

Kamélia DAUDEL

Assistant Professor

kamelia.daudel@essec.edu

Department: Information Systems, Data Analytics
and Operations
Campus de Cergy

DIPLOMAS

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|------|--|
| 2021 | PhD in Applied Mathematics
(Télécom Paris France) |
| 2018 | MSc in Mathematical and Computational Finance
(University of Oxford United Kingdom) |
| 2018 | Diplôme d'Ingénieur
(Télécom Paris France) |

CAREER

FULL-TIME ACADEMIC APPOINTMENTS

- | | |
|-------------------|--|
| 2023 - Now | Assistant Professor (ESSEC Business School France) |
| 2021 - 2022-12-31 | Post-Doctorate (University of Oxford United Kingdom) |

PUBLICATIONS

JOURNAL ARTICLES

[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.](#)

[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.](#)

CONFERENCE PROCEEDINGS

[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.](#)

PRESENTATIONS AT AN ACADEMIC OR PROFESSIONAL CONFERENCE

[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.](#)

[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.](#)

WORKING PAPERS

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