

# Alvaro Zornoza Uña

Industrial Electronics and Automation Engineering
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in Alvaro Zornoza Uña
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# **OVERVIEW**

- My main areas of interest are robotics, drones, embedded systems, IoT, AI and computer vision.
- I consider myself a responsible, hard-working and organised person. I am always eager to learn new things. Extracurricular activities carried out during my bachelor's degree have provided me with good communication, teamwork and leadership skills.

## **WORK EXPERIENCE**

#### Computer Vision Graduate Researcher

Polytechnic University of Catalonia - Barcelona Tech (Barcelona)

Oct 2018 - Feb 2019

- Participating in the European project Personal Online Dosimetry Using Computational Methods. PODIUM project is part of CONCERT European Joint Programme for the Integration of Radiation Protection Research under Horizon 2020.
- Integrating RGB-D cameras for 3-D human body localization and tracking (Visual Studio, C++, C#, OpenCV)

# IoT Application Engineer and Consultant thethings.iO (Barcelona)

Abr 2018 - Oct 2018

- $\bullet$  Integrating third-party services (APIs REST) with the platform (HTTP, CoAP & UDP and MQTT protocols).
- Prior knowledge of Web applications development (Angular, NodeJS and MongoDB)
- Supporting customers with the setup of IoT projects and programming of cloud-code scripts (NodeJS).
- Representing on behalf of the company for projects and meetings with other customers and institutions.

#### Intern

thethings.iO (Barcelona)

Sep 2017 - Abr 2018

- Programming libraries for embedded-system (C++, Arduino, Python)
- Integrating services of Sigfox and other LPWAN technologies with the platform.
- Writing website content for both the blog and documentation of the platform.

#### Assistant Laboratory Technician

Kaunas University of Technology (Lithuania)

Feb 2017 - Jul 2017

- Internship at FabLAB Kaunas while an Erasmus + Exchange assisting for scientific research.
- Commissioning and maintenance of simulation equipment. Documentation and programming of DJI drones.

### **EDUCATION AND TRAINING**

Master's Degree in Automatic Control and Robotics Polytechnic University of Catalonia - BarcelonaTech (Spain) Sep 2017 - Present

• 120/240 ECTS credits completed.

Bachelor's Degree in Industrial Electronics and Automation Engineering Technical University of Madrid (Spain)

Sep 2013 - Jul 2017

- 240 ECTS credits. GPA: 7.1/10 (B).
- Honors in Physics I and Business Management.
- Outstanding (A+) grade in Bachelor's Thesis: Design of a Drone Based Measurement System for GSM signals.

#### Bachelor's Degree in Electronics Engineering

Feb 2017 - Jul 2017

Erasmus + Exchange at Kaunas University of Technology (Lithuania)

- Internship at the laboratory in FabLAB Kaunas.
- Writing the Bachelor's thesis and attending several elective courses.

# CONFERENCES, COURSES AND SEMINARS

#### Digital Signal and Image Processing with MATLAB

Czech Technical University in Prague (Czech Republic)

Nov 2016

#### Organisational Behaviour

Technical University of Madrid (Spain)

- Seminar on Organisational Behaviour for mentorship training.
- Learning communication and motivation skills and how to make efficient presentations.

## **LANGUAGES**

#### Spanish

Native speaker

#### English

Professional working proficiency. B2 - British Council Aptis English Test

Elementary proficiency. A1 - Official Language School of Madrid (Spain)

### IT SKILLS

#### Programming languages

C, C++, C#, ROS, Python, MATLAB & Simulink, VHDL (FPGA), NodeJS, GScript, API REST and TFX

PLC programming

Siemens STEP 5 and STEP 7

Simulator and schematic editor

Eagle, PSpice and OrCAD

CAD programs

AutoCAD and Inventor

Office automation

MS Office and G Suite

# OTHER RELEVANT EXPERIENCE/SKILLS

- Coordinator at ESN UPC (Barcelona). Organizing events and activities for new incoming students.
- Basketball Referee for Basketball Association of Madrid. Officiating basketball games during five seasons. Capabilities such as empathy, conflict resolution and teamwork under pressure.
- Secretary of an University Association: Mountain an Leisure Activities Club of UPM (Madrid). Institutional relations, corporate image and groups management.
- Mentoring program for new students at University. Providing experience, socialization and personal support to facilitate a good starting experience and beyond.
- Volunteer experience in several sports events, such as Euroleague Final Four at Madrid (2015) and King's Cup of Basketball at Malaga (2014).
- Driver's license (B) and own car.

Sep 2015