



## EDUCATION

Higher Institute of Information and Communication Technologies, Borj Cedria

- Master's Degree in Data Science, specializing in Data Science and Smart Services  
2020 | 2022

- Bachelor's Degree in Computer Science and Communication  
2017 | 2020

## SKILLS

**Programming Languages:** Python, R, Java, Matlab, C, C++, C#

**Frameworks & Libraries:**

TensorFlow, PyTorch, Keras, Hugging Face, Transformers, Scikit-Learn, XGBoost, vLLM, LangChain, LangGraph, LlamaIndex, Ollama, NumPy, Pandas, Matplotlib, Seaborn, Plotly, OpenCV, YOLO (You Only Look Once), SpaCy, NLTK, TextBlob, Gensim, Kafka, FastAPI, Flask, NetworkX, PyG

**Databases:** Elasticsearch, Neo4j, MongoDB, PostgreSQL, Firebase

**Web Development:** HTML, CSS, Flask, FastAPI, Angular, Nodejs

**Cloud & Tools:** AWS, OVH, Git

**Data Science & AI:** LLMs, GNNs, NLP

**Operating Systems:** Linux, Windows

**Methodologies:** Agile, Scrum

## CERTIFICATIONS

- |                           |                |
|---------------------------|----------------|
| - AI Analyst              | IBM            |
| - Big data engineer award | IBM            |
| - Data structure          | Udemy          |
| - Machine learning        | Le Wagon Dubai |
| - Machine learning        | Kaggle         |
| - Python mega course      | Udemy          |

## SOCIAL ACTIVITIES

Istic Maker Labs 2018-2021

Google developers club 2021-2022

## LANGUAGES

Arabic, French, English

# Elbahri Chayma



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[chaymabh](https://github.com/chaymabh)

## PROFESSIONAL EXPERIENCE

### Data Scientist | iTransform365

01/2024 | present

- Fine-tuned LLMs with TensorFlow and PyTorch for specific projects.
- Designed and implemented graph-augmented retrieval systems combining LLMs with GNNs and knowledge graphs.
- Developed and deployed predictive models with TensorFlow and PyTorch on large-scale data in multiple formats (JSON, CSV, etc.).
- Utilized GPUs within AWS and OVH cloud platforms, accelerating training and inference by 25%.
- Integrated Elasticsearch, enhancing data retrieval efficiency by 50%.
- Leveraged LangChain, LangGraph, and LLMs to build sophisticated AI agents capable of executing complex tasks autonomously.
- Built and deployed machine learning models as APIs using Flask and FastAPI, enabling real-time predictions and seamless integration into web applications.

### Artificial intelligence engineer | NARD Intelligence

10/2022 | 11/2023

- Leveraged Python, TensorFlow, PyTorch, and GNNs to design, implement, and optimize AI models tailored to project requirements.
- Applied advanced web scraping techniques using tools like BeautifulSoup.
- Worked closely with engineering and data science teams to integrate AI-driven solutions into JavaScript and Angular frameworks.
- Built and deployed machine learning models as APIs using Flask and FastAPI, ensuring real-time predictions and seamless web application integration.

### Machine Learning Researcher (Master's Thesis) | ISTIC Borj-cedria

05/2022 | 6/2023

- Researched and developed advanced methods for data preprocessing and feature extraction, optimizing model input data.
- Investigated anomaly detection algorithms and implemented anomaly classification models, successfully identifying outliers and improving model robustness.
- Utilized graph neural networks (GNNs) for enhanced anomaly detection, improving model accuracy and uncovering complex patterns in data.

### Machine Learning intern | Meducol

03/2022 | 06/2022

- Developed and implemented NLP models for extracting insights from medical data.
- Designed and deployed web scraping solutions to collect medical data from various sources.
- Applied data preprocessing techniques to clean and transform raw data into usable formats.
- Developed interactive dashboards and visualizations for data analysis.

### Machine learning intern | The Sparks Foundation

03/2022 | 04/2022

- Developed and optimized machine learning algorithms for image processing and computer vision tasks.
- Implemented data preprocessing techniques to handle noise, outliers, and missing values.

### Computer vision and IOT intern | Aroteq

02/2020 | 06/2020

- Designed and implemented data collection and preprocessing pipelines for IoT devices.
- Developed algorithms for intelligent data filtering and feature extraction.
- Integrated real-time data streaming from IoT devices into a database for analysis.

