# 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


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## Areas of specialization

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

## Skills

Coding & Programming
Data Analytics
Data interpretation & Charting
Active listening & 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

- The first year I carry out programming and conditioning activities of the technical part of the HortSost II project of the University of Malaga.
- I carried out 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.
- The second and third year, now 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.
- From this infrastructure I made a publication and a talk at the national computer science congress titled "Auto-configurable wireless sensor network for edge computing".
- My last months were dedicated to the signal conditioning of the A121 radar sensor (60GHz PCR) for monitoring biometric signals in enclosed spaces.

06/2019–01/2020 — **Administrative Assistant**
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.