

Malek Abida

ICT Engineering Student

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Malek Abida | Malek0007

PROFILE



A motivated final-year ICT engineering student with a passion for **Artificial Intelligence**, particularly in the fields of **Machine Learning, Deep Learning, NLP and Generative AI**.

Actively seeking opportunities to apply my skills in AI research and development.



EXPERIENCE

- Huawei** 
AI Intern 08/2024 – present
Tunis, Tunisia 
 - Developed a **MERN** dashboard to display Huawei Nodes information.
 - Incorporated **data processing and visualization** techniques, which improved the efficiency of node management by 30%.
 - Developed a customized Q&A **chatbot** using the **GPT-4** model, improving user experience by providing accurate responses.
 - Deploying the user dashboard application on Huawei Cloud.
- Comar Insurances** 
AI / Generative AI Intern 07/2024 – 08/2024
Tunis, Tunisia 
 - Explored **Natural Language Processing (NLP)** techniques for text processing.
 - Researched and applied advanced techniques in **Generative AI** and **Fine Tuning** to enhance text generation capabilities.
 - Developed a text generation application using **NLP** and **HuggingFace** models for Large Language Models (LLM) techniques.
- Tunisian Post** 
Machine Learning Intern 07/2023 – 08/2023
Tunis, Tunisia 
 - Explored the applications of **Artificial Intelligence** in the financial sector.
 - Developed a price prediction model using **Linear Regression** Algorithm of **Machine Learning** with 98% accuracy.

EDUCATION

- Higher School of Communication of Tunis (SUP'COM)** 
ICT Engineering Diploma 09/2022 – present
Ariena, Tunisia
- Tunis Preparatory Engineering Institute (IPEIT)** 
Admission in National Competitive Examinations for access to the Engineer Training Cycles 09/2020 – 06/2022
Tunis, Tunisia

PROJECTS

- AI-Assisted Data Migration using Generative AI associated with EY Tunisia** 09/2024-present
Tools: Generative AI, NLP, LLM, Machine Learning
 - Researched Predictive Analysis of data schemas using **NLP**.
 - Researched techniques for the Automatic Generation of Migration Scripts, focusing on improving efficiency and accuracy in data migration processes.
 - Explored the use of Generative Adversarial Networks (**GANs**) for data validation and quality assurance.
- Plant disease detector** 07/2024
Tools: Deep Learning, MLOps 
 - Researched and identified the most accurate deep learning algorithm for this model.
 - Built an end-to-end deep learning project for image classification using **CNN** to detect plant diseases.
 - Deployed the model using **MLOps** practices.
- Cloud Native e-commerce application with devops automation** 01/2024-06/2024
Tools: Docker, Kubernetes, Jenkins, Pytest 
 - Researched microservices architecture, **DevOps** tools, and practices.
 - Developed a MERN e-commerce platform for smart home devices.

- Implemented a microservices architecture to enhance testing capabilities, inspired several teams to adopt microservices.
- Integrated DevOps automation tools and deployed the application on Microsoft Azure.

• Text Summarizer

04/2024

Tools: *Hugging Face, Flask*



- Developed a Flask web application for automatic text summarization.
- Integrated the **Hugging Face** BART model to generate text summaries based on user-defined summary length.

• My Chatbot

03/2024

Tools: *NLP, Deep Learning, Flask*



- Implemented **NLP** techniques to preprocess and analyze user inputs before passing them to the classification model.
- Trained a **deep learning** model using Keras and TensorFlow to classify user inputs (sentences) into predefined intents, allowed the program to respond appropriately based on a JSON file.
- Developed a Flask-based chatbot web application that uses **NLP** and the trained **deep learning** model to facilitate interactive user engagement.

SKILLS

• Artificial Intelligence :

- **Frameworks & Libraries:** Scikit-Learn, TensorFlow, Keras, PyTorch
- **Natural Language Processing (NLP):** NLTK, SpaCy, Hugging Face
- **Generative AI (GenAI):** GPT4-model, GANs
- **Programming Languages:** Python, MATLAB, C++, C, Kotlin
- **Mathematics:** Calculus, Linear Algebra, Probability, Statistics, Optimization
- **Web Technologies:** React.js, Node.js, Flask, HTML, CSS, JavaScript
- **Database Systems:** MySQL, MongoDB
- **Software Development Tools :** Git, Docker, Kubernetes, Jenkins, Pytest
- **Operating Systems :** Windows, Linux

AWARDS

First Place at "Challenge Projets d'Entreprendre", competed against 30 teams

05/2024

Sup'Com



- Developed a prototype of mobile application for the digitalization of contracts using **AI** techniques OCR, **NLP**, and **LLM**.

Second place at artificial intelligence national summit 2023

06/2023

IEEE INSAT SB



- Developed a website resembling a virtual legal assistant, leveraging **LLMs** to identify and highlight ambiguities and contradictions within contracts.

Skills : Team Collaboration, Communication, Creativity, Problem Solving.

VOLUNTEER EXPERIENCE

• Active Member in ACM

10/2022 - Present

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- Participated in the international programming competition TCPC'2024 in September 2024.
- **Skills:** Problem Solving, C++

• Python Teacher: "Python For All"

12/2022 - 06/2023

Kaffel Al Yatim



- Taught students the basics of the **Python** programming language at the Kaffel Al Yatim association, Ariena.
- **Skills:** Python

• Active Member in IEEE Computer Science

10/2022 - 06/2023

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- Attended Workshops in Machine Learning and Deep Learning.
- **Skills:** Machine Learning, Deep Learning

LANGUAGES

- English : Level B2 , **TOEIC** Score: 840/990
- French : Level B2
- Arabic : Native