



# Álvaro Zornoza Uña

Industrial Electronics and Automation Engineering  
Originally from Madrid (Spain), but now living in Graz (Austria)

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[in](#) Álvaro Zornoza Uña

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## OVERVIEW

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- 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

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### R&D Engineer Intern

*Siemens AG (Graz)*

Mar 2019 - Present

- Writing master thesis at the Development House of the Digital Factory department.

### Computer Vision Graduate Researcher

*Polytechnic University of Catalonia - BarcelonaTech (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)*

Apr 2018 - Oct 2018

- 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 - Apr 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

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### Master's Degree in Automatic Control and Robotics

*Polytechnic University of Catalonia - BarcelonaTech (Spain)*

Sep 2017 - Present

- 90/120 ECTS credits already completed.
- Honors in Human Robot Interaction and Teleoperation.
- Currently writing master thesis in Austria as an Erasmus+ exchange student.

### 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**  
*Erasmus+ Exchange at Kaunas University of Technology (Lithuania)*

Feb 2017 - Jul 2017

- Internship at the laboratory in [FabLAB Kaunas](#).
- Writing the Bachelor's thesis and attending several elective courses.

## CONFERENCES, COURSES AND SEMINARS

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**Digital Signal and Image Processing with MATLAB**  
*Czech Technical University in Prague (Czech Republic)*

Nov 2016

**Organisational Behaviour**  
*Technical University of Madrid (Spain)*

Sep 2015

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

## LANGUAGES

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### Spanish

Native speaker

### English

Professional working proficiency. B2 - British Council Aptis English Test

### German

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

## IT SKILLS

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### Programming languages

C, C++, C#, ROS, Python, MATLAB & Simulink, VHDL (FPGA), NodeJS, GScript, API REST and T<sub>E</sub>X

### 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

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- 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 and 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.