

HASSAN BOUKATENA

AI & Data Engineering Intern

hassanboukatena@gmail.com | +212 690 615 697
hassanboukatena.vercel.app | linkedin.com/in/boukatena-hassan | github.com/BkHassan
Kenitra, Morocco

PROFILE

Final-year Master's student in Intelligent Systems Engineering with hands-on experience developing LLM-powered applications and multi-agent systems. Built a Python-based assistant orchestrating specialized Gemini agents for IT ticket classification, document retrieval, and evidence-grounded recommendations. Also developed a RAG-based CV analysis platform integrating Gemini, LangChain, ChromaDB, and NestJS REST APIs. Interested in applying agent orchestration and backend integration to automate enterprise workflows, including requirements analysis and User Story generation.

EDUCATION

Master's in Intelligent Systems Engineering *Sep 2025 to Present*
Faculty of Sciences, Ibn Tofail University, Kenitra
Artificial Intelligence, Machine Learning, Deep Learning, Cloud Computing, Distributed Systems, Data Science.

Bachelor's in Computer Science and Applied Mathematics *Sep 2024 to Jun 2025*
Faculty of Sciences, Chouaib Doukkali University, El Jadida

Programming: Python, TypeScript, JavaScript, SQL
AI Agent Engineering: LLMs, Gemini API, Prompt Engineering, Multi-Agent Systems, LangChain, RAG, Embeddings, ChromaDB
Backend & Integration: NestJS, Node.js, Express, REST APIs, JWT
Tools & Databases: PostgreSQL, Docker, Git, GitHub Actions

RELEVANT PROJECTS

Multi-Agent RAG for Technical Support: Built a Python-based proof of concept where a coordinator orchestrates Gemini Triage, Researcher, and Writer agents to classify IT tickets, retrieve documentation from ChromaDB, and generate cited troubleshooting recommendations. Includes clarification or manual escalation when evidence is insufficient. On 20 held-out tickets: 18/20 correct outcomes.

RAG-Based CV Analysis Platform: Developed an end-to-end recruitment pipeline integrating PDF processing, Gemini embeddings, and semantic retrieval with ChromaDB. Integrated an LLM to analyze candidate profiles, answer recruiter queries, and generate quizzes from CV content. Evaluated on a 25-question reference set: 23/25 passed.

Football Market Value Prediction: Developed a machine learning pipeline using Sofascore data covering 71 clubs across four major leagues. Prepared a dataset of 1,377 players using Python, Pandas, and PostgreSQL. Compared regression models and optimized a Random Forest using GridSearchCV. Built a Streamlit application with similar-player search functionality.

PROFESSIONAL EXPERIENCE

AI Full Stack Developer (PFE Internship) *Apr to Jun 2025 (3 months)*
Grande Charte, El Jadida, Morocco
- Independently developed a RAG-based CV analysis platform, integrating Gemini and LangChain retrieval and generation into NestJS REST APIs.
- Containerized the API and ChromaDB with Docker and deployed them on a VPS using Dokploy. Deployed the frontend on Vercel.

IT Support Intern *Jul to Aug 2024 (2 months)*
MD Call Center, Casablanca, Morocco
- Diagnosed and resolved workstation and software incidents; maintained IT infrastructure and configured IP telephony systems (Issabel, Grandstream) and CRM tools.

Full Stack Developer *Jan to Jun 2024 (6 months)*
Ark x Talent Factory, Casablanca, Morocco
- Developed RESTful APIs using Node.js and Express, and built responsive React interfaces within an Agile/Scrum workflow.

CERTIFICATIONS & LANGUAGES

Certifications: DataCamp AI Agent Fundamentals (2026) | AWS Knowledge: Cloud Essentials (2026) | EF SET English C1 (2026) | Codecademy Intro to DevOps (2025).
Languages: Arabic (Native) | English (Advanced) | French (Intermediate)

LEADERSHIP & ACTIVITIES

Secretary General, ISI Peasy Club *Ibn Tofail University, Kenitra*
Coordinate club activities, document official meetings, and support the organization of academic and Master's program events.