

Electronics Engineer

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[Link to Portfolio](#)

Daniel Rodriguez

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

February 2004 - November 2010

Diploma in Project Management, Australasia Polytechnic

Melbourne, Australia

February 2018 - November 2018

Advance Diploma in Program Management, Australasia Polytechnic

Melbourne, Australia

February 2019 - November 2019

Work Experience

Digital Journeys Specialist at Telstra

Adelaide SA

October 2018 - Current

- Manage the eCommerce platform by ensuring product availability, updating product listings, and overseeing inventory to ensure accurate and timely updates for customers.
- Develop and maintain automated web tools to verify the functionality of the online store, ensuring smooth navigation and optimal user experience across various customer journeys.
- Perform regular testing through web automation to detect and resolve any issues related to product visibility, checkout processes, and overall site performance.
- Analyze user behavior on the eCommerce platform using automated tools, identifying potential friction points and recommending improvements to enhance customer satisfaction and engagement.
- Collaborate with the product, marketing, and IT teams to ensure alignment of the digital store with business objectives and marketing campaigns.
- Generate reports on the performance and reliability of the eCommerce platform, providing insights to stakeholders to support data-driven decision-making and continuous improvements.

Electronics Engineer at EazyV3

Melbourne VIC

August 2017 - September 2018

- Led the design and implementation of system hardware and control algorithms, ensuring alignment with project goals and customer requirements.
- Managed multiple electronics development projects, utilizing Agile and Waterfall methodologies to ensure timely and on-budget delivery.
- Coordinated cross-functional teams, overseeing the integration of electronics systems with other engineering departments to meet project milestones and client expectations.
- Served as the subject matter expert for both electronics and software queries, providing technical guidance and ensuring solutions met high-quality standards.
- Developed comprehensive documentation for the manufacturing and assembly processes, ensuring clear instructions for production teams and seamless handoffs between engineering and operations.
- Monitored project timelines, budgets, and resources to ensure successful execution and delivery of project objectives.

Field Service Engineer at ROCHE

Bogota, Colombia

March 2013 - June 2017

- Assembled and installed advanced robotics instruments on client sites, ensuring seamless integration with existing systems and adherence to technical specifications.
- Performed preventive maintenance on robotics instruments and software platforms, reducing downtime and optimizing system performance for clients.
- Delivered rapid and efficient solutions to technical issues, troubleshooting complex robotics systems to ensure minimal disruption to client operations.
- Applied project management skills to effectively prioritize and resolve simultaneous issues at multiple client locations, maintaining focus and composure under pressure.
- Worked closely with clients to provide tailored technical support and guidance, ensuring customer satisfaction and building long-term relationships.

Post-Production Engineer at RTI TV

Bogota, Colombia

October 2010 - February 2013

- Designed, built, and installed electronics and communication systems for TV production, including the development of Interactive Voice Response (IVR) systems to streamline communication with cast and crew.
- Conducted testing and diagnostics to evaluate the condition of existing broadcast systems, including IVR components, and provided recommendations for upgrades and enhancements.
- Devised technical requirements for the integration of IVR systems into production workflows, improving the efficiency of scheduling, casting, and feedback collection processes.
- Collaborated with production teams to modify and improve work procedures, ensuring seamless interaction between IVR and other production support technologies.

Technical Skills

Project/Program Management

- **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.

Software Development

- **General Software Development:** Strong programming skills in languages including C, Python, PHP and Bash for developing applications and software tools.

- **Web-Based Technologies:** Experience in developing web-based applications using frameworks like FastAPI, Django, or Laravel, and proficient in HTML, CSS, and JavaScript for frontend development.
- **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 SQLite, MySQL, PostgreSQL, and MongoDB, including designing schemas, writing optimized queries, and performing data manipulation tasks.
- **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.

Hardware Design

- **Electronic Circuit Design & PCB Layout:** Proficient in designing and implementing electronic circuits, PCB layout, and schematic design using tools such as Cadence Allegro and EasyEDA.
- **FPGA Design:** Skilled in FPGA programming using VHDL/Verilog and utilizing Xilinx or Altera development tools (e.g., Vivado, Quartus).
- **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.


Embedded Systems

- **Firmware Development:** Extensive experience in developing firmware and embedded software for microcontrollers (e.g., Microchip, Arduino, STM32) using programming languages like C.

Selected Projects


Casting and Audition Management

Developed an Interactive Voice Response (IVR) system for a TV production company to automate the casting process for a new show. The system managed thousands of calls from actors, agents, and managers inquiring about roles, audition details, and submission statuses, significantly reducing manual workload and improving efficiency.

Technologies Used: AWS(EC2 RDS), Linux, Asterisk, Python, PHP
[Link to Project](#) 

Article Summarization Bot

Developed a conversational AI bot that summarizes webpage articles, extracting key points to save users time on reading lengthy content. Users can input article URLs, and the bot fetches, processes, and presents concise summaries, enhancing information accessibility.

Technologies Used: openAI, Streamlit, Python
[Link to Project](#) 

Product Monitoring Application

Developed a web-based application to monitor products published on the eCommerce platform from the client side. Utilized public APIs to retrieve product data, enabling real-time verification of product status as seen by customers. This application provided insights into the entity catalog's performance and ensured product availability.

Technologies Used: APIs, Streamlit, Python, Pandas

[Link to Project](#) 

Product and Promotion Requirements Gathering Tool

Developed a web-based application to streamline the process of gathering product and promotion build requirements from stakeholders. The application features a dynamic form that adapts based on the user's selections, guiding them through the necessary information required for JIRA submissions. At the end of the flow, stakeholders receive a PDF document containing all relevant information, reducing back-and-forth communication and ensuring that the development team has all required details to execute requests efficiently.

Technologies Used: Streamlit, Python, PFD generation

[Link to Project](#) 