# Meriem Khedhiri

Software engineer





(in) https://www.linkedin.com/in/mariem-khediri/



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Dynamic and detail-oriented Software Engineer with a strong foundation in Data Science, AI, and IoT. Skilled in machine learning, deep learning, and data analysis with hands-on experience in innovative research and real-world applications. Seeking an entry-level role to apply my expertise and drive innovation.

### **KEY SKILLS**

- Data Science & Al: Machine Learning, Deep Learning, Computer Vision, TensorFlow, PyTorch
- Programming: Python, JavaScript, PHP, Java, C/C++,
  MATLAB
- Big Data & Databases: Spark, MySQL, PL/SQL, SQL
- Data Visualization: Matplotlib, Seaborn, Power BI
- Development Tools: VS Code, Eclipse, Jupyter, Google Colab, Git/Github
- Embedded Systems: STM32, Arduino, Raspberry Pi4
- **Soft Skills:** Problem-solving, Debugging, Team Collaboration, Agile (Scrum)

#### PROFESSIONAL EXPERIENCE

## Research and development intern - Data engineer

02/2024 - 06/2024

Measurement and sensor Technology (MST) TU- Chemnitz, Germany

- Developed an innovative EEG-based epileptic seizure classification method using compressive sensing techniques.
- Conducted EEG data collection and preprocessing with MATLAB & ICA.
- Designed a feature selection pipeline in Python and implemented a web-based visualization tool using React.js & Flask.
- Deployed the model on Raspberry Pi4 for real-time monitoring.

Key tools: MATLAB, EEGLAB, Python, Google Colab, React.js, Flask, Raspberry Pi4

## Deep Learning developer intern

06/2023 - 07-2023

Leoni, Tunisia

- Built a CNN for employee recognition & emotion detection using TensorFlow.
- Integrated OpenCV for real-time image processing.
- Enhanced model performance through extensive testing and optimization.

Key Tools: Deep Learning, TensorFlow, Jupyter, OpenCV, Python

## Machine Learning developer Intern

06/2023 - 07/2023

The Sparks Foundation, Singapore (remote)

- Conducted EDA on 'SampleSuperstore' data to identify profitability insights.
- Developed a hybrid model combining stock price prediction and sentiment analysis.

Key Tools: Supervised and unsupervised learning, Clustering, Linear Regression

### IOT developer Intern

07/2022 - 08/2022

TUNSA and ESPITA – Tunsat1 the Satellite Project (Tunisia-Japan), Tunisia

- Developed an STM32-based communication protocol for microcontrollers.
- Designed a redundancy backup system for CubeSat applications.
- Presented findings to JAXA & UNOOSA.

Key Tools: STM32, I2C, CubeMX.

### **EDUCATION**

## Engineering Degree, Industrial computer science Engineering

2021-2024

National School of Electronics and Telecommunication of Sfax (ENET'Com) – Tunisia

• Engineering courses focusing mainly on Information Systems, computer engineering, artificial Intelligence, object-oriented programming, robotics, IOT and industrial computing.

### Pre-Engineering Degree

2019-2021

Preparatory Institute for Engineering Studies of Monastir – Tunisia

• Preparatory cycle for engineering studies, Linear Algebra, IT, Mathematical Fundamentals, Physics, chemistry, and basic computer science.

### **LANGUAGES**

English: Full Professional Proficiency

French: Full Professional Proficiency

Arabic : NativeGerman: A2

### **CERTIFICATIONS**

•	Data Science Professional Certificate   IBM- Coursera	2025
•	Scrum for Ops and DevOps Fundamentals   SCRUMstudy	2024
•	CNA 1: Introduction to Networks   cisco	2023
•	Machine Learning Specialization   Deep Learning.Al- Coursera	2023

## **VOLUNTEER WORK AND ACHIEVEMENTS**

• Human resources manager for club Aeromodelisme Enet'com - Tunisia

09/2022-07/2023

- Soft skills trainer: Team/Time /Stress management
- Founded and lead organised the « ENET AERO CUP »: National aeromodelling competition
- 2nd Prize Hackathon'23: 2023

Smart Solutions for the Automotive Sector at the Digital Research Center of Sfax