# **IMANE EL MISSAOUI**

DATA SCIENTIST

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Website

Portfolio



Paris, France

## EXPERIENCE

#### Sorbonne University Computer Science Laboratory

DATA SCIENTIST APPRENTICE

Paris, France Dec 2023 - Present

## • Embedded Al | Endoscopic capsule project :

- Developed and Studied new protocols for the collection of medical data from clinical trials for the testing and validation of capsule prototypes.
- Designed and implemented a hybrid machine learning classification model that processes over 10 000 endoscopic images, automating colorectal polyp detection and classification and providing actionable healthcare insights.
- Designed and implemented a NoSQL database with separate dev and prod environments to manage data from endoscopic capsule trials, enabling scalable and efficient data collection for future research.

## Ankle Joint Inflammation Monitoring:

- Built a multimodal database to track ankle joint inflammation, enhancing post-surgical monitoring and diagnostic tools for ligament
- Conducted statistical analysis and symbolic fusion of the data for the development of a diagnostic aid system for ankle ligament injuries and post-operative monitoring.
- Developed a real-time dashboard that processes and visualizes signals (e.g., ECG, PPG) from the database, displaying key metrics such as heart rate, SpO2, and stress levels, enabling more informed clinical decision-making.

## Lille Neuroscience and Cognition Center

Lille, France

**DATA SCIENTIST INTERN** 

Mar 2023 - Aug 2023

Executed comprehensive analysis of 2,000+ MRI images, integrating machine learning and Topological Data Analysis to create a robust stratification model for improving parkinsonian patients outcome predictions.

#### **Academic Projects**

Masters Thesis: Built a knowledge graph using Neo4J and NLP, two innovative pipelines one based on ontology-driven entity extraction using the scispaCy library, and another one using a LLM(Llama3) to extract knowledge from unstructured text, without using a predefined ontology. Offering insights into how different methods can enhance our understanding of complex disorders like autism.

Project Manager for Research Training: Analyzed the reproducibility of published research, ensuring rigorous scientific standards.

Shiny Dashboard for Obstetrics Data: Created a dynamic dashboard for tracking and visualizing obstetrics data, improving visibility into maternal health trends over time.

Dash Dashboard for Health Data science Market Analysis: Scraped online job postings and applyed NLP clustering to classify key technologies and trends for data science roles.

# EDUCATION

Lille Faculty	of Health	Management	and Engineering	

MASTER'S DEGREE IN HEALTH DATA SCIENCE 2022 - 2024 Lille, France

University of Grenoble Alpes

BACHELOR'S DEGREE IN PHYSICS-CHEMISTRY Grenoble, France 2020-2022

Benguerir High School of Excellence

UNIVERSITY FOUNDATION COURSE (MATH & PHYSICS) 2017-2019 Benguerir, Morocco

Jasmin High School

2016-2017 SCIENTIFIC BACCALAUREATE (MATH) Sefrou, Morocco

Passed with Honors, Merit Scholarship

**CERTIFICATIONS & TRAINING:** 

Data scientist Associate, R programming, Data Analysis with Python

## **OTHER**

### **SKILLS**

Languages Python R SQL Latex Bash

Technologies Postgresql MongoDB Spark|Airflow Git GCP Shiny|PowerBI

Neo4J

Technical skills Data management Cloud computing Big data technologies Database management Statistical analysis Machine learning Data visualization

## LANGUAGES

English: Fluent - C2 French: Bilingual Arabic: Native

## **INTERESTS**

Personal Development Fitness Traveling and volunteering Photography Art and graphic design