

## PERSONAL DATA \_\_\_\_\_

**Name:** [Alberto Lopez-Gasso](#)

**Email:** alberto@miscircuitos.com

**Date of birth:** 1988 in Murcia (Spain)



## STUDIES \_\_\_\_\_

- 04/2019 – Today      **PhD Universidad de Navarra.**  
Develop of a integrated circuit of a energy harvester for a semi-active tag with several input sources: solar, thermal and RFID input.
- 09/2016 – 02/2019      **Master in Advanced Electronic Engineering.** specialization: **Micro- & Nano-Electronics, Chip Design** at FH Joanneum.  
Master Thesis: “Design of a Mixed-Signal Circuit to control a Charge-Pump for a Low Power Energy Harvester”. (grade 1)  
Mean grade: 1,3. Merit-based scholarship 2016/17
- 09/2012 – 07/2015      **Bachelor in the University of Applied Sciences of Mannheim**  
Bachelor in Science: *Automatisierungstechnik* (BSc Automation Technology) (in german)  
Mean grade: 1.8.
- 2006 – 2012      **Politecnical University of Cartagena**  
*Ingeniería Industrial superior:* (6.5) (Industrial Engineering)  
Final Project: “Design, construction and control of a hexacopter in a testing platform” (grade: 10)  
-Erasmus exchange student in university of Applied Sciences of Opole (Poland)  
-Seneca exchange student in the University of Applied Sciences of Sevilla

## WORK EXPERIENCE \_\_\_\_\_

- 04/2019 – Today      **Analog Circuit Designer. PhD Universidad de Navarra.**  
(PhD Thesis) Development of Power Management Unit of solar energy harvester with low-power IC analog blocks like charge pump, comparators, voltage detectors, digital logic (tsmc 180nm). Work with the full analog design flow starting from the conceptual idea – circuit design - layout and on-wafer chip test.
- 05/2018 – 12/2018      **Mixed-signal Designer. Research Institute IMMS**  
(Master thesis) Develop of a circuit for an energy harvester with an MPPT and mixed signal control logic. Simulation of the top level which includes a switch capacitor analogue feedback, a ring and relaxation oscillator and Verilog logic. Models were developed in verilogs.
- 05/2017 – 03/2018      **Application Engineer. Research Institute Know Center**  
Develop an interface of biomedical sensor with a big data system via Bluetooth Low Energy. Program written using python and Linux scripts. Employ of reversing engineering to decode BT protocols and figure out the HW implementation.
- 08/2015 – 09/2016      **Mechatronic Engineer/PLC-Programmer. SSI Schäfer**  
Technical support from a fully automated Amazon logistic center. Troubleshooting and analysis for optimization or PLC errors. Reporting. Implementation and initiation of CIP measures

- 09/2014 - 07/2015 **Automatic Control. John Deere Mannheim.**  
Develop, design and debug Software for a Tractor to control the balance of energy of a trailer. The program was done with LabView and had some EtherCat and CAN Bus controlled devices and some Sensors. Check the state of sensors and electronic devices and make the Start-up of the system.
- 04/2014 - 06/2014 **µC program Developer. Department of Electrical Engineering. University of Mannheim**  
Write and debug small C programs for Texas Instrument Msp430-family in order to be used by students in practical lessons.
- 01/2011 - 06/2011 **Robot builder. Department of Electrical Engineering. University of Cartagena**  
Development, design, construction and Programming of a Sumo-battle Robot.

#### ENGAGEMENT

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- 2010 - today **Website with robot and electronic tutorials and articles**  
[www.albertoLopez.eu](http://www.albertoLopez.eu)
- 10/2009 -05/2011 **Participation in the national spanish robot Liga. With the University of Cartagena([www.lnrc.es](http://www.lnrc.es)).**  
Tasks: design (with EAGLE), mount and test of PCB. Choose electric component and motors, wheels, program and debug the Software. Hardware design.

#### ADDITIONAL SKILLS

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**Strong Knowledge:** Cadence Virtuoso, Vivado, LabView, Matlab-Simulink.  
**Programming language:** VHDL(ams), Verilog (ams), C, C++, Visual Basic, Python, CCS, html, php.

Languages

**Spanish:** Native

**German:** fluent (B2/C1)-Österreich Sprach Diplom (C1)

**English:** fluent (C1)

Others Driving licence (B Class)

Personal interests

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Climbing, Wakeboard, Juggling, Traveling, Piano, Saxophone, Wordpress, blogging