HAMMAMID AHMED ISSAM

Education

University of Algiers 1 Benyoucef Benkheda

Masters of Data Science and analytics

Expected Graduation: June 2025 Algiers

• Main Courses: Advanced Machine Learning, Cloud And No SQL Databases, Data mining, Big Data, OLAP And Data Ware Housing, Data Visualisation

University of Algiers 1 Benyoucef Benkheda

Graduated in June 2023

Bachelor's in Computer Science

Algiers

 Main Courses: Web Development, Operating Systems, Data Structures and Algorithms, Software Engineering, Computer Architecture, Mobile Development

Work Experience

Data Science Intern

Algiers

- Engineered Large Language Models (LLMs), including Qwen and LLaMA3.2, to build an HR chatbot using techniques like Retrieval-Augmented Generation (RAG) with LangChain, and fine-tuned models with Unsloth and QLoRA to ensure domain-specific accuracy
- Analyzed Djezzy's internal **HR documents** to generate precise **Q&A datasets**, significantly improving chatbot response relevance and trustworthiness
- Developed an interactive platform with a **React** frontend and **Flask** backend, allowing employees to easily query HR policies and access key information
- Dockerized the entire application for streamlined deployment and enhanced scalability across multiple environments

Djezzy Mar 2023 – Jul 2023

Web Developer Intern

Algiers

- Built and maintained a full-stack **dashboard web application** using **Spring Boot** for the backend and **React** for the frontend during a **5-month internship** with Djezzy's Data Team
- Cleaned, processed, and analyzed large-scale datasets to ensure data quality, leading to more reliable business insights
- Designed and implemented interactive data visualizations that revealed actionable insights, supporting data-driven decision-making across departments

Projects

RecipeHub | Source Code

 ${\bf Javascript} \mid {\bf ReactJS} \mid {\bf NodeJS} \mid {\bf PostgreSQL} \mid {\bf Python}$

- * Built a full-stack web application that allows users to browse, search, comment on, and save recipes, as well as generate personalized meals based on their preferred protein and calorie intake plans using a **genetic algorithm** in **Python**
- * Scraped recipe data from the web using **Selenium** and **Python** to populate a **PostgreSQL** database
- * Implemented a **ReactJS** frontend with **Node.js** for the **REST API** backend, **JWT** and **Passport.js** for secure authentication, and used **Sequelize ORM** with a **PostgreSQL** database

 $ext{QuizzMe} \mid Source \ Code \qquad ext{TypeScript} \mid ext{ReactJS} \mid ext{NestJS} \mid ext{Redis} \mid ext{PostgreSQL} \mid ext{Web Sockets} \mid ext{TailWind CSS}$

- * Built a real-time quiz trivia web application where users can authenticate, create or join rooms, and play together with live score updates after each round
- * Used **NestJS** for the backend and **ReactJS** for the frontend; used **Socket.IO** with **WebSockets** for real-time communication and **Redis** for managing non-persistent room data
- * Implemented secure authentication using JWT and Passport.js, and performed input validation with Zod
- * Containerized the entire application using **Docker**, deployed with **Nginx** as a reverse proxy, and followed modern **security best practices** throughout the development process

Odoo Prospect Manager | Source Code

Python | Odoo | XML | PostgreSQL | CSS

- * Developed a custom **Odoo 18** module for managing regions, commercial teams, prospects, and clients as part of a technical assessment
- * Designed models for regional management, enabling linkage between commercial teams and specific geographical zones with designated Team and Commercial Leads
- * Implemented prospect creation and assignment workflows with role-based logic: Team Leads can assign prospects to members; members auto-assign to themselves
- * Built a custom prospect pipeline with stages (Contact Prospect, Offer Sent, Won, Lost); automated client conversion upon winning prospects
- * Integrated dynamic PDF generation to export client details and acquisition history, including acquisition owner, offer dates, and win status

Audio Command Recognition System for Arduino | Source Code

Python | Machine Learning

- Built a machine learning model for audio command recognition and classification tailored for deployment on Arduino devices
- * Processed and analyzed audio data using Librosa, and trained classification models using scikit-learn
- * Enhanced model performance and dataset diversity by applying various **data augmentation** techniques to the audio inputs

Technical Skills

 ${\bf Languages:\ Python,\ SQL,\ HTML5,\ CSS,\ JavaScript\ ,\ TypeScript}$

 ${\bf Databases} \colon {\rm MySQL}, \, {\rm PostgreSQL}$, Redis

Developer Tools: Postman, PowerBI, Git, Docker, Github Actions Libraries/Frameworks: ReactJS, ExpressJS, Odoo, TailWindCSS

Languages

Arabic (Native)

French (Fluent)

English (Proficient)