

WIEM TABBAL

Work Experience and Internships

- ELECTRICAL ENGINEER** – Construction work office – Kebili, Tunisia July 2024 – June 2025
- Conducted electrical design studies in accordance with relevant standards and project specifications.
 - Supervised site installations to ensure quality and safety compliance.
 - Prepared detailed electrical schematics using **AutoCAD**.
- END-OF-STUDIES PROJECT INTERNSHIP** – DRÄXLMAIER SATE – Mahdia, Tunisia February 2023 – June 2023
- Developed a full-stack web application to report and track defects on the production line, improving communication between operators and supervisors.
 - Used **Angular** for the front end and **Spring Boot** for the back end to ensure responsive and scalable performance.
 - Integrated **MySQL** for data storage and used **Power BI** for real-time data visualization and analytics.
 - Employed **Postman** for API testing and followed the **Scrum** methodology for agile development.
- INTERN** – Consulting Engineer's Office for Electricity and Fire Safety – Kebili, Tunisia July 2022 – August 2022
- Created single-line electrical schematics using **AutoCAD**.
 - Developed code for cable section calculations using **MATLAB**.
- INTERN** – Tunisian Company of Electricity and Gas (STEG) – Kebili, Tunisia July 2021 – August 2021
- Learned about electricity production and distribution systems.

Projects

- DRIVER DROWSINESS DETECTION SYSTEM** 2023
- Designed and implemented a real-time driver drowsiness detection system using **Python** and **OpenCV** on a **Raspberry Pi 4**.
 - Integrated deep learning models with **Keras** to detect signs of fatigue from live video input.
- RASPBERRY PI BOARD CONTROL** 2023
- Programmed and tested the Pi Sense HAT extension board and controlled the Raspberry Pi camera module using **Python**.
 - Gained hands-on experience with IoT protocols by implementing **MQTT** and integrating **ThingSpeak** for real-time data monitoring and visualization.
- SMART CONNECTED LOCK** 2022
- Designed a smartphone-controlled connected lock using **ESP32** and **C++ language**.

Skills

- Programming: JavaScript, Python, C/C++, HTML/CSS
- Frameworks/Tools: Angular, Spring Boot, Power BI, MATLAB/Simulink, TIA Portal, VHDL, LabVIEW
- Hardware & Design: Raspberry Pi, STM32, ESP32, Proteus, AutoCAD, Linux/Windows environments

Languages

- French – Proficient
- English – Intermediate
- Arabic – Native

Education

- ENGINEERING DEGREE IN ELECTRICAL ENGINEERING** – National Engineering School of Sfax (ENIS), Tunisia 2020 - 2023
- PREPARATORY CYCLE IN PHYSICS-CHEMISTRY** – Higher Institute of Applied Sciences and Technology of Gabes, Tunisia 2018 - 2020