: bhadra@purdue.edu

Malay Ghosh Department of Statistics, University of Florida

Phone: (352) 273-2992 Email: ghoshm@ufl.edu

Qian Qin Department of Statistics, University of Minnesota

Phone: (612) 625-9861 Email: qqin@umn.edu