#### FRANCISCO LUQUE LUQUE

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Public CV, contact me to get my email

or phone number

I'm an industrial electronic engineer and, as electronic, I like hardware! But software and firmware have always been there because digital electronics is what appealed to me from the beginning. Based on that, I like to work maintaining contact with HW and its design at the same time that I'm involved in its FW development

#### Experience

FEMA electrónica (Oct 2019 - nowadays)

Electronic engineer (R&D). Industrial instrumentation/indicators development.

- Electronic schematics capture and PCB design (Altium, kiCad)
- Embedded FW development (MICROCHIP PIC18, CCS C compiler, TortoiseSVN...)

#### **ALTRAN**

- Hardware Quality Assurance engineer at HP Inc. (Feb 2019 Oct 2019)
  - My main task was the Planification and execution of System Errors, mostly by designing and triggering electronic hardware malfunctions on their PCBs
  - Manage the documents related to System Error and testing, as well as change request for test fails
  - Validate System Diagnostics, running them in "normal/working" and malfunction scenario, analysing their outputs/report and giving feedback about fixes and implementation
- R&D internship inside EILIS department. I was involved in 3 projects playing a different technical roll in each one (Feb 2018 Feb 2019):
  - I worked modelling some subsystems and debugging the Simulink model of a boat in a project that was developing a . In the area of control algorithm for stabilization new kind of sailboat with innovative hydrofoils control, I designed and run simulations.
  - In a pilot project to monitor electricity distribution, using small wireless sensors. I handled and wrote all the technical documentation of the project: from requirements to the final evaluation report of the technology. During the process I designed the test plan for the HW involved and analysed its results.
  - In the first stages of development of a new high-speed method of transport, participating in communication, power and instrumentation, writing some of the technical documentation, guidelines and proposals for the development

UCO (May - Sept 2017)

Power and control box in collaboration with thermodynamics department for an experimental cooling tower

### **Education and Training**

- Industrial Electronic Engineering bachelor at the University of Córdoba (2012 2017)
- "Introducción al diseño PCB Parte I y II", Altran. 16h, Jun 2018
- "Diseño electrónico orientado a EMC/EMI. Diseño PCB, cumplimiento normativo y validación", Altran. 18h, Oct 2018
- "Curso de introducción a la programación en ROS", OpenWebinars. 30h, Aug 2019
- "MOOC Procesos de prueba ISTQB", Altran. 21h, May 2018
- "Introducción a la programación paralela", Altran. 12h, Oct 2018
- "Introducción a la visión por computador", Altran. 8h, May 2018

## Languages

Español Lengua materna

English Non updated certification, I'm willing to show you my skills on conversation and writing reports

Deutsch Ich lerne es. Mein Niveau ist sehr niedrig. Als Bezug habe ich das CEFR Niveau A2 in meine Erasmus Bewertung bekommen (elektronisches

Praktikumsprogramm, oct – dec 2017)

# Recurrent skills I use in my current work

- Agile hardware development with PCB design (Altium)
- Embedded development (C programming on microchip PIC18F)
- Soldering SMD components
- · Project requirements acquisition, electronic components selection, project version control and documentation

# Relevant engineering skills I have worked on

- SCRUM and Kanban methodologies for project development
- Scripting languages as Python, tcl, bash... and some Linux knowledge
- VHDL: ispLEVER tool and Xilinx's ISE tool to create components in PLDs and FPGAs
- PLCs: I programmed in STL, SCL and S7-graph using STEP 7 software for SIMATIC S7-300. Knowledge about HMI design
- Communications: intra-system communication protocols (I2C, SPI) and real-time bus communication (CAN). For PLCs, PROFIBUS DP, Industrial Ethernet,
- Matlab and simulink: Simulink toolbox for Control engineering, and Matlab IDE used in different areas during my degree studies (from mech and maths to solve problem with numerical methods to image steganography)