



# Seif Eddine Daadoucha

## Embedded systems engineer

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🇹🇳 Tunisian

📅 29 years old

🏠 Tunis, Tunisia

- 5 years creating high-quality products and embedded firmware for unique embedded systems used by millions of end-users.
- Led cross-functional teams of 5, driving Agile projects, overseeing the full product lifecycle from concept to circuit design, PCB layout, software development, testing, documentation, and maintenance.

## SKILLS

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### Languages:

English (fluent), French (fluent), Arabic (Native).

### Programming Languages:

C(SoloLearn), C++(SoloLearn), JAVA(SoloLearn), Python(SoloLearn, Great Learning), Bash, Kotlin.

### MCUs/Boards:

Raspberry Pi, Arduino, ESP32, Texas instrument DSP C6416, STM32 F401RE-NUCLEO.

### Protocols:

SPI, I2C, UART, CAN BUS, Ethernet, USB, TCP/IP, WIFI.

### Embedded IDE:

Arduino IDE, CCS(Code Composer Studio), CubeMX, IAR, Atollic, Circuit Wizard, LabVIEW, Proteus8.

### Operating systems:

Windows, Ubuntu, Raspbian, Kali Linux, Free RTOS, Embedded Android.

### Professional Soft Skills:

Interpersonal skills (IBM), Project management (IBM, Great Learning), Design Thinking (IBM).

### Software Development Life Cycle:

Do-Act-Check-Plan, Agile, V cycle.

### Development tools :

Devops(IBM, SkillUP By Simplilearn), SRUM (Certiprof), Jira, GIT, Jenkins, SYSUML.

### Other IDE:

Eclipse, Visual studio code, Android Studio, Netbeans.

### Frameworks and libraries:

HTML 5, CSS 3, JS, Symfony, Django, PHP, Flask, Open CV (Python/C++)..

### Other softwares:

Cisco Packet Tracer, Adobe Illustrator, Adobe Photoshop, Audacity, Filmora, MS Office, MS Power BI.

## WORK EXPERIENCE

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Software Designer

Since March 2022

[Actia Engineering Services](#) Ariana, Tunisia

### Job details - Audio Developer at Renault Software Labs 11/2023 - present :

- Helped build and improve audio features in embedded Android systems for car infotainment. Worked on integrating major software updates that improved user experience and customer satisfaction.
- Skilled in working across Android layers from apps to kernel.

### Job details - Audio System Debug Analyst at Renault Software Labs 03/2022 - 10/2023 :

- Analyzed and fixed complex software bugs in automotive audio systems, helping increase customer trust and satisfaction, ultimately resulting in being awarded the entire audio development project.
- Mentored interns to build internal debugging tools, reducing bug resolution time by 30%.

### Technologies/languages used:

Jira, GitLab CI, Embedded Android, Shell Scripting, Linux, Android AOSP, Automotive Android, ADB, Makefile, C/C++, Java, Kotlin.

## WORK EXPERIENCE

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Automotive Diagnostic Consultant -- freelance

From February 2021 to February 2022

**IA Car Workshop** Kairouan, Tunisia

### Job Details:

-Leveraged comprehensive knowledge of automotive architecture to lead the development of a car security system project at GPRO Consulting, ensuring robust system design and successful project delivery.

-Diagnosed and repaired over 100 vehicles using Modern diagnostic tools, reducing customer wait time by 15% and reducing problem-solving time by 30%.

### Technologies/languages used:

Delphi Cars, Tolerance Data, ATris Stahlgruber, Autodata.

Embedded systems and IOT project manager

From September 2020 to February 2022

**GPRO Consulting SARL** Sousse, Tunisia

### Job Details - Embedded systems and IOT project manager 2/2021 - 2/2022:

-Responsible for conceiving and developing innovative embedded systems and IoT products, managing the full life cycle from concept and circuit design through software and firmware development, testing, documentation, and maintenance.

-Led cross-functional teams and coordinated IT and embedded engineering efforts to deliver robust, standards-compliant solutions across multiple domains.

### Projects:

#### -Car Security & Safety System

Designed a smart system for cars that prevents theft, detects accidents, warns against drowsy driving, protects from gas leaks, and provides a smart parking solution. Included fleet tracking and real-time alerts.

#### -Machine & Worker Monitoring System

Created a Monitoring system using sensors and a fleet system to monitor the machine's state in real time. Helped improve delivery efficiency.

### Job Details - Embedded System Engineer 9/2020 - 1/2021:

Designed and built electronic systems from idea to final product. Worked on circuit design, firmware development, testing, and integration across healthcare, energy, and industrial applications.

### Projects:

#### -Energy & Fire Monitoring System

worked on the development of a smart system to track energy use and detect electrical faults (short-circuit, over-voltage) and fire risks. Sent instant alerts and connected to building automation.

#### -COVID-19 Remote Patient Monitoring System

Built a portable device with sensors to track patient health (SpO<sub>2</sub>, heart rate, temperature) at home. Sent real-time data to doctors and cloud platforms, helping save lives in emergencies.

**Technologies/languages used:** GIT, JIRA, V Cycle, SCRUM, Jenkins, SYSUML, Raspberry Pi, Arduino, ESP32, STM32, FreeRTOS, Raspbian, Linux, Python, Embedded C/C++, Arduino IDE, CCS, CubeMX, IAR, Atollic, Circuit Wizard, LabVIEW, Proteus8, SPI, I2C, UART, CAN BUS, Ethernet, USB, Flask.

Summer Internship

From July 2020 to August 2020

**GPRO Consulting SARL** Sousse, Tunisia

### Job Details:

Developed a semi-autonomous car prototype designed to perform automatic parking with over 90% accuracy. The system utilized sensors, including ultrasonic modules and a camera, along with a Raspberry PI, to detect parking spaces and control steering and movement.

**Technologies/languages used:** Raspberry Pi 4, Raspbian, Python, CV2 Library, Arduino, Embedded C, C++, PyCharm, V Cycle, UML.

## EDUCATION

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Engineering Degree in Computer Science

From 2018 to 2021

**Polytechnic School of Sousse** Sousse, Tunisia

**EUR-ACE accreditation.**

Bachelor degree in computer science

From 2015 to 2018

**Higher Institute of Information Technology and Management of Kairouan(ISIG.K)** Kairouan, Tunisia