CLÉMENT BERENFELD

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EDUCATION

Université Paris-Dauphine Paris, France PhD in statistics 2019 - 2022 Université Paris-Saclay Orsay, France Graduate studies, Statistics and Machine Learning. Highest Honor 2017 - 2018 École Normale Supérieure de Paris Paris, France Undergraduate and graduate studies, Mathematics department. Highest Honor 2014 - 2019 Versailles, France Lycée Sainte Geneviève Preparatory school in mathematics and physics. Admitted by competitive examination to ENS Paris. 2012 - 2014

EXPERIENCES

Institut of Mathematics, Potsdam University

Potsdam, Germany

Postdoctoral Researcher

2022 - Today

- Research project on various topics of *unsupervised* learning.
- Teaching the advanced statistical analysis course of the graduate program of Potsdam University.

CEREMADE, Université Paris-Dauphine

Paris, France

PhD student under the supervision of Marc Hoffmann

2019 - 2022

- The PhD thesis tackles numerous statistical problems formulated under the so-called *manifold hypothesis*.
- Teacher assistant in statistics for undergraduate and graduate students, and supervision of master theses.

Signactif Bagneux, France 2017

Machine Learning engineer

- Analysis and prediction of crowd motion through novel machine learning algorithms.

HONORS AND AWARDS

MJLD Award: Best PhD in statistics

2023

Awarded every three years by the French Statistical Society

Humboldt research fellowship (declined)

2023

SKILLS

Mathematics Probability, Statistics, Machine Learning, Data Analysis

Programming Python (including PyTorch), R

Languages French, English (fluent), German (notions)

SELECTED PUBLICATIONS

- 1. Optimal reach estimation and metric learning (2023), with E. Aamari and C. Levrard. *Annals of Statistics*.
- 2. Estimating a density near an unknown manifold: a Bayesian nonparametric approach (2024), with P. Rosa and J. Rousseau. Accepted for publication in Annals of Statistics.
- 3. A theory of stratification learning (2024), with E. Aamari. *In revision*.

My other publications and my PhD manuscript are available on Google Scholar or my personal webpage.

INTERESTS

Brazilian jiu-jitsu, rock climbing, music production.