

Passionate AI/ML enthusiast with hands-on experience in Deep Learning, Computer Vision, and Large Language Models. Eager to apply my skills to real-world challenges, I am seeking a final-year internship where I can contribute to innovative AI projects, focusing on advanced deep learning techniques and cloud-based AI solutions.

### EDUCATION

Degree in Software Engineering   Higher Institute of Computer Science	09/2022 – Present
Bachelor's Degree in Network and Computer Systems   Higher Institute of Computer Science	09/2019 – 06/2022

### SKILLS

Programming Languages	Python, Javascript, Java
AI/ML Tools	TensorFlow, Scikit-learn, PyTorch, LangChain, Ollama
Cloud and Devops Tools	Docker, Kubernetes, AWS, Azure
System Administration	RHEL, Ubuntu Server

### PROJECTS

#### AI System for Image and Audio Processing

- Designed and deployed a **Multimodal AI** system integrating **OpenAI's Whisper** for speech-to-text and **Llava** for image-to-text processing. The system includes a user-friendly **Gradio** interface for testing purposes and **gTTS** for real-time audio output, enabling real-time conversion between image, text, and audio.

#### RAG-based document Question-Answering System

- Built a Retrieval-Augmented Generation system based on the **LangChain API**. The system can process various different types of documents, store their embeddings and retrieve relevant content from a **Chroma** vectorstore. Users can interact with the system through a **Gradio** interface to upload documents and ask **HuggingFace's Mistral LLM** questions for context-aware responses.

#### Real-time Fire and Smoke Detection System with Alerts

- Developed a real-time fire and smoke detection system using a **YOLOv11** model trained on a custom **RoboFlow** dataset. Utilized **Flask** to build a web application that visualizes detections and sends email alerts via an **SMTP** server.

### INTERSHIPS

Potato Leaf Disease Detection	08/2024 – 09/2024
<i>Hemosciences Tunisia</i>	

- Built and trained a computer vision system for leaf disease classification using **TensorFlow** and **Scikit-learn**, achieving improved model accuracy and faster inference times. Deployed the model using **FastAPI** and **React**.

Automated Testing Integration	02/2022 – 06/2022
<i>NeoXam Tunisia</i>	

- Developed black-box tests and automated CI/CD pipelines using **Ranorex** and **Jenkins**, reducing automatic testing time and deployment time by 30%. Managed test binaries using **Artifactory** and **Bitbucket**. Improved software quality by detecting and resolving critical bugs.

### CERTIFICATES

Deep Learning Specialization   Deeplearning.AI	10/2024
Convolutional Neural Networks   Deeplearning.AI	10/2024
Machine Learning Specialization   Deeplearning.AI	07/2024
Microsoft Azure Fundamentals   Microsoft	03/2023
AWS Certified Cloud Practitioner   Amazon	10/2022

### EXTRACURRICULAR ACTIVITIES

Global Next Leaders Forum	02/2024 – 03/2024
<i>Tokyo, Japan</i>	

- Collaborated with diverse, multicultural teams to tackle global IT challenges, sharpening my leadership and collaboration abilities. Delivered multiple presentations on the ethical implications of public data and AI, strengthening my public speaking and critical thinking skills.

ISI Geeks	09/2020 – 09/2022
<i>Higher Institute of Computer Science</i>	

- Participated as a weekly podcast member exploring topics in Japanese culture, technology, and artificial intelligence. Coordinated multiple entertainment and geek-themed events, enhancing my event management and teamwork skills.