

AYA KHALIFI

[aiaklf02](#) | [in Aya khalifi](#) | [My portfolio](#) | [ayakhalifi02@gmail.com](#) | [+212714964327](#)



SUMMARY

Second-year Master's student in Artificial Intelligence and Data Science, with a strong foundation in full-stack software development acquired during my bachelor's degree. This dual expertise enables me to work on both application development and machine learning/data analysis. Passionate about digital innovation and real-world AI applications, I am currently seeking a PFE internship to deepen my skills through practical projects, combining the rigor of full-stack development with the power of modern AI and machine learning models.

WORK EXPERIENCE

Final-Year Internship – Fromageries Bel Maroc, Tangier

April 2024 – June 2024

Designed and developed a full-stack web application for IT asset management and monitoring using Python/Django, integrating interactive dashboards for reporting and performance tracking.

End-Year Internship – Sweet Berry, Larache

july 2025 – August 2025

Designed and developed an end-to-end system for dataset annotation, creation, and classification of fresh vs rotten fruits using Convolutional Neural Networks (MobileNetV2) and YOLOv8 for real-time detection. Integrated a user-friendly interface with Streamlit and image processing via OpenCV.

PROJECTS

TheMLHub – Machine Learning Platform

Developed an interactive Django-based platform enabling dataset import, preprocessing, visualization, model selection (SVM, Random Forest, Naive Bayes, KMeans, RNN), and performance dashboards.

Real-Time Amazon Sentiment Analysis Pipeline

Big Data pipeline using Kafka, Spark, MongoDB, Docker, FastAPI and React.Web scraping, NLP preprocessing, and real-time ML-based sentiment insights.

CancerUX – Intelligent Cancer Treatment Assistant

Developed an NLP application based on fine-tuned BioBERT with a Flask interface. Provides answers to questions on treatments and side effects using specialized medical datasets.

Parkinson's Disease Prediction

Developed predictive models using Logistic Regression, Random Forest, and LightGBM. Applied Pearson correlation analysis for feature selection and leveraged shape-based feature extraction, with SMOTE used to address class imbalance.

EDUCATION

2024-2026 (Outgoing)	Master's in Artificial Intelligence and Data Science at Faculty of Science and Technology, Tangier
2023-2024	Bachelor's in Application Development Engineering at Faculty of Science and Technology, Tangier
2020-2023	University Degree in Science and Technology – Mathematics, Physics, Chemistry, and Computer Science at Faculty of Science and Technology, Tangier

SKILLS

Programming Languages:	PHP, Java, C++, Python, JavaScript, R
Operating Systems:	Linux, Windows Server
Databases:	MySQL, SQL Server, T-SQL, SQLite
Project Management:	Agile, Scrum
Libraries & Frameworks:	scikit-learn, Pandas, NumPy, Matplotlib, Seaborn
Development & Analysis Tools:	Jupyter Notebook, Talend
Big Data & Distributed Systems:	Apache Spark, Apache Kafka, Hadoop, Cloudera
IoT & AIoT:	MQTT, Node-RED, ThingsBoard, Adafruit IO, IoT communication protocols, real-time AI model integration

LANGUAGES

Arabic:	Native
French:	Intermediate
English:	Intermediate