# El Mahdi Khribch

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## About Me

I am a final year PhD student at ESSEC Business School specializing in computational statistics and statistical learning theory. My research focuses on unbiased MCMC methods and coupling techniques for Monte Carlo estimation, variational approximations, and PAC-Bayesian theory.

## Education

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|---|---|---|
| 2022 - present | **Ph.D. in Statistics and Data Analytics**<br>*Supervised by Pr. Pierre Alquier and Pr. Pierre Jacob* | ESSEC Business School, Paris, France |
| 2021 | **Master of Science: MVA** | ENS Paris-Saclay, Paris, France |
| 2020 | **Master of Science: Statistical Sciences** | Oxford University, Oxford, UK |
| 2019 | **Year Abroad** | Harvard University, Cambridge, USA |
| 2018 | **Master of science and executive engineering** | Mines-ParisTech, Paris, France |

## Publications

**On importance sampling and independent Metropolis–Hastings with an unbounded weight function**
George Deligiannidis, Pierre E. Jacob , El Mahdi Khribch , Guanyang Wang
*Submitted and under review for Annals of Statistics*

**Convergence of Statistical Estimators via Mutual Information Bounds**
El Mahdi Khribch, Pierre Alquier
*Submitted and under review for Journal of Machine Learning Research*

## Awards and Honors

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| 2025 | **Best Poster Award** | Bayes Comp 2025, Singapore |
| 2018 | **French Government's Major-Excellence Scholarship** (37,830 €) | Given to the top 40 students |
| 2018 | **Top 1% students in Morocco** | Concours National Commun ranking |

## Research Experience

**Visiting PhD Student** Warwick Department of Statistics Feb-Mar 2026

**Master's Dissertation** Paris, France - 2021
– *On PAC Bayesian bounds: Faster rates in hostile grounds*

**Master's Dissertation** Oxford, UK - 2021
– *On mixing Times of Metropolized Algorithm with Optimization Step (MAO): A New Framework*

**Research Assistant** Harvard Department of Statistics - 2019
– *Pricing American Options: The Feed Forward Neural Network approach*

## Teaching Experience

**Teaching Assistant - ENSAE** 2023-2024
Simulation and Monte-Carlo Methods

**Teaching Assistant - ENSAE** 2023-2024
Introduction to Stochastic Processes

**Teaching Assistant - ENPC** 2023-2025
High dimensional Statistics course

## Skills

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| **Programming** | Python, R, LaTeX, ,TensorFlow, PyTorch |
| **Languages** | English (Bilingual), French (Native Speaker), Arabic (Native Speaker), Spanish (Intermediate - European Union Reference Level B1) |

## Additional Information

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| **Sports** | Football, Basketball (Played in College level regional league) |
| **Arts & Culture** | Cinema, Theater, Poetry, Member of debating club PSL University |

Last updated: November 5, 2025