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INTERETS DE RECHERCHE

Inférence approximative, Méthodes d'inférence variationnelle

FORMATION

2021	Doctorat en Mathématiques Appliquées, Télécom Paris, France
2018	MSc in Mathematical and Computational Finance, University of Oxford, Royaume-Uni
2018	Diplôme d’Ingénieur, Télécom Paris, France

EXPERIENCE PROFESSIONNELLE

Positions académiques principales

2023 - Présent	Professeur assistant, ESSEC Business School, France
2021 - 2022	Post-Doctorante, University of Oxford, Royaume-Uni

BOURSES, PRIX ET DISTINCTIONS

Prix et Distinctions

2022	Premier Prix de Thèse 2022 de l'Institut Polytechnique de Paris

PUBLICATIONS

Articles

DAUDEL, K., DOUC, R. et ROUEFF, F. (2023). Monotonic Alpha-divergence Minimisation for Variational Inference. *Journal of Machine Learning Research*, 24(62), pp. 1-76.

DAUDEL, K., BENTON, J., SHI, Y. et DOUCET, A. (2023). Alpha-divergence Variational Inference Meets Importance Weighted Auto-Encoders: Methodology and Asymptotics. *Journal of Machine Learning Research*, 24(243), pp. 1-83.

DAUDEL, K., DOUC, R. et PORTIER, F. (2021). Infinite-dimensional gradient-based descent for alpha-divergence minimisation. *Annals of Statistics*, 49(4), pp. 2250 - 2270.

Actes d’une conférence

DAUDEL, K. et DOUC, R. (2021). Mixture weights optimisation for Alpha-Divergence Variational Inference. Dans: *35th Conference on Neural Information Processing Systems (NeurIPS 2021)*. Curran Associates, Inc. pp. 4397–4408.

Conférences

DAUDEL, K. et ROUEFF, F. (2025). Learning with Importance Weighted Variational Inference: Asymptotics for Gradient Estimators of the VR-IWAE Bound. Dans: 2025 BIRS Workshop "Efficient Approximate Bayesian Inference". Banff.

DAUDEL, K. et ROUEFF, F. (2024). Learning with Importance Weighted Variational Inference: Asymptotics for Gradient Estimators of the VR-IWAE Bound. Dans: 2024 Rethinking the Role of Bayesianism in the Age of Modern AI. Saarbrücken.

DAUDEL, K., BENTON, J., SHI, Y. et DOUCET, A. (2023). Alpha-divergence Variational Inference Meets Importance Weighted Auto-Encoders: Methodology and Asymptotics. Dans: 37th Conference on Neural Information Processing Systems 2023 (NeurIPS 2023). New-Orleans.

Documents de travail

DAUDEL, K. et ROUEFF, F. (2024). *Learning with Importance Weighted Variational Inference: Asymptotics for Gradient Estimators of the VR-IWAE Bound*. arXiv.

ENSEIGNEMENT

2023	Statistical Inference, ESSEC Business School, France
2023	Business Statistics & Introduction to Analytics, ESSEC Business School, France