

# OUMAIMA ABJAOU

Business Intelligence & Analytics Engineering Student / AI Enthusiast

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## EDUCATION

**2022 - present** Business Intelligence & Analytics Engineering at **ENSIAS**, Rabat, Morocco  
**2020 - 2022** Preparatory Classes (Physics, Engineering Sciences) at **CPGE Med Reda Slaoui**, Agadir, Morocco

## EXPERIENCE

### Data Science Intern

*Jul 2024 - Sep 2024*  
*Sofrecom Morocco, Sala Aljadida*

Helping the IT team to efficiently solve problems by using an ML solution to automate incident identification and root cause analysis.

**Skills:** Client Interaction · Machine Learning · NLP · FastAPI · Docker

### Business Intelligence Intern

*Jun 2023 - Aug 2023*  
*D&A Technologies, Casablanca*

Implementing and optimizing a Business Intelligence solution tailored for the retail sector to enhance informed and strategic decision-making.

**Skills:** Data Warehousing · PostgreSQL · Talend · Tableau DESKTOP

## PROJECTS

### Development of an Intelligent System for Disease & Food Interaction Discovery

Fine-tuning selected large language models (LLMs) such as Gemma, GPT-2, and Llama 2 with health data to enhance their performance and accuracy in this specific domain.

**Skills:** Web Scraping, Generative AI Tools, Python, Hugging Face Transformer, Fine-tuning LLMs

### Pipeline Project with Airflow

Designed and implemented data pipeline, transformation, containerization, ingestion, and aggregation of data using YouTube Data API for sentiment analysis of comments.

**Skills:** Airflow, Docker, Apache NiFi, Kafka, PowerBI Visualization

### Data Warehousing Project for ForestAI

Designed and implemented a comprehensive data warehousing solution, including data loading with SSIS, relational database creation, and dynamic data visualization using SSAS cubes, along with reporting dashboards created in SSRS and Power BI.

**Skills:** SQL Server, SSIS, SSAS, Reporting (SSRS, Power BI)

### HVAC Occupancy Detection

Implementing machine learning and deep learning algorithms to help the HVAC sector in predicting room occupancy, alongside conducting a comparative analysis of classification algorithms.

**Skills:** NumPy, Pandas, Scikit-learn, Matplotlib, PyTorch, TensorFlow

### Exploration and Comparison of Python Libraries for ML in Terms of Performance

Evaluating and comparing popular Python machine learning libraries based on accuracy, usability, and execution time to offer insights for data scientists to make informed tool choices.

**Skills:** Comparative study, Scikit-learn, TensorFlow, Keras, PyTorch, XGBoost, LightGBM, CatBoost

## TECHNOLOGIES

**Languages:** Python, SQL, PL/SQL, C, R, JAVA, HTML, JavaScript, CSS

**Libraries/Frameworks:** NumPy, Pandas, TensorFlow, PyTorch, Scikit-learn, Selenium, BeautifulSoup, NLTK, FastAPI

**Database Administration:** SQLServer, PostgreSQL, MySQL, Oracle Database, MongoDB

**Data Integration/Reporting:** Talend, SSIS, SSAS, SSRS

**Big data:** Hadoop, Apache Spark, ELK Stack

**Project Management Tools:** JIRA, Trello, Notion

**Platforms/Others:** Docker, Git, GitHub, Linux, L<sup>A</sup>T<sub>E</sub>X

## CERTIFICATIONS

Finalist of the Orange Morocco Mega Pan-African Hackathon (Orange Digital Center)

BCG - Data Science Job Simulation (FORAGE)

Introduction to Cloud Computing (IBM)

Data Visualization (Kaggle)

## LANGUAGES

**English:** Professional working proficiency

**French:** Bilingual proficiency

**Arabic:** Native language

## EXTRACURRICULAR ACTIVITIES

**UM5 Ambassador**, Mohammed V University

**Sponsorship Manager**, Olympiades ENSIAS Committee

**Skills:** Leadership, Communication, Event Organization, Negotiation, Teamwork.