Ángel Soto Boullosa

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Pontevedra, Spain

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PROFESSIONAL SUMMARY

Embedded software and electronics engineer with proven experience in firmware development, embedded Linux (Yocto), PCB design, and communication protocols (CAN, LIN, UART, SNMP). Skilled in developing Windows desktop applications (C#), Python scripting, and automated testing tools for automotive and defense sectors. Adept at hardware–software integration, leading small engineering teams, and delivering projects from concept to deployment with measurable efficiency gains.

WORK EXPERIENCE

Software Development Engineer

Inster Grupo Oesía | Mar 2024 - Present

- Developing firmware and software solutions for military and defense projects, ensuring full compliance with strict client and regulatory requirements.
- Optimizing system performance on ARM Cortex-A53 multicore platforms running embedded Linux (Yocto) through efficient driver integration and software tuning.
- Enhancing product reliability by conducting thorough software validation on evaluation boards prior to deployment.
- Improving team knowledge sharing and maintenance efficiency by producing technical documentation with Markdown, Doxygen, and Confluence.
- Accelerating testing processes and reduce manual work by developing Shell and Python scripts for automation.

Software Development Engineer

Antolín | Aug 2022 - Feb 2024

- Reduced RGB microcontroller testing time significantly by developing automated Windows desktop tools in C# and integrating Python libraries, all for automotive systems.
- Improved software validation efficiency by integrating protocol-specific communication modules (CAN, LIN, UART) into testing applications.
- Customized Python libraries for specific project requirements.
- Utilized Jira and Bitbucket for project management and collaboration.

Electronic Engineer

SETGA S.L.U., Pontevedra | May 2019 – Jul 2022

- Advanced from trainee to Head of Electronics Department, leading 1 engineer and 3 lab technicians.
- Shortened PCB development cycles by streamlining design reviews, implementing component selection guidelines, and coordinating with embedded software teams.
- Increased product reliability through rigorous LED power supply validation and documentation improvements.
- Reduced commissioning and maintenance times by standardizing installation schematics and test procedures.

Other experience

Technical Assistant at Promovert Crop Services S.L. – Spain & Portugal | May 2018 – Oct 2018

Research Engineer at University of Vigo | Dec 2017 – Jan 2018

Research Engineer at University of Vigo | Nov 2017

Service Station Attendant at CEPSA | Jul 2009 - Aug 2009

EDUCATION

Bachelor's Degree in Industrial Engineering, Electronics and Automation – University of Vigo (2010–2017)

Final Year Project: *Design, Implementation and Validation of an Electronic Circuit for Battery State-of-Charge Measurement in Mobile Robots* (9.3/10)

Designed and manufactured a PCB for state-of-charge monitoring using a Texas Instruments fuel gauge IC communicating via I^2C to an Arduino. Integrated into an open source project (**UviSpace**) developed by the Department of Electronic Technology at the University of Vigo.

TECHNICAL SKILLS

Programming	Embedded Systems	PCB & CAD Tools	Version Control & Collaboration
- C - Python - VBA - C# - Java - Visual Basic - VHDL	 - ARM Cortex-A53 - Embedded Linux (Yocto) - SNMP - Communication Protocols (CAN, LIN, UART, DALI, DMX) 	 Altium Designer KiCad / OrCAD AutoCAD 2D / ZWCAD FreeCAD SolidWorks / CATIA V5 	BitbucketGitMarkdownDoxygenJiraConfluence

LANGUAGES

- Spanish, Galician Native (Bilingual)
- **English** Upper-intermediate (B2)
- **French** Intermediate (B1)
- German Basic (A2)
- Portuguese Basic

ADDITIONAL INFORMATION

- Driving licences: B and A2 Own car and motorcycle
- **Availability:** Open to short-term travel
- **Interests:** RTOS projects (ESP32), robotics (Arduino), 3D printing (custom designs), climbing and canyoning (certified Level I guide)