

Rayan GHARBI

📍 Tunis ✉️ rayan.gharbi@etudiant-enit.utm.tn ☎️ 20200475 in Rayan Gharbi

Summary

I am a second-year Telecommunications and Networking student at the National Engineering School of Tunis. I am deeply interested in cloud computing, DevOps, and MLOps, areas where I am currently improving my skills. Motivated and curious, I am seeking an internship opportunity to apply my knowledge, further enhance my skills, and contribute to innovative projects.

Education

Institut Préparatoire aux Études d'Ingénieurs de Monastir Sept 2021 – June 2023

Preparatory cycle, Math-Physics — Rank: 398/1700

- Advanced mathematics, analysis, and statistics.
- Analytical rigor and time management.
- Introduction to Python and SQL.

National Engineering School of Tunis Sept 2023 – Sept 2026

Engineering cycle, Networks and Telecommunications

- Networks and telecommunications: CCNA 1 & CCNA 2, infrastructures, transmission.
- Signal and image processing.
- Software development: C, C#, .NET, MATLAB.
- Linux systems and administration: managing Linux systems.

Experience

Intern – Leoni, IT Department July 2024 – August 2024

- Network administration: configuration, maintenance, and security.
- Virtual server management: installation and optimization.
- Storage and data: setup and backup.
- Installation and deployment of new equipment.

Intern – WorldQuant University, Applied Data Science June 2024 – September 2024

- Completion of 8 data science projects (air quality, earthquake damage, etc.).
- Exploration and application of machine learning models: Linear Regression, Logistic Regression, Random Forests, K-Means Clustering.
- Work on Time Series for forecasting and temporal analysis.
- Development of ETL processes for data extraction, transformation, and loading.

Projects

Forum Creation in C

- Development of a forum with user management and discussions.
- Use of pointers and file handling for data persistence.

Game Development in SDL with C++

- Creation of an interactive game with 2D graphics, animations, and input management.
- Object-oriented programming (OOP), managing graphical and audio resources.

Voice-Controlled Robot (System Programming)

- Design of a robot with voice recognition and motor control.
- Programming in C and integration with embedded systems using Arduino.

Object Detection using Computer Vision

- Development of a real-time object detection application.

- Use of Python, OpenCV, and YOLOv4 for computer vision.

Mini .NET Projects

- Windows Forms applications with MVVM pattern in C#.
- Development of an online movie booking platform using .NET MVC.

ETL Pipeline Implementation for Data Management in an MLOps Application

- Creation of an ETL pipeline for extracting, transforming, and loading medical data.
- Integration with Apache Airflow for automating processes.
- Use of Apache Spark for processing large volumes of data.
- Development of a Flask API for interaction and integration with processed data.
- Docker deployment for scalability and container management.
- Real-time data visualization with Dash and Power BI.

End-to-End MLOps Project with DVC Pipeline

- Implementation of a complete MLOps pipeline with DVC for tracking data and models.
- FastAPI for the API and integration of machine learning models.

Real-Time Data Streaming Project

- Setting up a real-time data streaming system using Apache Kafka and Zookeeper.
- Use of PostgreSQL, Cassandra, Apache Spark, and deployment with Docker.

Skills

Programming Languages:

C++, Python, C#, SQL/NoSQL

Technologies:

Docker/Kubernetes, .NET, OpenCV, Machine Learning, Apache Spark, Flask, Apache Airflow

Tools:

Git, Linux, MongoDB, AWS, Power BI/Dash, PostgreSQL, Kafka/Zookeeper, Cassandra, DVC (Data Version Control)