

# Mehdi BEN ATTIA

# Data Scientist

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Paris, France

Mehdi Ben Attia

Git Repository

#### **Professional Experiences**

#### Machine Learning Engineer - Apprenticeship Safran

09/2024 - 09/2025

- Designed and trained RNN/LSTM models for engine health monitoring using sensor data using Python, PyTorch, GitLab, and AWS.
- Developed a RAG (Retrieval-Augmented Generation) system to improve internal document search using LiteLLM, LlamaIndex, Qdrant, HyDE, LangChain, and Claude.

#### AI Engineer - Internship

01/2024 - 07/2024

Paris, France

Paris. France

Scaylab

- Fine-tuned large language models (LLMs) to build recommendation and expert-matching systems, using Python, LlamaIndex, Mistral, Claude, LangChain, and ChromaDB.
- Deployed AI systems in containerized environments using Docker, and orchestrated deployments via AWS ECR and ECS for scalable performance.

# AI Developer - Freelance

Data Scientist - Internship

09/2023 - 01/2024

Symmetryk

- Built a RAG system to optimize document retrieval using Python, LlamaIndex, Faiss, Qdrant, LangChain, and multiple indexing techniques (TF-IDF, BM25, embeddings).
- Collected and analyzed user feedback to improve search accuracy using reinforcement learning from human feedback (RLHF).

06/2023 - 08/2023

- CarNet Paris, France • Designed and implemented a recommendation system in Python to guide users toward optimal repair centers,
- Deployed the system to production via AWS stack: S3, SageMaker, Lambda, and ECS, ensuring scalability and reliability.

#### Achievements

### 1st place - AI4Health Hackathon 🛭

using TF-IDF, KNN, and cosine similarity.

05/2023

- Fine-tuned a large language model (GPT-2) to identify and classify the severity of side effects from medication usage.
- Built a demo interface using Streamlit; utilized HuggingFace Transformers.

#### 1st place - OpenGovData Hackathon 🖸

04/2023

• Developed an intelligent solution to simplify and automate access to mammography services using public health datasets.

# 1st place - CardioHackathon 🛮

03/2023

• Designed a smart decision-support tool to assist physicians in treating patients with heart failure using predictive modeling and medical datasets.

#### Education

#### MS Expert Big Data Engineer

Université de Technologie Troyes

2024 - 2025

#### Prépa intégrée / Software Engineer - Data Science

Ecole Supérieure Privée d'Ingénierie et de Technologies 🖸 2019 - 2024

## **Personal Projects**

### **Skill-Based Curriculum Platform**

• Python, Web Scraping, Data Preprocessing, NLP, Recommandation System, SkillNER, Data Visualization, Power BI.

# **Chronic Kidney Disease Prediction**

• Business Understanding, Data Preprocessing, training and finetuning a machine learning model, evaluating, deployment Flask.

#### **Skills**

#### AI / Data Science

Python, Machine Learning, Deep Learning, NLP, LLM, RAG, TensorFlow, Pytorch, Data Analysis, Power BI, Dataiku, LlamaIndex, Ollama, HuggingFace, Langchain.

### **Databases**

SQL, MongoDB, Qdrant, ChromaDB, ElasticSearch, Neo4J.

### DevOps / MLOps

Github, GitLab, AWS, Docker, Airflow, Spark.

#### Certifications

- Microsoft Certified Power BI Data Analyst Associate 🛚
- Microsoft Certified AI Fundamentals
- PMI Project Mangament Ready 🛮

#### Languages

• Arabe / Français / Anglais - Courant