# Kamélia DAUDEL

Assistant Professor
Department: Information Systems, Data Analytics and Operations
ESSEC Business School
3 avenue Bernard Hirsch
95021 Cergy-Pontoise
France

Email: kamelia.daudel@essec.edu

## RESEARCH INTERESTS

Approximate inference, Variational inference methods

## EDUCATION

| | |
|---|---|
| 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 |

## EMPLOYMENT

### Full-time academic positions

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|---|---|
| 2023 - Present | Assistant Professor, ESSEC Business School, France |
| 2021 - 2022 | Post-Doctorate, University of Oxford, United Kingdom |

## GRANTS AND HONORS

### Awards and Honors

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|---|---|
| 2022 | First prize of Institut Polytechnique de Paris Best Thesis Award 2022 |

## PUBLICATIONS

### Journal Articles

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

### Conference proceedings

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

### Conferences

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

## TEACHING EXPERIENCE

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