

FELIX JIMENEZ

Work Authorization: US Citizen

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EXPERIENCE

Research Assistant

Texas A&M University

📅 Dec. 2020-Present 📍 College Station, TX

- Scalable Bayesian optimization, latent space optimization and Gaussian processes approximation.
- TA for statistical learning for one semester.

Research Intern

Toyota Research Institute

📅 May. 2023-Aug. 2023 📍 Los Altos, CA

- Energy and Materials group.

Research Intern

Microsoft Research

📅 May. 2022-Aug. 2022 📍 Cambridge, MA

- Statistics and AutoML group.
- Automating hyperparameter tuning for vision models using gradient statistics during training.

Mathematical Statistician (Prev. Research Assistant)

National Institute of Standards and Technology

📅 05/2018-09/2020 📍 Boulder, CO

- Stats/ML research: GAN performance on low dimensional multimodal data, hierarchical Gaussian processes for outlier detection.

PUBLICATIONS

- [1] F. Jimenez and M. Katzfuss, "Scalable bayesian optimization using vecchia approximations of gaussian processes," in *International Conference on Artificial Intelligence and Statistics*, PMLR, 2023, pp. 1492–1512.
- [2] J. Cao, M. Kang, F. Jimenez, H. Sang, F. Schafer, and M. Katzfuss, "Variational sparse inverse cholesky approximation for latent gaussian processes via double kullback-leibler minimization," *Accepted to ICML, 2023*.
- [3] F. Jimenez, A. Koepke, M. Gregg, and M. Frey, "Generative Adversarial Network Performance in Low-Dimensional Settings," *Journal of Research of National Institute of Standards and Technology*, vol. 126, 2021.
- [4] K. Tucker, B. Zhu, R. J. Lewis-Swan, J. Marino, F. Jimenez, J. G. Restrepo, and A. M. Rey, "Shattered time: Can a dissipative time crystal survive many-body correlations?" *New J.Phys.*, vol. 20, Dec. 2018.

ABOUT ME

I'm a third year PhD student in the **Katzfuss group** at Texas A&M. I work on scaling Bayesian inference for optimization.

EDUCATION

Ph.D., Statistics

Texas A&M University

📅 2020-2024 📍 College Station, TX

M.S. / B.S., Applied Mathematics

University of Colorado Boulder

📅 2014 – 2018 📍 Boulder, CO

Courses

- Bayesian inference • Bayesian computation • probabilistic graphical models • natural language processing • measure theory • mathematical statistics • linear models • network science • numerical analysis • time series • spatial statistics

Miscellaneous Activities

- Mentoring statistics undergrad student.
- AISTATS 2023 reviewer.

TECHNICAL SKILLS

Programming

- Languages: Python, R
- Libraries: PyTorch, BoTorch, NumPy, Pyro
- Visualization and writing: ggplot, LaTeX.

Stats & ML

- Bayesian optimization, Bayesian statistics
- Gaussian processes, generative adversarial networks