Electronics Engineer

danielrodirguezmarin@me.com 0424749403

Daniel Rodriguez

236 Sportsmans Drive, West Lakes SA 5021, Australia

Professional Summary

Results-driven electronics engineer with a strong passion for innovation and a proven track record in creating and maintaining cutting-edge products and services. Equipped with a comprehensive understanding of both hardware and software development. My expertise lies in designing and implementing robust electronic systems, as well as developing efficient software solutions to enhance product functionality. With a solid foundation in project and program management, I excel in overseeing end-to-end development cycles, ensuring on-time delivery and optimal resource allocation. Adept at collaborating with cross-functional teams and stakeholders to translate complex requirements into practical and scalable solutions. Committed to continuous learning, I stay abreast of emerging technologies and industry trends to drive innovation and achieve business objectives. Seeking opportunities to leverage my diverse skill set and contribute to the success of dynamic organisations in the Tech industry.

Education

Bachelor's in Electronics Engineering, Santo Tomas University, Bogota, Colombia

02/2004 - 11/2010

Diploma in Project Management, Australasia Polytechnic, Melbourne, Australia

07/2017 - 11/2018

Advance Diploma in Program Management, Australasia Polytechnic, Melbourne, Australia

02/2018 - 04/2019

Work Experience

Digital Journeys Specialist at Telstra, Adelaide SA

10/2018 - Current

- Designing and creating software tools to perform various types of testing including functional, system integration, regression, and exploratory.
- Generate reports and recommendations for improving existing process and implementing new algorithms based on test results.
- Coordinate the channel management, implementation and delivery of best practice digital initiatives and outcomes across the enterprise for stakeholders.
- Provide support in the planning of the enterprise digital channel strategy, focusing in data capture and analysis.

Electronics Engineer at EazyV3, Melbourne VIC

2017 - 2018

- Design and implement system hardware and accompanying control algorithms.
- Serve as subject matter expert for electronics and software queries.
- Ensure all customer specifications are met in design details.

Provide documentation with instructions for manufacturing and assembling new product's electronics.

Field Service Engineer at ROCHE, Bogota, Colombia

2013 - 2017

- Assemble and install robotics instruments on client site.
- Perform preventive maintenance protocols for robotics instruments and software platforms.
- Provide efficient solutions to any issue that occurs on the robotics systems.
- Applied project management skills to prioritise problems that may occur at different places at the same time; and being able to keep focused and calm whilst working under pressure.

Post-Production Engineer at RTI TV, Bogota, Colombia

2010 - 2013

- Design, build, and install electronics equipment for TV production in a variety of projects.
- Carry out testing to determinate the condition of existing systems and made recommendations for further improvements.
- Devise requirements for improvement and modification of work and procedures.

Technical Skills

- Hardware Design: Proficient in designing and implementing electronic circuits, PCB layout, and schematic design using tools such as Cadence Allegro.
 - Embedded Systems: Extensive experience in developing firmware and embedded software for microcontrollers (e.g., Arduino, STM32, PIC) using programming languages like C/C++.
- FPGA Design: Skilled in FPGA programming using VHDL/Verilog and utilizing Xilinx or Altera development tools (e.g., Vivado, Quartus).
- Software Development: Strong programming skills in languages including Python, C/C++, and Java for developing applications and software tools.
- APIs: Familiarity with designing and consuming APIs, including RESTful APIs, and integrating them into software applications for seamless data exchange.
- Databases Systems: Proficient in working with databases such as MySQL, PostgreSQL, and MongoDB, including designing schemas, writing optimized queries, and performing data manipulation tasks.
- Web Based Technologies: Experience in developing web-based applications using frameworks like Diango, Flask, or Node.is, and proficient in HTML, CSS, and JavaScript for frontend development.
- Cloud Technologies: Familiarity with cloud platforms such as AWS or Google Cloud, including services like EC2, S3, Lambda, and knowledge of deploying applications and managing resources in the cloud.
- Linux Operating System: Proficient in working with Linux operating systems, including command-line navigation, shell scripting, package management, and system administration tasks.
- Communication Protocols: In-depth knowledge of various communication protocols such as UART, I2C, SPI, USB, Ethernet, and wireless technologies (Bluetooth, Wi-Fi).
- Sensors and Actuators: Hands-on experience with a wide range of sensors (e.g., temperature, pressure, motion) and actuators (e.g., motors, solenoids) for data acquisition and control systems.
- Testing and Debugging: Proficient in using oscilloscopes, logic analyzers, and other test equipment for hardware and software debugging and verification.
- CAD Modelling: Skilled in 3D modelling using FreeCAD, including creating and modifying solid models, generating technical drawings, and performing simulations for mechanical and electrical designs.
- Project Management: Well-versed in project management methodologies, including Agile and Waterfall, and proficient in using project management tools (e.g., Jira, Trello) to effectively plan, execute, and deliver projects on time and within budget.
- Program Management: Skilled in overseeing multiple projects, coordinating cross-functional teams, managing project budgets, and ensuring alignment with strategic goals and objectives.