Daniel Bretón Suárez

Contact data

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- https://dbsportfolio.wordpress.com/

Embedded software engineer with experience in hardware development and project management.

Education

University

Master of Science in telecommunications engineering conducted at Universidad de Oviedo. Asturias, Spain.

- Strong focus on calculus and algebra. Including mathematical modeling and simulations.
- Electronic theory, simulations and prototyping for power electronics, control and communications.
- Software engineering foundations. OOP and embedded devices. Computational complexity, algorithms, computer science and network architecture.
- Signal theory and stochastic processes for telecommunications systems modeling.
- Strong focus on electromagnetism theory. Antenna prototyping.
- Project management, feasibility and viability analisys.
- Technical drawing and CAD basics.
- Classical physics and quatum theory basics.
- Basics on economics.

Conducted at work

Subject	Company	Year
Unitary tests and continous integration	ZIV	2020
Software analisys tools	ZIV	2020
Autotools	ZIV	2019
Introduction to PRIME	ZIV	2019
First Aid	Tecnalia	2019
Introduction to A.I.	Standford University (online)	2019

Languages

- Spanish: Native user
- English: Advanced user. I use it every day for work, for watching tv series, to read most of the articles on the internet, etc.

Key skills

- Programming languages: C, C++, Python, Matlab/Octave, Bash, Assembly
- Architectures: 8-bit ARM, 32-bit ARM, 8-bit PIC, 8051, linux based (Debian)
- Distrubuted version control systems: Git, subversion

Other

Sound technician conducted at CIDISI. Asturias, Spain.

- Maintenance and operation of profesional equipment.
- Public address and live events.
- Studio recording and radio.

Profesional experience

Role	Company	Duration
Embedded software engineer[1]	ZIV Automation	From september 2019
Embedded software engineer	Tecnalia	1 year
HW/FW engineer	Treelogic	3 years
Software engineer	Capgemini	6 months
Power electronics researcher	Ikerlan	1 year

Highlighted projects

More detailed information available at my personal portfolio. Also available the ongoing projects.

Foggy radar

Company	Treelogic
Client	Ministry of development of Spain
Description	A technological solution to virtualize drivers visibility on foggy conditions
Technologies	Radar, smart radio, traffic ligths
Role	Hardware & firmware engineer, project management
Years	2016 - 2019

Robots for kids

Company	Treelogic
Client	Adele Robots, Edelvives
Description	A consumer electronic device for educating kids at schools
Technologies	Robotics, consumer electronics
Role	Hardware engineer
Years	2018 - 2019

Smart meters I

Company	Tecnalia
Client	ZIV, Endesa
Description	A embedded software development on a smart meter for the spanish market
Technologies	Metering, smart grids
Role	Firmware engineer
Years	2019

Smart meters II

Company	ZIV, Alfanar
Client	Saudi Electricity Company
Description	A huge project on smart grids for the whole kingdom of Saudi Arabia
Technologies	Metering, smart grids, NB-IoT
Role	Firmware engineer, head of software
Years	Ongoing, started on 2019

Awards

2015 Third Prize Paper Award.

The Trasportation Systems Committee of the IEEE Industry Applications Society.

For the manuscript co-authored with M. Arias, M.M. Hernando, U. Viscarret and Iñigo Gil, entitled "Equalization system for serially-connected battery cells based on the wave-trap concept" as presented at the 2014 Energy conversion Congress and Exposition, Pittsburgh, PA, USA.

Interests

Music, hicking, running, personal projects, surf, gastronomy, science & engineering, cultural events.

This document is intended to be public, if you require further information like a phone number, please consider to use the contact methods listed above.

Last version of this document can be found at:

- htlm: https://dabresua.github.io/
- pdf: https://github.com/dabresua/dabresua.github.io/raw/master/DBS_CV_remote.pdf

Source code of this document can be found at https://github.com/dabresua/dabresua.github.io

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1. International experience on Saudi Arabia 2020.↩