

Jesús Carrascosa Carro

Computer Hardware Engineer by the University of Seville

Profile

I am a computer engineering student passionate about technology and biology, with a special focus on the application of computer science and electronics to the environment.

My motto is: "Stories of imagination tend to upset those without one" - Terry Pratchett

Areas of Interest

Computer science and electronics applied to the environment - Microelectronics - Smart cities - Hardware-based accessibility - Public transport - Robotics.

Work Experience

Collaboration Grant [University of Seville](#)

Seville - Spain *November, 2025 - Present*

Carried out in the Department of Electronics and Electromagnetism

Optimization of AI models (LLMs, vision, audio) for low-power hardware through quantization, pruning, and knowledge distillation. Performance evaluation on Raspberry Pi. Application in real-world biodiversity monitoring systems.

Education

Microcredential in Edge AI for FPGAs and Microcontrollers [University of Seville](#) **Seville, Spain** *January-2026*

Introduction to the design and implementation of **Edge Artificial Intelligence (Edge AI)** solutions on **FPGAs and microcontrollers**.

Hands-on Emerging technologies in Electronics Engineering [BIT](#)

Beijing, China *July-2025*

In-person. Intensive 4-week program in emerging technologies of electronics engineering.

Practical labs: FPGA, design of wearable devices with AI, Software-Defined Radio (SDR), smart agriculture and wireless communications.

Scholarship awarded to 10 students from the University of Seville based on academic performance and English proficiency.

BIP: Advancements and applications of wearable technology [University of Genoa](#) **Genoa, Italy** *February-2025*

In-person.

Erasmus +

I developed an interdisciplinary **human activity classifier system using machine learning**, achieving **97%** accuracy in movement classification.

Awarded to 10 students from the University of Seville based on GPA and English proficiency.

Artificial Intelligence Winter Program [BIT\(Zhuhai\)](#)

Zhuhai, China *January-2025*

In-person.

Awarded to 10 students from the University of Seville based on GPA and English proficiency.

Bachelor's Degree in Computer Engineering [University of Seville](#)

Seville, Spain *2019-2025*

Avg. grade of: 7.91

Honors in (Top 5% and ≥ 9): Hardware Development Laboratory, Computer Technology, Real-Time Embedded Systems II, Robotics and Automation, Peripherals and Interfaces, Artificial Intelligence (Mobility), Big Data Analytics for Hospitality (Mobility), Internet of Things (Mobility), Final-year project.

Outstanding in: Introduction to Discrete Mathematics, Discrete Mathematics, Computer Networks, Parallel and Distributed Systems.

Member of the SUGUS (Free Software and GNU/Linux) and IoTUS (Internet of Things) associations.

Exchange student.

Courses taken: Internet of Things, Big Data Analytics for Hospitality and Tourism, and Introduction to Artificial Intelligence.

Also attended beginner Chinese classes.

Technological Baccalaureate *Colegio Buen Pastor*

Seville, Spain *Sept 2017- Feb 2019*

GPA: 7.45

Volunteering

President of IoTUS Student Association

Seville, Spain *2025-NOW*

Vice President of IoTUS Student Association

Seville, Spain *2024-2025*

Guide at the Pantheon of Illustrious Sevillians and the Chapel of the Third Order

Seville, Spain *2017-2019*

La Herradura Equestrian Therapy Center

Seville, Spain *2018-2019*

Completed during Christmas holidays through the Colegio Buen Pastor internship program.

Languages

- **Spanish** [Native]
- **English** [C2] - Cambridge CAE (203)
- **Mandarin Chinese** - Learning
- **Esperanto** - Learning

Sports

Universo Parkour

Seville, Spain *2014-2018*

Received Parkour classes taught by Iván Fabián Garoz.

Tournaments, Competitions and Hackathons

Hack4Change ETSII, AccesiBLE

Seville, Spain *2025-Q1*

La Carbonería Autumn Go Tournament

Seville, Spain *2024-11-09*

NASA Space Apps Challenge 2024

Seville, Spain *2024-10-05*

XXV Seville Go Tournament

Seville, Spain *2024-04-06*

La Carbonería Spring Go Tournament

Seville, Spain *2024-03-16*

Courses and Certifications

- Internet of Things (Feb. 2024) - [Santander/MIT](#)
- Foundations of RISC-V Assembly Programming (No certificate) (Jul. 2024) - [Linux Foundation](#)
- SALUS Workshop 2024 (Mar. 2024)
- Shih Chien University Chinese Evening Class Level 1.

Skills

- **Programming Languages:** Java, Python, C/C++ (Learning), Rust (Learning).
- **Hardware Platforms:** Arduino, STMCubeIDE.
- **Computer Architectures:** RISC-V.
- **Operating Systems:** Fedora, Ubuntu, Windows.
- **Text Processing:** $\text{\LaTeX}$ (Overleaf).
- **Soft Skills:** Teamwork, Planning and Organization, Creative Problem Solving.