

# Idriss Khattabi

drisskhattabi6@gmail.com | +212635245797  
drisskhattabi/portfolio | linkedin/idriss-khattabi  
github.com/drisskhattabi6



## About me

AI & Data Science Master's graduate with a strong foundation in Python, Machine & Deep Learning, NLP, Predictive Modeling, and Chatbot Development. Passionate about generative AI, AI Agents, AI-driven and data science projects. Hands-on experience in Django development and a proven ability to work collaboratively, lead, and learn quickly.

## Education

<b>M.S.T in Artificial Intelligence and Data Science</b> <i>Faculty of Sciences and Technologies of Tangier</i>	Oct 2023 – June 2025 Tangier, Morocco
<b>BS in Computer Science and Mathematics</b> <i>Faculty multidisciplinary of Larache</i>	Oct 2019 – June 2023 Larache, Morocco

## Experience

<b>AI Engineer Intern, TNA Consulting – Casablanca</b>	Feb 2025 – July 2025
<ul style="list-style-type: none"><li>Developed an intelligent chatbot about African Central Banks Documents using RAG and LLMs.</li><li>Built an automated pipeline for scraping, processing, and integrating data into vector DB.</li></ul>	

## Skills

**Programming Languages:** Java, Python, C, JavaScript, SQL, Solidity, LaTeX, Bash  
**Machine Learning:** Pytorch, scikit-learn, LLM, Fine-tuning, RAG, NLP, Hugging Face  
**Web Development:** HTML & CSS, JavaScript, ReactJS, and Django  
**Libraries & Tools:** NumPy, Pandas, Matplotlib, Seaborn, OpenCV, NLTK, BeautifulSoup, Selenium, Streamlit, Apache Airflow, Apache PySpark, Apache Kafka.  
**Data Bases:** MySQL, SQL Server, MongoDB, ChromaDB, FAISS  
**DevOps & Workflow Tools:** Linux, Git/GitHub, Docker, VS Code, Jupyter Notebook, Kaggle, Power BI.  
**Metaheuristic & Decision-Making Algorithms:** GA, PSO, ACO, TS, GWO, AHP, TOPSIS ...

## Publications

<b>Generating a Set of Consistent Pairwise Comparison Test Matrices in AHP using Particle Swarm Optimization</b>	Apr 2024
YOUSSEF KARKOUR, CHAKIR TAJANI, <i>Idriss Khattabi</i> 10.37394/23206.2024.23.24	
<b>A metaheuristic approach to improve consistency of the pairwise matrix in AHP</b>	Jan 2023
Zakaria TAJANI, CHAKIR TAJANI, <i>Idriss Khattabi</i> , Mohamed Sabbane 10.23939/mmc2023.04.1164	

## Certifications

Associate Data Scientist in Python – DataCamp  
Associate AI Engineer for Data Scientists – DataCamp  
Associate Data Analyst in SQL – DataCamp

## Languages

**Arabic:** Native proficiency | **English:** Professional working proficiency | **French:** Professional working proficiency

## Projects

<b>ChatPDF – Chat with PDF Locally</b>	[GitHub Repo]
<ul style="list-style-type: none"><li>A local RAG web app to query PDF documents using LLMs, with support for PDF-to-Markdown conversion, vector search, and chatbot-style Q&amp;A.</li></ul>	

- Tools Used: Python, Streamlit, LangChain, Ollama, Sambanova, ChromaDB, Marker

## AI Scraper

[GitHub Repo]

- An interactive tool to scrape, process, and structure web data using local or cloud-based LLMs.
- Tools Used: Python, Selenium, Crawl4AI, Streamlit, Ollama, Sambanova, Pandas

## Moroccan Meal Recipes Chatbot

[GitHub Repo]

- An AI chatbot that uses RAG to deliver authentic Moroccan recipes with ingredients, steps, and optional images, supporting both local and cloud LLMs.
- Tools Used: Python, Streamlit, LangChain, Ollama, Sambanova, Faiss DB

## Real-time Twitter Sentiment Analysis

[GitHub Repo]

- Created a real-time system to predict sentiment from Twitter (X) posts.
- Tools Used: PySpark, Kafka, Docker, Django, MongoDB, ChartJS

## Obstacle Detection & Alert System for the Visually Impaired

[GitHub Repo]

- A real-time obstacle detection and audio alert system designed to assist visually impaired individuals using deep learning and automation tools.
- Tools Used: Python, Flask, PyTorch, MobileNetV2, CNN, OpenCV, Node-RED, FFmpeg

## Medical Document Management Blockchain System

[GitHub Repo]

- A decentralized solution for secure medical document storage and access using Ethereum and IPFS. Empowers patients with document control, ensures transparency, and supports multi-platform access for doctors and admins. (Web & Desktop App)
- Tools Used: Solidity, Ethereum, IPFS, ReactJS, Python, Tkinter, Hardhat, MetaMask, Docker

## Stock Market Analysis and Prediction using LSTM

[GitHub Repo]

- A deep learning project that applies LSTM neural networks to forecast stock prices based on historical time series data, offering visual insights and strong predictive performance.
- Tools Used: Python, PyTorch, NumPy, Matplotlib, Scikit-learn, Pandas

## Commerce Data Warehouse Builder and Analyzer

[GitHub Repo]

- A full ETL pipeline and data warehouse project for commerce product and supplier analytics with Power BI dashboards.
- Tools Used: Python, Pandas, SQLAlchemy, MySQL, Power BI

## Data Analysis & Machine Learning Desktop Application

[GitHub Repo]

- A Python desktop app built with CustomTkinter that enables users to analyze qualitative and quantitative datasets and apply multiple machine learning algorithms through an intuitive GUI.
- Tools Used: Python, CustomTkinter, Scikit-learn, Pandas, Matplotlib

## OCR From Scratch

[GitHub Repo]

- A Python-based application that implements Optical Character Recognition (OCR) without relying on pre-built OCR engines. Processes images through custom image preprocessing, segmentation, and character classification using a CNN model, CRNN model, and YOLO model.
- Tools Used: Python, OpenCV, NumPy, Matplotlib, Scikit-learn, PyTorch

## Web Development with Django

- Marketplace Website - Chat With LLM Locally - Social Media Website - Blog Website - Note App - Room Chat App - E-commerce App