

# Idriss Khattabi

E-mail: drisskhattabi6@gmail.com | Phone: +212 6 35 24 57 97

Portfolio: drisskhattabi6.github.io/id-kh

LinkedIn: linkedin.com/in/idriss-khattabi-b3a266235/

GitHub: github.com/drisskhattabi6



## About me

AI Engineer / AI Developer with a Master's degree in AI & Data Science, skilled in Python, Machine and Deep Learning modeling, Predictive Modeling, Chatbot Development, AI agent development, and LLM integration. Passionate about AI-driven and data science projects, with hands-on experience in Django development and a proven ability to work collaboratively, solve problems, and learn quickly.

## Education

### M.S.T in Artificial Intelligence and Data Science

Faculty of Sciences and Technologies

Oct 2023 – July 2025

Tangier, Morocco

### BS in Computer Science and Mathematics

Faculty multidisciplinary

Oct 2019 – July 2023

Larache, Morocco

## Experience

### AI / Data Engineer Intern, TNA Consulting – Casablanca

Feb 2025 – July 2025

- Designed and developed an AI SaaS platform to support financial institutions in interpreting and leveraging official central bank publications & documents across Africa.
- Engineered an automated and scalable **Data pipeline** for scraping & collecting documents from websites, cleaning, transforming & chunking documents, and loading into a Vector database.
- Built an intelligent **chatbot** using RAG Technique capable of answering user questions on African Central Bank documents.
- Used Tools : **Python, Marker, Streamlit, Apach Airflow, ETL Pipeline, Flask, Ollama, Faiss, RAG, LLM, Selenium, Docker**

### Research Assistant, Faculty of Poly-disciplinary – Larache

March 2023 – June 2023

- Designed and implemented an optimization system to improve the consistency of pairwise comparison matrices in the **AHP**, leveraging **GA** and **PSO**, with Developing a Django web application that makes it easier to generate AHP matrices.
- Co-authored **three** research papers with **Dr. Chakir Tajani**, papers examples :
  - A Metaheuristic Approach to Improve Consistency of the Pairwise Matrix in AHP
  - Generating a Set of Consistent Pairwise Comparison Test Matrices in AHP using PSO

## Soft Skills

Analytical thinking and problem-solving – Fast learning – Teamwork and collaboration – Agility and Adaptability – Curious for new technologies

## Technical Skills

- Programming Languages:** Python, Java, JavaScript, SQL, C, Solidity, Bash
- Machine / Deep Learning & NLP:** Scikit-learn, TensorFlow, Keras, PyTorch, XGBoost, MLFlow, NLTK, spaCy
- Generative AI & LLMs:** RAG , Prompt Engineering, Fine-Tuning, LangChain, LangGraph, LlamaIndex, n8n
- Web Development:** HTML, CSS, Tailwind, JavaScript, React/Next JS, Django, Flask, FastAPI, Streamlit.
- Libraries & Tools:** NumPy, Pandas, Matplotlib, Seaborn, OpenCV, Selenium.
- Big Data & Distributed Systems:** Apache Spark (PySpark), Apache Kafka, Apache Hadoop, Apache Airflow
- Databases:** MySQL, SQL Server, PostgreSQL, MongoDB, Supabase, IPFS, FAISS, Chroma, Qdrant, Milvus.
- DevOps & Workflow Tools:** Linux, Git/GitHub, Microsoft Azure, Docker, Power BI, Postman

## Languages

**Arabic:** Native proficiency | **English:** Professional (B2) | **French:** Professional (B2)

## Certifications

**Associate Data Scientist in Python – DataCamp**  
**Microsoft Azure Fundamentals – DataCamp**

**Associate AI Engineer for Data Scientist – DataCamp**  
**Associate Data Engineer – DataCamp**

## Projects

### ChatPDF – Chat with PDF Locally

[GitHub Repo]

- A local RAG web app to query PDF documents using LLMs, with support for PDF-to-Markdown conversion, vector search, and chatbot-style Q&A.
- 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

### Text To SQL Converter

[GitHub Repo]

- An interactive tool to convert user text to SQL query using AI Agent, with getting data from SQL DB and Visualizing using Interface.
- Tools Used: Python, LangGraph Streamlit, 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

### 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

### Age, Gender & Emotion Detection using CNN

[GitHub Repo]

- Detecting person Age, Gender, and Emotional state from facial images using CNN.
- Tools Used: Python, OpenCV, Tkinter, TensorFlow/Keras, CNN, NumPy, Pretrained Models

### Fake News Detection

[GitHub Repo]

- Fine-tuning BERT model to detect fake news articles, and Deploying the trained model via a Flask web app for real-time prediction.
- Tools Used: Python, Flask, Pytorch, BERT

### YouTube Transcript Summarizer Bot

[GitHub Repo]

- An AI-powered automation workflow that extracts transcripts from YouTube videos sent via a Telegram bot as .txt file with its summarize.
- Tools Used: n8n, Telegram Bot API, RapidAPI, JavaScript, Google Gemini

### Web Development with Django

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