Mehdi Cherif

Software Engineering Student

Tunis, Tunisia

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EDUCATION

National Institute of Applied Science and Technology

Software Engineering

Tunis, Tunisia 2020-2025

EXPERIENCE

Software Engineer

01/07/2023 - 01/08/2024

Technozor

Tunis, Tunisia

- Developed a web application designed to control an agricultural drone. This application facilitated precise and user-friendly operation of the drone, optimizing its functionality for agricultural tasks.
- Implemented Proportional-Integral-Derivative (PID) control algorithms for the drone's navigation system, ensuring stable and accurate flight paths during agricultural operations.
- Integrated a computer vision algorithm using YOLO to detect trees and farms, enabling the drone to navigate agricultural environments precisely.

PROJECTS

'9anounGPT': AI Lawyer assistant

- Developed the chatbot powered by Retrieval-Augmented Generation architecture, using multiple LLMs.
- Integrated the chatbot into a website featuring a law forum for discussing legal matters.
- Implemented features allowing users to schedule appointments with lawyers directly through the website .

Real-time Tweets Sentiment Analysis and Emotion Detection

• Architected an end-to-end pipeline that provides powerful insights about any topic or product through real-time tweets sentiment analysis and emotion detection.

Tunisian Water Level Prediction

• Established a Time Series model that predicts the level of water in multiple dams around the Tunisian country.

CO₂ Emission Prediction in Rwanda

• Developed a LightGBM regression model to predict CO2 emissions in Rwanda. This project explored data preprocessing, feature engineering, model selection, and evaluation techniques, culminating in a model that can be used to forecast future emissions.

Traffic Signal Optimization System

Designed a project aimed at tackling the issue of time waste in traffic using computer vision with yolov5 and GRU
optimizing the time duration of green lights depending on traffic intensity.

Aerobotix Website

• Created a website using React for a university club showcasing the club achievements and projects and its main axis.

LANGUAGES

English (Proficient), French (Proficient), Arabic (Native)

ACHIEVEMENTS

First Place in Eurobot Qualification in Tunisia 20/04/2023 Third Place in Data Overflow Data Science challenge 30/04/2023 First place in NRW makeathon by Orange FabLab 26/06/2023

TECHNICHAL SKILLS

Programming Languages: JavaScript, Python, Java, C, C++, PHP

Frameworks: ReactJS, Angular, NestJS, Flask, Django, ROS, Tailwind, Bootstrap

Message Brokers: Apache Kafka, RabbitMQ Developer Tools: Git, Docker, Kubernetes