

ALY GUINGA

Data Science Engineer | Seeking PFE Internship

National Mobility

+212 706 78 37 26

GitHub

Kaggle

Aliguinga2020@gmail.com

Portfolio

PROFILE

Data Science Engineering student with expertise in AI, Machine Learning, and Generative AI. Experienced in building intelligent solutions including predictive models, computer vision systems, and LLM-based applications. Strong technical foundation in developing end-to-end projects from conception to deployment. Passionate about applying AI technologies to solve complex industrial challenges.

EDUCATION

Engineering Cycle

ENSA Tétouan — Specialization in Data Science, Big Data, and Artificial Intelligence

2023 - Present

Integrated Preparatory Cycle

ENSA Tétouan — Scientific and technical training

2021 - 2023

First Year DUT

EST Salé — Specialization in Civil Engineering

2020 - 2021

Baccalauréat Physical Sciences

Ibn El Athir High School, Arbaoua — Honors: Very Good

2019 - 2020

PROFESSIONAL EXPERIENCE

PFA Internship — AI Chatbot Development

July - August 2025

ADD (Digital Development Agency), Rabat

- Conceptual study and architecture of an intelligent chatbot
- Implementation with LLMs (HuggingFace, RAG, Transformers, Jina, Qdrant)
- Development of an interactive user interface with HTML and JavaScript

ACADEMIC PROJECTS

Football Transfers and Rumors Analysis

- **Context:** Academic project (Web Mining module) carried out by a team of 3 people
- Development of an automated ETL pipeline for extraction, storage, and visualization of collected data
- Workflow orchestration with Apache Airflow and storage in MongoDB Atlas
- Design of interactive dashboards with Power BI for trend analysis
- **Results:** Complete workflow automation (extraction, transformation, storage, and visualization)

Laptop Search Engine

- **Context:** Project developed during Qdrant-organized Hackathon
- Built a semantic search engine using Qdrant vector database
- Implemented embedding models (Sentence Transformers) to convert product specifications into vectors
- Optimized vector indexing for similarity search and filtering
- **Results:** Deployed an intelligent search engine leveraging embedding and vector similarity

Vehicles Logos & License Plates Detection

- **Context:** Computer Vision project for real-time vehicle identification
- Implementation of YOLO object detection model for detecting car logos and license plates
- Development of an interactive web application using Streamlit for real-time detection
- Image processing and detection optimization with OpenCV
- **Results:** Deployment of a functional detection system capable of identifying vehicle brands and license plates

Prediction of Most Profitable Sector in Morocco

- **Context:** Data Mining & Machine Learning project for economic sector analysis
- Collection and preprocessing of economic data across multiple sectors in Morocco
- Application of data mining techniques and ML algorithms for predictive modeling
- Comparative analysis of different machine learning models for profitability prediction
- **Results:** Development of a predictive model to identify the most profitable economic sectors

TECHNICAL SKILLS

Programming Languages

Python, R, SQL, HTML

Data Science & ML

Pandas, NumPy, Scikit-Learn, TensorFlow, PyTorch

Computer Vision

YOLO, OpenCV, Image Processing, Object Detection

Visualization & BI

Power BI, Tableau, Streamlit, Matplotlib, ETL, Excel

Big Data & Cloud

Docker, Airflow, AWS, HDFS, Hive, Linux, Git, n8n

Databases

MySQL, PostgreSQL, MongoDB, Qdrant, Milvus, Chroma

LLMs & Generative AI

HuggingFace, Fine-Tuning, RAG, LlamaIndex, Jina, APIs, LangChain, OpenAI API

ACTIVITIES & CERTIFICATIONS

Volunteer Involvement, Tétouan

Member — AIGEEKS Club (2024)

Organization of tech events, SQL mentorship, Project Manager

Volunteer Teacher — Al-Amal Association (2024 - 2025)

Teaching Arabic to children in difficult circumstances

Gardening Project — Bosafou Children's Home (04/2022)

Participation with a group in the maintenance and landscaping of the garden for an orphanage

Languages

Arabic (Native), French (Fluent), English (Intermediate)

Certifications

- AI Agent Fundamentals (HuggingFace)
- Intro to LLMs (356datascience)
- Python: Pandas (Kaggle)
- Cloud Computing (DataCamp)
- Bioinformatics (FutureLearn)
- Intro to Machine Learning (Kaggle)
- Machine Learning Specialization (Coursera)

Soft Skills

Teamwork, Communication, Problem-Solving, Project Management