IMANE EL MISSAOUI

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Github

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 Sefrou, Morocco SCIENTIFIC BACCALAUREATE (MATH)

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