# HABIBI MOHAMMED-YASSINE

+33 7 66 98 90 49 ➤ habibimohammedyassine@gmail.com

> in LinkedIn **O** GitHub **Q** Personal Website

## **EDUCATION**

## 2025 - 2026 | Public Policies and Actions for Sustainable Development (PAPDD)

ENPC (IPP) and AgroParisTech (Paris-Saclay Uni.), France

General Law, Markets and regulation, Sociology of local power, Sociological news, Public management tools, Digital transformation, Environmental assessment, Ecological transition, European Union, Transport, Agriculture and food, Energy and territories, Forest and wood,

## 2024 - 2025 | Master's Degree: Mathematics, Vision, Learning (MVA)

 $ENS\ Paris-Saclay\ (Paris-Saclay\ Uni.),\ France$ 

Representation learning, Large Language Models, Deep Learning, Computational Optimal Transport, Reinforcement learning, Convex optimization, Computational statistics, Geometric data analysis, Geometric deep learning, Kernel Methods, Online algorithms, Inverse problems and imaging, Data generation by transport and denoising.

## 2021 - 2024 | Master's Degree : Ingénieur Polytechnicien Program

École Polytechnique (IPP), France

Stochastic calculus, Monte-Carlo methods, Optimization and control, Statistical Learning Theory, Data Analysis, Regression and Classification, Random models for biology and ecology, Random and statistical process modeling

## 2019 - 2021 | Bachelor's degree / Classes préparatoires

Lycée Sainte-Geneviève, Versailles, France

Top 25 over 150 students. Majored in mathematics, physics, and computer science. Conducted a group project on crowd dynamics.

## Research experiences

#### 04/2025 - 08/2025 | Neuroscience-Inspired Encoding and Learning: A Path to Robust Representation Learning OIST, Japan

Superviser: Pr. Makoto Yamada (Machine Learning and Data Science Unit)

Explored frontiers between robust representation learning and neuroscience-inspired encoding and learning. NeurIPS 2025 workshop.

### 04/2024 - 07/2024 | Deep Learning and ABC for parameter inference

Columbia University, United States

Superviser: Dr. Simon Tavaré (Herbert and Florence Irving Institute for Cancer Dynamics)

Infered parameters of finite sites evolutionary models to fit them to speciffic cancer data. Applied Deep Learning framework to summarize genomic data observed in a sample of cells & Random Forest Approximate Bayesian Computation (RF-ABC) to infer multivariate vectors of parameters from the summarized genomic data.

## Professional experiences

### Managing Application's Problem

Eurofins, Hamburg, Germany

June 2023 - August 2023

Analyzed error logs, identified problems, maintained backlog, and created KPIs dashboards for the eurofins network of analysis laboratories.

## Teaching Assistant in Mathematics

Lycée Sainte-Geneviève, Versailles, France

September 2022 - June 2023

Advised and evaluated students preparing for the entrance exams of French engineering schools.

## SKILLS AND INTERESTS

#### Languages Computing Skills Interests

French: Native Speaker Python, Java, C++, OCaml Violin – 8 years of Conservatory / 10 LaTeX, Pytorch, Tensorflow, Scikit-English: Proficient years of orchestra

Chinese: Intermediate learn, Pandas, Seaborn Running and Cycling Choir

Arabic: Intermediate