

YASSINE BOUKHATEB

PhD STUDENT IN MATHEMATICS

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French citizen ◇ Born 01-10-2002 ◇ Office : ???, ENSAE Paris

EDUCATION

CREST-ENSAE - Institut Polytechnique de Paris

2025 – Present

Ph.D. in Mathematics

Under the supervision of [Victor-Emmanuel Brunel](#) and [Austin J. Stromme](#)

Institut des Mathématiques d'Orsay, Université Paris-Saclay

2024 – 2025

M.Sc. in Probability and Statistics

Related courses: Concentration of Measure, Stochastic Calculus, High-dimensional probability and statistics.

ENSAE, Institut Polytechnique de Paris

2022 – 2025

Studies in mathematics and economics

GPA: 4.0/4.0

Related courses: Measure and Probability Theory, Functional Analysis, Convex Optimization, Optimal Transport, Theoretical Machine Learning, Statistics.

Lycée Louis-Le-Grand, Paris

2020 – 2022

Classes préparatoires (MPSI–MP*)

Relevant courses: Mathematics (Algebra, Topology, Analysis), Theoretical Physics (Electromagnetism, Quantum Physics), Programming (Python and SQL)

RESEARCH INTERESTS

Probability Theory, Statistics (Parametric and Nonparametric), Statistics in Metric Spaces, Optimization, Geometry, Geometric Functional Analysis.

RESEARCH EXPERIENCE

Master's Thesis Internship

May 2025 – Sept 2025

Supervisors: Damien Garreau (CAIDAS, JMU Würzburg) and Eddie Aamari (DMA, ENS Paris)

CAIDAS Lab – Julius-Maximilians-Universität, Würzburg, Germany

- **Research Topic:** Review and advance the mathematical analysis of the UMAP (Uniform Manifold Approximation and Projection) algorithm, a nonlinear dimensionality reduction method.

Research Internship in Mathematics

Jun 2024 – Oct 2024

Supervisor: Victor-Emmanuel Brunel (CREST)

Palaiseau, France

- **Research Topic:** Further investigation of Klartag's results on the Central Limit Theorem for convex bodies, with an emphasis on Stein's method and convex geometry techniques.

INDUSTRY EXPERIENCE

Data Analyst – Internship

Jun 2023 – Aug 2023

Clap Partners, HR Consulting Firm

Montrouge, France

- Created reports using the SAP SF People Analytics Story solution.
- Monitored the creation of a connector between PowerBI and PMA (Performance Management Analytics).

SKILLS AND LANGUAGES

Languages	French (Native), English (Proficient), Spanish (Beginner)
Technical Skills	Python, R, LaTeX, Git/GitHub