HAMDA HMIDA

AI/ML Engineer

@ hamda.hmiida@gmail.com 📞 +33 7 48 29 75 31 📍 Nice, France
in hamda-hmida ⌭ HamdaHmida

PROFESSIONAL EXPERIENCES

AI Researcher
CEMEF, Mines Paris - PSL

📅 Dec 2024 – Nov 2027 📍 Sophia Antipolis

- Advancing Foundation Models for fluid flow simulation and prediction.

Graduation Internship
AIRBUS

📅 Mar 2024 – Sep 2024 📍 Toulouse

- Design a Reinforcement Learning algorithm to assist pilots in emergency diversions by optimizing for minimal time, fuel consumption, and diversion cost, with the goal of reaching the nearest airport with explanations.

Software Engineer
ReDX Technologies

📅 Jun 2023 – Jan 2024 📍 Sfax

- Conduct in-depth research to optimize the Digital Rock Physics Workflow using super resolution, diffusion models, and segmentation techniques.
- Investigate the application of MONAI, a medical imaging deep learning framework, to analyze digital rock images for oil exploration.

ACADEMIC BACKGROUND

DOCTOR OF PHILOSOPHY
École des Mines de Paris , PSL University

📅 Dec 2024 – Nov 2027

Doctoral studies in Numerical Mathematics, High-Performance Computing, and Data

NATIONAL ENGINEERING DEGREE
Ecole Polytechnique de Tunisie , University of Carthage

📅 Sep 2021 – Sep 2024

Multidisciplinary Engineering Studies-Masters of Engineering Majoring in Signal and Systems

PRE-ENGINEERING CYCLE
The Preparatory Institute for Engineering Studies of Monastir

📅 Sep 2019 – Jun 2021

Finished by succeeding in the national pre-engineering exam (Physics - Chemistry) with a national rank : 8 / 1000

ACADEMIC PROJECTS

- **Social Network Graph Generation for Influence Prediction** Developing an AI-based system using GraphGAN and influence-ranking to generate social network graphs, predict key influencers, and simulate information spread.
- **Operational Research project to apply meta-heuristic techniques for optimizing the Traveling Salesman Problem** (Applied to 70 cities) .
- **Market Sales Forecasting System with MLOps Integration using ARIMA and the Prophet model** (MSE 1.623).

SUMMARY

Highly motivated and results-oriented, passionate about continuous learning and development and actively seeking to contribute significantly to the team's success

CERTIFICATES

- Neural Networks and Deep Learning
- Machine Learning with Python

HONORS & AWARDS

Computer Vision for License Plate Recognition, **Ranked 1/88** (Zindi)
UmojaHack2023 Cryptojacking Challenge, **Ranked 3/247** (Zindi)
Tunisian Collegiate Programming Contest, **Ranked 16/120**

PROGRAMMING AND IT TOOLS

Python | PyTorch | C/C++ | Java
SQL | Bash Scripting | Git

TECH KNOWLEDGE

Data analytics | Machine Learning
Reinforcement learning | Planning
Programming | Problem Solving

SOFT SKILLS

Teamwork | Communication
Leadership | Time management

LANGUAGES

English (TOEIC B2)
French (DELF B2)
Arabic : Native

PASSION

Traveling | Video Games
Ping-Pong