Alvaro Ferrán Cifuentes

Experience

Systems Engineer, Fotokite *(March 2022 - present, Zürich)*
Implementing automated physical component testing with a robotic platform, installation of a simulator in CI to automatically pass test cases, and development of internal tools and general software development and code reviews.

Robotics Engineer, Space Applications *(Feb 2020 - Mar 2022, Brussels)*
Full-stack development (PCB, firmware, software, GUI) for space R&D projects. These include a double-ended walking robotic arm to service spacecraft, a lunar rover demonstrator and astronaut training machines.

Software/Hardware Engineer, Productize *(Aug 2018 - Jun 2019, Brussels)*
Developed prototypes (electronic design and firmware) for startups, such as a electric meter, a water leak detector and a cattle health monitoring system.

Embedded Software Engineer, Dekimo *(Jun 2017 - Aug 2018, Brussels)*
Developed real-time firmware for a high-voltage power line sensor, including a bootloader to upgrade the firmware without cutting power to the grid.

Software Engineer, Sopra Steria *(Dec 2016 - Jun 2017, Madrid)*
Maintained and improved C and C++ code in MVS and Unix mainframes for a large telecom company.

Software/Hardware Engineer, BQ *(Sep 2014 - Aug 2016, Madrid)*
All-around development of prototypes, including hardware and software, mechanical design, 3D-printing and soldering.

Projects

SeparAItor [link]
Robotic platform to sort trash in different bins using a camera and deep learning.

MotioSuit [link]
Motion capture suit to send limb positions to a PC over bluetooth using IMUs.

OpenChair [link]
An electric wheelchair conversion kit by reverse-engineering a hoverboard.

Education

Deep Learning Specialization *(2019)*
Deeplearning.ai

Robotics Specialization *(2018)*
University of Pennsylvania online course

B.Sc. Industrial Electronics and Automation Engineering *(2010-2014)*
University Carlos III of Madrid

B EU/EFTA permit

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linkedin.com/in/alvaroferran

Languages

Spanish Native
English Proficient
French Proficient
Italian Elementary

Skills

Software:
- Python
- C++
- Git
- Conda
- Docker
- Linux

Robotics:
- ROS2
- MoveIt
- EtherCAT
- CANOpen

Electronics:
- KiCad EDA design
- MBed OS

Hardware:
- Logic analyzer
- Oscilloscope
- SMD soldering
- 3D printing

3D design:
- FreeCAD
- Blender