



ALVARO NÍGUEZ FERNÁNDEZ

Software Developer

ABOUT ME

RoboticsEngineeringIntern | Python · C++ · ROS2 · Docker · Git · OpenCV · CI/CD

With practical experience in robotics, **ROS2**, and software development. I've built autonomous robots in **Gazebo** + **ROS2**, including a color-tracking bot, as well as a **Bluetooth-controlled** robot with **C++** and Web Bluetooth. I've also deployed intelligent systems with **FastAPI**, **Docker**, and **OpenCV**, and worked in **Agile environments** using **Git** and **Confluence**. Motivated to contribute to software architecture, deployment, and real-world robot optimization.

RELEVANT EXPERIENCE

MAR.
2025
-
JUNE
2025

Intern VR Developer

Grupo Fuertes (Murcia, Spain)

- Led an Agile dev team creating a VR training system using Unity and C#. Recreated realistic factory environments via photogrammetry. Contributed to immersive system design and
- cross-functional collaboration.

MAR.
2022
-
JUNE
2022

Intern Web Developer

T-Systems (Granada, Spain)

- Created an internal seat reservation system using Python, JavaScript and SQL.
- Automated location detection of reservable areas via OpenCV and blueprint analysis

MAR.
2021
-
JUNE
2021

Intern React Native Developer

Area F5 (Granada, Spain)

- Built a React Native mobile app using OCR with Python + OpenCV.
- Implemented JS client and Python server communication via WebSockets.

PROJECT HIGHLIGHTS

- **ROS2 Gazebo Robot:** Designed a robot that tracks a colored ball in a simulated environment.
- **Bluetooth-Controlled Robot:** Programmed using C++ for motors and sensors; built a React interface with Web Bluetooth for live control.
- **Greenhouse Forecasting System:** Developed a genetic-algorithm-optimized LSTM model for temperature prediction. Deployed via FastAPI, with a real-time dashboard in JavaScript + HTML.
- **Private Tutoring:** Taught Python, JavaScript, and Java to individuals, reinforcing core software and algorithmic concepts.

Contact

Email

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URLs

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LinkedIn: [linkedin.com/in/alvaro-niguez-fernandez](https://www.linkedin.com/in/alvaro-niguez-fernandez)

Education

Bachelor's in Computer Science

UCAM

2022 - 2025

Advanced Technician in Web Application Development

EIG Business School

2021 - 2022

Advanced Technician in Multiplatform Application Development

EIG Business School

2019 - 2021

Skills

- Languages: Python, C++, C#, JavaScript/TypeScript, Java, SQL
- Robotics: ROS2, Gazebo, OpenCV
- Software Dev: FastAPI, Docker, REST APIs, Git, Linux Tools: Unity,
- TensorFlow, Figma, Atlassian Confluence Methodologies: Agile,
- CI/CD

Language

- Spanish (Native)
- English (B2)
- German (B2)