# Diego Mesquita

School of Applied Mathematics Getulio Vargas Foundation Rio de Janeiro (RJ), Brazil

#### **Education**

2021, Doctor of Science, Computer Science, Aalto University, Finland;

2017, Master of Science, Computer Science, Federal University of Ceará, Brazil;

2016, Bachelor of Science, Computer Science, Federal University of Ceará, Brazil.

# Work experience

2022-present, Assistant professor (*professor adjunto*), Getulio Vargas Foundation, Brazil; 2017-2021, Doctoral researcher, Aalto University, Finland.

# **Awards and honours**

2023-present, Young Scientist of Our State, FAPERJ, Brazil

# **Teaching**

Since 2022, I have taught an advanced machine learning class for undergrad students in data science and applied mathematics at the Getulio Vargas Foundation. I have also taught courses in deep generative models at the same institution's doctoral programme in mathematical modelling and data science.

# Research Supervision and Leadership Experience

I lead a growing research group at FGV, comprising 2 post-docs, 2 PhD students, 7 MSc students, and 2 undergrad research assistants.

I have advised over 100 exceptional undergrad students (high school mathletes) in fast-tracking their graduate studies as the FGV coordinator of the PICME program.

I have coordinated one research consortium funded by the CNPq and four other projects financed by the FAPERJ, FAPESP, CNPq, and SVCF.

I have been elected a member of the Brazilian Computer Society's special committee on AI (CEIA) for the 2025-2026 biennium.

#### Graduate alumni

2024, Tiago da Silva (PhD, FGV EMAp)

2024, Alan Matias (PhD, UFC) co-supervised

2024, Mariana Neves (MSc, FGV EMAp)

#### Post-doc advisory

2024-present, Ana Tenório (FGV EMAp)

2022-2024, Eliezer Silva (FGV EMAp)

2023-2024, Jamille Feitosa (FGV EMAp)

#### Selected publications

Opposite to other areas of science, the most prestigious publication venues in computer science are peer-reviewed conferences (see, e.g., csrankings.org). For a comprehensive list of publications, check my Google Scholar profile.

Differentially Private Selection using Smooth Sensitivity, 2025 (IEEE S&P) I. Chaves, V. Farias, A. Perez, D. Mesquita, J. Machado.

Generalization and Distributed Learning of GFlowNets, 2025 (ICLR) T. da Silva, A. Souza, O. Rivasplata, V. Garg, S. Kaski, D. Mesquita.

When do GFlowNets learn the right distribution?, 2025 (ICLR)
T. da Silva, R. Alves, E. da Silva, A. Souza, V. Garg, S. Kaski, D. Mesquita.

Streaming Bayes GFlowNets, 2024 (NeurlPS) T. da Silva, D. de Souza, D. Mesquita.

On Divergence Measures for Training GFlowNets, 2024 (NeurlPS) T. da Silva, E. Silva, D. Mesquita.

Meta-analysis of Bayesian analyses, 2024 (Bayesian Analysis)
P. Blomstedt, D. Mesquita, O. Rivasplata, J. Lintusaari, T. Sivula. J. Corander, S. Kaski.

Amortized Variational Deep Kernel Learning, 2024 (ICML) A. Matias, C. Mattos, J. Gomes, D. Mesquita.

Embarrassingly Parallel GFlowNets, 2024 (ICML) T. da Silva, A. Souza, L. Carvalho, S. Kaski, D. Mesquita.

Thin and deep Gaussian processes, 2023 (NeurIPS)
D. de Souza, A. Nikitin, S. T. John, M. Ross, M. A. Álvarez, M. P. Deisenroth, J. Gomes, D. Mesquita, C. Mattos.

Distill n' Explain: explaining graph neural networks using simple surrogates, 2023 (AISTATS) T. Pereira, E. Nascimento, L. Resck, D. Mesquita, A. Souza.

Provably expressive temporal graph networks, 2022 (NeurIPS) A. Souza, D. Mesquita, S. Kaski, V. Garg.

Parallel MCMC without embarrassing failures, 2022 (AISTATS) D. de Souza, D. Mesquita, S. Kaski, L. Acerbi.

Federated stochastic gradient Langevin dynamics, 2021 (UAI) K. El Mekkaoui, D. Mesquita, P. Blomstedt, S. Kaski.

Rethinking pooling in graph neural networks, 2020 (NeurlPS) D. Mesquita, A. Souza, S. Kaski.

Learning GPLVM with arbitrary kernels using the unscented transformation, 2020 (AISTATS) D. de Souza, D. Mesquita, J. Gomes, C. Mattos.

Parallel MCMC using deep invertible transformations, 2019 (UAI) D. Mesquita, P. Blomstedt, S. Kaski.