

Oumayma IHRISSANE

Data & AI Engineering | PFE Internship 2027

Available January 2027 · End-of-Studies Internship · International Mobility

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 [Portfolio](#)

 [Oumayma Iharrassane](#)

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Profile

Final year engineering student specializing in Data Engineering at ENSA Al Hoceima, seeking a PFE internship in data-driven and AI-related domains. Passionate about data, artificial intelligence, and scalable systems, with hands-on experience gained through academic and professional projects.

Education

Engineering Studies in Data Engineering

2022 – Present

National School of Applied Sciences (ENSA)

Al Hoceima, Morocco

Technical Skills

Programming : Python , SQL, R

Data Engineering & Big Data : Spark, Flink, Hadoop, Airflow, PostgreSQL, MongoDB, Cassandra, MinIO

Machine Learning & AI : Scikit-learn, TensorFlow, Keras, LangChain, LangSmith, FAISS, ChromaDB

Tools & Platforms : Docker, Git, GitHub, FastAPI, Streamlit, Power BI, Jupyter Notebook, Railway

Professional Experience

Caisse de Dépôt et de Gestion (CDG)

Rabat, Morocco | August, 2025 | [Repo](#)

AI & Data Engineering Intern

- Developed a Proof-Of-Concept RAG chatbot using LLMs, FAISS, and LangChain, with data pipelines for web/PDF processing and an interactive Streamlit interface.

Voynich SARL

Mohammedia, Morocco | July – August, 2026 | [Repo](#)

AI & Data Engineering Intern

- Designed and implemented **Morafiq**, a multilingual **RAG-based AI assistant** with text/voice interaction, enhancing retrieval and generation through corpus enrichment, cross-encoder reranking, prompt engineering, and LangSmith evaluation, improving Overall Score **from 0.35 to 0.51** and Procedure Correctness **from 0.58 to 0.77**.

Projects

TaaSim | Real-Time Mobility & Big Data Platform

[Repo](#)

- Engineered geospatial remapping and map-matching of 1.7M+ taxi trips from Porto to Casablanca.
- Evaluated GeoJSON filtering, OSMnx, and OSRM for realistic mobility data transformation.

Brain Tumor Detection System | Deep Learning & Medical Computer Vision

[Repo](#)

- Built a deep learning pipeline for brain tumor classification and segmentation from MRI scans
- Integrated LLM + Contextual RAG module to generate a medical report with findings and recommendation

Crop Yield Prediction | Machine Learning

[Repo](#)

- Engineered a leakage-free end-to-end ML pipeline for crop yield prediction
- Evaluated models using cross-validation, Selected Random Forest achieving strong performance $R^2 = 0.98$

Certifications

CS50 - Introduction to CS

Harvard University | edX

08/2023 - 12/2024 | [link](#)

Introduction to data analysis

Young Researchers Forum

10/03 - 16/03 , 2025 | [link](#)

Languages

Arabic | French | English

Spanish , Chinese : Beginner

Leadership & Impact

• World Youth Festival - Russia

• | Moroccan Delegate – Digitalization & IT | [2026](#)

• DigiGirlz Mentorship Program - Morocco

| STEM Mentor

| [2026](#)

• AlgoWave Programming Club - Morocco

| Founder

| [2023](#)