

Nadhir Ben Halima

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Education

Ecole Polytechnique de Sousse - GFI

Software Engineering (specialty in Data Science and AI)

Sousse, Tunisia

2023 - 2026

École supérieure des sciences et de la technologie de Hammam Sousse

Maths-Physics Preparatory Class for Engineering Studies

Sousse, Tunisia

2018 - 2022

Tunisian Baccalaureate in Mathematics

Honors: Good

2018

Experience

Data Soft

Website Development

Sousse, Tunisia

Summer 2023

- Developed an ERP extension for financial data transfer and tax compliance using UML.
- Debugged and optimized system functionality with WinDev 25.

Société tunisienne de l'électricité et du gaz

Tunisia

Sousse,

TurbineControl IoT Upgrade

July ,Out 2022

- Developed and integrated an IoT service to monitor and control gas turbine systems in real time.
- Successfully migrated control logic from Mitsubishi PLC code to Siemens TIA Portal, ensuring full functionality and reliability of the gas turbine regulation system.

Abajim

Claud & Security

July ,Out 2024

- Successfully migrated infrastructure from OVH to Amazon Web Services (AWS) to improve scalability and reliability.
- Led the transition process, ensuring seamless deployment, optimized performance, and minimal downtime.

Multiverse IA

AI & Full-Stack Development Intern

June – September 2025

- Developed a full React.js web project from scratch as part of the internship training program.
- Worked on advanced Natural Language Processing (NLP), Retrieval-Augmented Generation (RAG), and Model Context Protocol (MCP) applications.
- Built and fine-tuned machine learning and deep learning models for intelligent data analysis.

Projects

PFA-BigData & Machine Learning Project

- Implemented Hadoop for large-scale data cleaning and processing.
- Developed a machine learning model using Apache Spark for predictive analysis.

Water Footprint Reduction Advisory Website

- Built an Angular-based advisory website for sustainable water usage.
- Integrated an LLM chatbot for personalized environmental advice.

React Website for Industrial Machinery Company

- Designed, developed, and hosted a company website using React.

Virtual Try-On Feature for Zen Clothing Brand

- Implemented a virtual try-on feature using the OOTDiffusion model as part of IEEE challenges.
- Integrated the feature into Zen's mobile app, enabling users to visualize clothing in real-time.
- Stock Management System for Bank
- Developed a stock management system using JavaFX, Java, and MySQL.
- Features include inventory tracking, supplier management, and automated stock alerts.

Grocery Delivery App

- Developed an Android grocery delivery application using Java and Material UI.
- Implemented user authentication and a seamless UI/UX.

School Management System

- Developed a comprehensive school management system using Python, Tkinter, and MySQL.
- Features include student calendar management, class management, and a library module.

AI Oil Price Prediction & Advisory Platform

- Developed a real-time oil price monitoring and forecasting web application using React.js, Next.js, FastAPI, and MCP
- Integrated a Retrieval-Augmented Generation (RAG) system for generating investment insights and financial analysis.
- Deployed machine learning and deep learning models to predict oil market trends and assist decision-making.

Leadership & Activities

IEEE EPS Student Branch

Member

Tunisia
2023 - Present

- Worked on various technical projects and ranked 2nd in the IEEE Xtreme Hub Competition.

Founding Member of Microsoft IT Lab, ESSTHS University

Event Coordinator

Sousse, Tunisia
2022 - 2023

- Led event management efforts and facilitated tech workshops for students.

IEEE Membership

Member

Tunisia
2021 - Present

- Participated in competitive programming contests and algorithmic challenges.

Skills & Certifications

Technical: Python, Java, C, JavaScript, HTML & CSS, PHP, R, Flutter, C++, C# .NET, MEAN Stack, Docker, Apache Spark, Flask, REST APIs, Linux

AI & Machine Learning: LLM deployment, Prompt Engineering, RAG-powered chatbot development, Ollama, Hadoop, Data Warehousing

Networking & Security: Enterprise network setup, Security Protocols

Certifications

- *Microsoft Azure AI-900 (AI Fundamentals)*
- *CCNA 1 & 2 Certification (Cisco)*
- *BLS (Basic Life Support) Certification*
- *Securinet OSINT Formation*
- *2nd Place - IEEE Xtreme Hub Competition (2023)*
- *Building Transformer-Based Natural Language Processing Applications (NVIDIA)*
- *Fundamentals of Deep Learning (NVIDIA)*
- *Intermediate to R*
- Introduction to Data Science (Cognitive Class)
- Big Data (Cognitive Class)
- IBM Blockchain Foundation Developer (BC0201EN, provided by IBMDeveloperSkillsNetwork)
- Hadoop (BD0111EN, provided by IBM)
- Spark Fundamentals (BD0211EN, provided by BigDataUniversity)
- Supervised & unsupervised Learning with scikit-learn(Datacamp)

Languages

Arabic: Native

English: Fluent

French: Fluent

German: Basic