Daniel Bretón Suárez

Contact data

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https://www.linkedin.com/in/dabresua/

Software engineer with experience in IT and embedded.

About me: I am very independent, good at problem solving and I can think outside the box. I am always learning something new because I am very curious.

I focus on developing highly optimized tools and applications. I'm passionate about writing outstanding unit tests. I also have experience on managing small teams and projects. I have experience developing multi-platform applications (Linux, Windows, MacOS) and embedded.

Skills

Programming Languages

Mastered	C, C++
Advanced	Golang, Python, Bash, Powershell
Intermediate	Matlab/Octave, Java, Assembly

Software Development

Methodologies	Agile
Workflows	GitFlow
Code quality	Best practices knowhow
Tools	Valgrind, GNU debugger, Cppcheck
DVCS	Git
DevOps	Gitlab, **Github**

Embedded Experience

Architectures	8-bit ARM, 32-bit ARM, 8-bit PIC, 8051, embedded Linux
Low-level communications	SPI, UART, I2C
MCU knowhow	IRQs, low-power management, bus clocking, RTC
RF	RFID, NB-IoT, 4G, 3G, 2G, LoRa, 868Mhz/433Mhz p2p radios
Hardware development	Analysis, simulations, Schematics, PCB design
Laboratory	Soldering, multimeter, Oscilloscope, signal debugging

IT Experience

Cloud services	AWS
Virtual environments	Vagrant, Virtual Box
Automation	Ansible
Containers	Docker
OS experience	Linux (multiple flavours), Windows, MacOS (basic knowledge)
Cybersecurity	Endpoint security knowhow

Other Experience

Industrial devices	Aging tests, defective analysis, on-field patches
Manufacturing	Manufacturing instructions, integration, training
Smart grids	DLMS, massive deployment, massive updates

Profesional Experience

Devo

```
Position     = Senior software engineer
Location     = Remote
Period       = From March 2022
Sector       = IT -> Cybersecurity
Description  = Develop and provide engineering support for a multi-platform and multi-purpose
               endpoint monitoring solution based on Osquery to recollect a variety of datasets
               sitting in their infrastructure, efficiently process them, and create a
               comprehensive view that spans multiple applications and use cases in areas such as
               security monitoring, IT health, and performance monitoring or capacity planning.
               Provide visibility and collaborate with the Osquery open-source project.
Technologies = C++, Golang, AWS, Vagrant, Ansible, Docker
```

ZIV Automation

```
Position     = Embedded software engineer
Location     = Bilbao Area
Period       = From September 2018 to March 2022
Sector       = Industrial -> Smart Grids
Description  = Develop embedded software for multiple smart grid projects.
               Develop drivers for ARM 32-bit MCU. Develop tools and scripts.
               Manage software teams. Implement good practices.
               Schedule software projects. Design architecture.
               Technology consultant. International project on Saudi Arabia.
Technologies = C, C++, Python, Assembly
```

Treelogic

```
Position     = Hardware and Firmware engineer
Location     = Central Asturias Area
Period       = From April 2015 to September 2018
Sector       = R&D -> IT/Robotics
Description  = Develop hardware and embedded software for multiple projects.
               Schedule projects. Design architecture.
               Technology consultant and forecasting.
Technologies = C, Assembly, PCB design
```

Capgemini

```
Position     = Software engineer
Location     = Central Asturias Area
Period       = From October 2014 to April 2015
Sector       = IT -> Consultancy
Description  = Develop software for insurance company.
Technologies = Java, C++
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Ikerlan

```
Position     = Power electronics researcher
Location     = Remote
Period       = From September 2013 to October 2014
Sector       = Industrial -> R&D
Description  = Research new technology for DC-DC converters (equalizer).
Technologies = Power electronics
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━━━━ 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 analysis.
- Technical drawing and CAD basics.
- Classical physics and quantum theory basics.
- Basics on economics.

Post-graduate Education

Subject	Company	Year	Description
Bootstrap 5 tutorial	w3schools	2023	Bootstrap 5 HTML, CSS, and JavaScript framework
Javascript tutorial	w3schools	2023	Javascript programming language
CSS tutorial	w3schools	2023	CSS stylesheet language
HTML tutorial	w3schools	2023	HTML language
Kubernetes for the Absolute Beginners	Mumshad Mannambeth	2023	Kubernetes Fundamentals, clusters and applications
Ansible for the Absolute Beginners	Mumshad Mannambeth	2023	Ansible Fundamentals, deployments, inventory files
Unit test for Go developers	Vinicius Silva	2023	Test driven development in Golang, unit tests and libraries
TDD in C++	Serban Stoenescu	2023	Test Driven Development in C++ with Googletest and Googlemock
The Agile Samurai Bootcamp	Jonathan Rasmusson	2023	Setup, execute, and successfully deliver Agile projects
AWS Essentials	Amazon Web Services (AWS)	2023	AWS Platform, global infrastructure, security, and the core services
Essential productivity skills	LifeLabs Learning	2022	Habits to increase daily productivity
Go: The Complete Developer's Guide	Stephen Grider	2022	Master the fundamentals and advanced features of the Go Programming Language (Golang)
Ansible for beginers	Mumshad Mannambeth	2022	Ansible to beginner in DevOps. Practice Ansible with coding exercises
Code quality on Python	Toronto University	2021	Writing quality code that runs correctly and efficiently
Remote team management	GitLab	2021	Learn and apply remote work best practices, build your remote work policy
Gitlab best practices	ZIV	2021	How to work efficiently using Gitlab
Cybersecurity at work	ZIV	2021	Protect yourself and your company from cyber attacks and social engineering
Doxygen best practices	ZIV	2021	Best ways to document C/C++ code using doxygen
Unitary tests and continuous integration	ZIV	2020	Implement continuous integration using Jenkins
Static code analysis tools	ZIV	2020	Tools for analyzing C/C++ code quality
GNU Autotools	ZIV	2019	In-deep GNU Build System (Autotools) workshop for building software under Linux systems
Introduction to PRIME	ZIV	2019	Prime protocol basics for communicating using the electricity network
First Aids	Tecnalia	2019	Immediate assistance given to any person with either a minor or serious illness or injury

Code style	Tecnalia	2019	Best practices to code efficiently in C/C++
Electrical risks and security	Tecnalia	2019	Guidelines to working safe in a environment with electrical risks
Introduction to A.I	Stanford University	2019	Introduction to Artificial Intelligence, probabilistic models

Languages

- **Spanish**: Native
- **English**: Writing and listening C1, speaking B2.

Awards

2015 Third Prize Paper Award.

The Transportation 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.

Codingame

C language certification

C++ language certification

Interests

Music, hiking, running, science, homebrew beer, culture, gastronomy

Other links of Interest

  https://www.linkedin.com/in/dabresua/

  https://dbsportfolio.wordpress.com/

  https://bit.ly/3xL5Evp

  https://github.com/dabresua

  https://www.codewars.com/users/dabresua

  https://www.hackerrank.com/d_breton_suarez

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