YASSINE BOUKHATEB

PhD STUDENT IN MATHEMATICS

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French citizen ⋄ Born 01-10-2002 ⋄ Office : x - ENSAE Paris

EDUCATION

CREST-ENSAE – Institut Polytechnique de Paris   *Oct 2025 – Present*
Ph.D. in Mathematics   Palaiseau, France
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   Orsay, France
Related courses: Concentration of Measure, Stochastic Calculus, High-dimensional probability and statistics.

ENSAE – Institut Polytechnique de Paris   *2022 – 2025*
Studies in mathematics and economics   Palaiseau, France
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   *2020 – 2022*
Classes préparatoires (MPSI–MP*)   Paris, France
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 (JMU Würzburg) & Eddie Aamari (ENS Paris)   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