HABIBI MOHAMMED-YASSINE

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in LinkedIn O GitHub O Personal Website

Graduated from the MVA Master in 2025 | Civil Servant Engineer (IPEF)

POSITIONS AND RESEARCH EXPERIENCES

09/2025 - Present | Ingénieur-élève des ponts, des eaux et des forêts - Trainee Civil Servant Civil servant engineer trainee as member of the French "Corps des IPEF" (French Ministries of Agriculture and Ecological Transition)

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

Supervisor: 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 | Research Assistant - Deep Learning and ABC for parameter inference

Columbia University, United States

Supervisor : 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.

09/2023 - 03/2024 | Research Project - Applying Machine Learning to Weather Forecasting

École polytechnique, France

Supervisor: Pr. Julien Chiquet (Paris-Saclay University, INRAE, AgroParisTech)

Compared and experimented with logistic regression, random forest, XGB, LSTM, CNN to predict rainfall and train a classification model.

09/2023 - 12/2023 \mid Nanoparticles synthesis & H_2 production

École polytechnique, France

Research project supervised by Pr. Grégory Danoun

Nanoparticle synthesis of ZnO and CdS, photocatalytic reactions for hydrogen production from waste.

11/2022 - 02/2023 | Sound Wave Propagation and Invisibility Geometries École polytechnique, France Research project supervised by Pr. Lucas Chesnel

Studied the dependence of a PDE solution on the geometry to determine conditions to inhibit reflection or achieve perfect transmission.

EDUCATION

09/2025 - 07/2026 | Public Policies and Actions for Sustainable Development (PAPDD)

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

Courses followed: 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,

09/2024 - 08/2025 | Master's Degree : Mathematics, Vision, Learning (MVA)

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

Relevant courses followed: Representation learning for computer vision and medical imaging, Large Language Models: introduction and applications for code, Deep Learning in Practice, Computational Optimal Transport, Reinforcement learning, Convex optimization, Computational statistics, Geometric data analysis, Geometric deep learning & geometry processing, Kernel Methods for machine learning, Stopping times and online algorithms, Inverse problems and imaging: stochastic and statistical approaches, AI data generation by transport and denoising.

09/2021 - 08/2024 | Master's Degree : Ingénieur Polytechnicien Program

École polytechnique (IPP), France

Relevant courses followed: 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

09/2019 - 07/2021 | 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.

PUBLICATIONS

Conferences

WiML @ NeurIPS 2025 - Neuroscience-Inspired Encoding and Learning: A Path to Robust Representation Learning

OTHER 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

LanguagesComputing SkillsInterests☑ French: Native SpeakerPython, Java, C++, OCamlViolin − 8 years of Conservatory / 10☑ English: ProficientLaTeX, Pytorch, Tensorflow, Scikit-
learn, Pandas, Seabornyears of orchestra☑ Arabic: IntermediateRunning and Cycling☑ Arabic: IntermediateChoir