

Fernando Román Hidalgo

ROBOTICS AND AUTOMATION ENGINEER

41909, Salteras, Seville, Spain


+34 611 467 316 | ferromhid@gmail.com | FerXxk | fernandoromhid



Summary

Engineer with a **multidisciplinary profile and systemic vision**, featuring professional experience in developing technological solutions and currently completing postgraduate studies. I possess a **high capacity for abstraction in solving complex problems** and **accelerated self-taught learning**, enabling me to provide significant value in technically demanding projects. My objective is to consolidate an ambitious career plan, with a focus on automation and embedded software, within dynamic and innovative environments where continuous improvement is the standard.

Experience

**Airtificial Aerospace & Defense**

SOFTWARE ENGINEER

- Management and Client Relations:**
 - Project management for the development of a process automation application for a major aerospace company.
 - Direct customer interaction for requirements definition and specification.
 - Technical leadership and coordination in the development of custom solutions.
- Technical Development and Automation:**
 - Fullstack development, applying coding best practices, efficiency, and organization.
 - Design and implementation of a digital twin for a composite material production plant, oriented towards simulation and optimization of industrial processes.
 - Software integration and deployment using Docker containers.
 - Automation and orchestration of workflows with Apache Airflow.
 - Development of AI models for early failure detection and scheduling algorithms based on CP-SAT.
 - Acquisition and interpretation of data from industrial sensors.

Seville, Spain
April 2025 – Present

Projects

Interactive CV & Portfolio


WEB PORTFOLIO

- To see all my projects in detail, check out my **Interactive Portfolio**

Achievements


2024 **Winner**, National Competitive Robotics League (LNRC) - Minisumo Category Spain

Education

**University of Seville**


MASTER'S DEGREE IN ELECTRONIC ENGINEERING, ROBOTICS AND AUTOMATION

Seville, Spain
2025 – 2026

**University of Seville**

BACHELOR'S DEGREE IN ELECTRONIC ENGINEERING, ROBOTICS AND MECHATRONICS (GPA: 7.5/10)

Seville, Spain
2021 – 2025

**IES Heliche**

TECHNOLOGICAL BACCALAUREATE (GRADUATED WITH HONORS DISTINCTION)

Seville, Spain
2019 – 2021

Certifications



Idexa

ADVANCED PYTHON COURSE

Online

January 2026



Cambridge Assessment English

CERTIFICATE IN ADVANCED ENGLISH (C1 ADVANCED)

September 2024

Skills

Programming	C, C++, Python, MATLAB, Simulink, ROS, JavaScript, VBA, HTML, CSS, SQL
Electronics	Digital/Analog electronics, microcontrollers (MSP430, ESP32, Arduino), FPGA, automation and control
Simulation	System modeling and simulation, PID control design, embedded systems integration
DevOps	Docker, Linux, version control with Git (merges, pull requests), Apache Airflow
Networking	TCP/IP, MQTT, CAN bus
3D Design	Fusion 360, FreeCAD

Soft Skills

Technical leadership, multidisciplinary teamwork, effective communication, problem solving, adaptability, and a **high learning curve**.

Languages

Spanish	Native
English	Professional competence
French	Basic competence