Daniel **Carrión**

Engineer & Designer

About me

Graduated in electronic engineering, robotics and mechatronics, with a master's degree in mechatronics. I love technology, specifically electronics and SoC programming. In my last years I have acquired programming skills in C/C++ and FreeRTOS with mCU thanks to projects like HortSost in which I got involved as a technician. As a researcher, I delved into the programming of RISC-V architectures and design of applications and wireless sensor network infrastructures framed in IoT projects.

Personal

- Daniel Rodríguez Carrión
- Spain
- makedir3d@gmail.com
- (+34) 722 67 89 59
- DaniCampusIoT
- danrodcar
- danicampusiot.github.io

Areas of specialization

C/C++ Programming · IoT · PCB Design · 3D Design · Electronic · Robotic & Control

Skills

Coding and Programming
Data Analytics
Data interpretation and Charting
Active listening and Empathy
Adaptability
Continuous learning

Interests

SoC Programming / Automating processes Web Programming / Reverse engineering / Discuss

Languages

Spanish C2   mother tongue
English B2   FCE Cambridge

Short Resumé

02/2022–09/2024	**Technical staff & Research personnel** Programmer · COMPUTERS ARCHITECTURE DEPT., UMA 📍

- I carry out programming and conditioning activities of the technical part of the HortSost II project of the University of Malaga.
- Co-tutoring activities of final degree projects of students who were doing their work in my department.
- I was in charge of the technical part of the adaptation of the greenhouse and its automation, where I learned the handling of various sensors and their electrical conditioning, programming (ESP32) and data management. I used MQTT and NODE-RED to send data and manage them in a UNIX server.
- My final degree project, which was based on these activities, was awarded 2nd place in the Bizintek 22/23 Awards.
- As a researcher, I combined my master studies with the work in the department. I programmed in C/C++ and FreeRTOS with ESP32 a self-configuring sensor infrastructure that exchanged data for processing at the edge.
- I made a publication and a talk at the national computer science congress titled "Auto-configurable wireless sensor network for edge computing".
- I dedicated to the signal conditioning of the A121 radar sensor (60GHz PCR) for monitoring biometric signals in enclosed spaces.

06/2019–01/2020	**Technical Staff** Worker · SITER 2000 📍

- In this company I was an intern for the first six months, performing consulting and study activities on GSM/DCS/UMTS and FTTH mobile network deployments.
- I worked in a multidisciplinary team with a great working spirit, in which I was assigned As-builts and other engineering documents for the analysis of the correct installation of access points (AP) installed in educational centers.

Degrees

2023	**Master in Mechatronics Engineering** M.A. · University of Malaga 🏛
2023	**Project Management of Photovoltaic Solar Installations: Solar Project Management** M.A. · EUROINNOVA BUSINESS SCHOOL 🏛
2021	**Grad. Electronic engineering, robotics and mechatronics** B.E. · University of Seville-Malaga 🏛

Certificates

2020	**PHP, JAVASCRIPT and MySQL developer** Cert. · DEUSTO FORMACIÓN 🏛
2019	**RPAS pilot and radio operator** Cert. · Aerocamaras 🏛

Publication & Talks

Jun. 2024	"Auto-configurable wireless sensor network for edge computing", at: *Spanish Congress of Informatics* in A Coruña, Jun. 2024.