

MARAM CHEIKH

FINAL-YEAR ENGINEERING STUDENT

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🌐 LinkedIn

📁 Portfolio

📍 Bizerte, Tunisia



Profil

Third-year engineering student at INSAT, specializing in Instrumentation and Industrial Maintenance, with a focus on Microelectronics (in partnership with Grenoble Alpes University). Passionate about embedded systems, IoT, and microelectronics, with strong motivation to contribute to innovative projects combining research and technological development.

Éducation

Instrumentation and Industrial Maintenance 2021-2026

INSAT

Scientific Baccalaureate

2017-2021

Mohamed Ali Annebi High school - with Honors

Experience

SOFIATECH - Summer Internship July-August 2025

Tunis, Tunisia

- Development of a Border Router based on a Raspberry Pi using an nRF dongle, integrating the Matter ecosystem and the Thread protocol to facilitate communication between connected devices within a network.
- Configuration of Home Assistant and integration of the Border Router, including commissioning of a Matter device (ESP32-H2 running the Light example) to experiment with management of connected devices.

Microelectronics Internship

July 2025

Grenoble, France

- Visit to ST-Crolles, CEA-Leti, LTM, and Labex Microelectronics
- Practical work in the Cleanroom of CIME-NANOTECH
- Design and routing of circuits using CADENCE

SOFIATECH - Summer Internship

July 2024

Tunis, Tunisia

- Development of an IoT solution for automating a garage door using the MATTER protocol on Ubuntu.
- Integration of smart home features enabling remote control and GPS-based operation.

ELEONETECH - Voluntary Internship

July 2023

Bizerte, Tunisia

- Development of tests using LabVIEW
- Observation of the daily tasks and responsibilities of maintenance professionals.

Projects

- Line follower Robots(×2)
- Autonomous Robot - Robotics competition
- Personal and professional project: study and development of smart glasses for visually impaired individuals, using computer vision.
- Wellness Innovation Bootcamp – 2nd Prize: optimizing the mobility of wheelchair users through innovative solutions via a platform.
- Smart Irrigation System: Automated irrigation management project using humidity sensors and an ESP32 microcontroller.

Technical and Soft Skills

- **Programming and Software Development:** Python, Embedded C, React JS, VHDL, SQL, GitHub, YOLOv8, OpenCV, OpenThread
- **Tools and Platforms:** LabVIEW, MATLAB, SolidWorks, Linux, Firebase
- **Embedded systems and Electronics:** STM32, ESP32, Raspberry Pi, nRF52840 Dongle, Microelectronics, Robotics
- **Personal skills** Teamwork, Stress Management, Motivation, Hardworking

Certificates

- Large Language Model – NVIDIA
- ROS for Beginners – Udemy
- Certified SolidWorks Associate (CSWA)
- GitHub Foundations – DataCamp
- Communication protocols – CSF
- AI Fundamentals – DataCamp

community life

- IEEE Robotics and Automation Society
- INSAT Maintenance Club
- INSAT ACM Student Chapter
- Tunisian Scout

Languages

- Arabic (Native)
- English (Fluent – ONSET B2)
- French (Fluent – TCF C1)
- German (Basic)

Interests

Scout • Swimming • Reading