





Arij SALEH


Embedded systems & IoT engineer


Recently graduated Embedded Systems and IoT Engineer from ESPRIT School of Engineering seeking entry-level opportunities to apply and expand my skills.

 arij.saleh@gmail.com

 arij-saleh-sa/

 ArijSaaleh

 +216 26 290 351

 Tunis, Tunisia

Experiences

Machine Learning Web App Developer at ESPRIT school of engineering research department, Tunisia

January 2023 – July 2023

Created an application for ESPRIT that manages reception functions and FAQ using a virtual chatbot. The app facilitates interactive discussions, offers guidance to potential ESPRIT students, and handles pre-admission interviews.

Keywords: *Dialog Flow, NLP, RNN, Angular, Nodejs, Mongo DB, Face API*

Embedded system developer intern at Orange Tunisia

July 2022 – September 2022

Realization of an IoT solution for the detection and prediction of forest fires propagation in real-time. Won the second prize at the Orange Summer Challenge 2022 under the name of FireFlow.

Keywords: *ESP32 HELTEC, LoraWan, MQTT, LoraWan The Things Network, PCB design, Google Cloud Platform.*

Embedded System Developer intern at TASEMCO

February 2020 – June 2020

Realization of a Bionic Hand. This advanced prosthetic hand was meticulously designed and 3D printed, incorporating state-of-the-art technologies such as electromyography (EMG) sensors and servo-motors.

Keywords: EMG, Arduino nano, Servomotors, 3D printing.

Desktop application Developer intern at STEG Tunisia

January 2019 – February 2019

Achievement of an inventory desktop application.

Keywords: Java, MySQL.

Projects

Integration project at ESPRIT "KARHABTI"

January 2022 – May 2022

Realization of an intelligent platform for cars capturing the ECU data through OBD II with the ELM327 connected to ESP32 and creating a dashboard for users and guide through a simple diagnosis alongside with a drowsiness detection system for the driver realized with the YOLOV5.

Keywords: OBD-II, ESP32, C/C++, MQTT, ELM327 BLE, Angular, Nodejs, MongoDB, Machine learning...

Yocto-based Embedded Linux Image for Raspberry Pi

November 2021- December 2021

Developed a custom embedded Linux image using Yocto Project for the Raspberry Pi platform. Utilized Yocto's build system to create a tailored and optimized Linux distribution, ensuring efficient resource utilization and performance.

Keywords: Cross compilation, Kernel configuration

STM32 Smart parking system

October2020 -December 2020

Implemented an intelligent parking system using STM32 for real-time parking space monitoring.

Utilized ultrasonic sensors for vehicle detection and WIFI to relay space availability data to a central server.

Keywords: STM32, MySQL, C, MQTT, Android Java, WIFI

Education

Master of Engineering – Telecommunication Internet of things systems and services major at **ESPRIT school of engineering, Tunisia**

September 2020 – July 2023

Applied License – Embedded & mobile systems major at **ISSET Rades, Tunisia**

September 2017 – July 2020

Skills

Coding Languages: Python, Java, C. **Web technologies:** HTML, CSS, Angular, NodeJS. **Database Tools:** MongoDB, MySQL, Firebase. **Electronic boards:** ARDUINO, ESP32/8266, RASPBERRY PI3, STM32. **Communication protocols:** RS232, SPI, I2C, Bluetooth, MQTT, WIFI, LoRaWAN. **Containerization:** Docker

Languages

Arabic: Native -- French: B2 -- German : A2 -- English:B2

Activities

- PI Makers Robots 2.0 (2019) -- ULT Robots 4.0 (2019) (2nd prize) – FST-Robots 2.0 (2019) -- Enicarthege 24 Challenge (2020)