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🏠 Kenitra
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Soft Skills

Effective communication

Organizational ability

Creative problem solving

Design Thinking

Quality tools: 5S, 5 Why, DMAIC, Pareto

Languages

Arabic
Native Language

French
Bilingual

English
Upper Intermediate

Spanish
A1 Beginner

Certifications

Michigan: Applied Machine Learning in Python
Coursera: Neural Networks and Deep Learning
IBM: Introduction to AI

Interests

IoT & Arduino

Outdoor Activities

Hamza El Ouali

BIG DATA & AI Engineering student

Education

5th year engineering student
From 2021 to 2026 International University of Rabat Rabat
Big Data & Artificial Intelligence

Professional experience

DATA & AI engineer
From July 2025 to September 2025 JESA S.A Casablanca, Morocco
Built an AI assistant that retrieves and understands content from PDFs using semantic search. Designed to deliver conversational, contextual, and source-grounded responses.
- Developed a RAG workflow with LangChain and tailored prompts for a fine-tuned LLM.
- Applied OCR and indexed extracted text in Weaviate with role-based context and document chunking.
Technologies: Python, FastAPI, React, Weaviate, PostgreSQL, LangChain, OpenAI, Docker, Clerk, PyMuPDF, PaddleOCR.

Automation Analyst Intern
From July 2024 to August 2024 ALTEN DELEVERY CENTER Rabat-Salé
Developed a tool to extract, compare, and track changes across versions of technical specification documents, and match them against test plans to detect coverage gaps.
- Automated document parsing, version comparison, and requirement-to-test linkage.
- Implemented data processing logic with pandas and document analysis using py-docx.
Technologies: Python, Pandas, python-docx, DiffLib, Flask

Academic Projects

Phone Feedback Agent
From April 2025 to June 2025 AI Project Developer International University of Rabat
- Built an AI agent to automate phone surveys using natural conversations.
- Collected post-purchase, satisfaction, and support feedback with adaptive questioning.
- Analyzed responses for sentiment and insights to generate actionable reports.
- Improved survey engagement and reduced costs by replacing manual calls at scale.
Technologies: Twilio, FastAPI, Redis, MongoDB, GPT-4, Claude, Gradio, Python

Kafka-Spark Powered Real-Time Stock Analytics Engine
From April 2025 to May 2025 Big Data Developer International University of Rabat
Real-time stock market analytics ingested MarketStack API data into PostgreSQL, processed it for insights, and stored results in MySQL. Delivered visualizations via a Spring Boot REST API and React dashboard with email alerting for significant price changes.
Technologies: Kafka, Spark Streaming, Debezium, PostgreSQL, MySQL, Spring Boot, React.js.

Machine Learning Project: Student Stress Level Prediction
2024 Machine Learning Practitioner International University of Rabat
- Developed an app to predict student stress using machine learning models.
- Analyzed student data and trained models (Logistic Regression, LDA, Random Forest).
- Built a Streamlit web app for predictions and integrated OpenAI for personalized advice.
Technologies: Python, Streamlit, OpenAI

Computer skills

Programming Languages
Python, Java, C/C++, R

Web development
HTML, CSS, JS, JEE

Database administration
SQL, PL/SQL, NoSQL (Neo4j, MongoDB, Cassandra), Data security

Big Data Technologies
Spark,Hadoop, Kafka, Apache Pig

Business Intelligence
Power BI, Data Modeling & ETL, Excel, Talend

Cloud Computing
Virtualization & Containerization (Docker), Serverless Computing, Azure services