Fernando **Román Hidalgo**

ROBOTICS AND AUTOMATION ENGINEER

41909, Salteras, Seville, Spain

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

Summary

Engineer with professional experience in developing technological solutions, currently active and completing postgraduate studies. My objective is to consolidate an ambitious career plan, with a special interest in automation and embedded software, while remaining open to participating in various projects that pose technical and professional challenges. I am motivated to be part of dynamic, innovative, and collaborative environments where I can continue expanding my competencies and provide real value to the team and organization through continuous improvement.

Experience

Airtificial Aerospace & Defense   *Seville, Spain*
SOFTWARE ENGINEER   *April 2025 – Present*

- Project management for the development of a process automation application for a major aerospace company.
- Extensive experience in the aerospace sector with solid technical knowledge.
- Direct customer interaction for requirements definition and specification.
- Fullstack development, applying coding best practices, efficiency, and organization.
- Development of a digital twin for a composite material production plant, oriented towards simulation, analysis, and optimization of complex industrial processes.
- Design and implementation of the plant's production digital twin.
- Software integration and deployment using Docker containers.
- Acquisition and interpretation of data from industrial sensors.
- Automation and orchestration of tasks and workflows with Apache Airflow.
- Development of AI models for early failure detection in production.
- Implementation of a production scheduling algorithm based on CP-SAT.

Education

University of Seville   *Seville, Spain*
MASTER'S DEGREE IN ELECTRONIC ENGINEERING, ROBOTICS AND AUTOMATION   *2025 – 2026*

University of Seville   *Seville, Spain*
BACHELOR'S DEGREE IN ELECTRONIC ENGINEERING, ROBOTICS AND MECHATRONICS (GPA: 7.5/10)   *2021 – 2025*

IES Heliche   *Seville, Spain*
TECHNOLOGICAL BACCALAUREATE (GRADUATED WITH HONORS DISTINCTION)   *2019 – 2021*

Idexa   *Online*
ADVANCED PYTHON COURSE   *2025*

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 fast learning.

Languages

Spanish   Native
English   C1 Cambridge
French   Basic competence

Achievements

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

Projects

Interactive CV & Portfolio
WEB PORTFOLIO

- Check out my full portfolio, project details, and interactive demo at: `https://ferxxk.github.io/CV-interactivo/`