Adam Amin

adamamin54@gmail.com | tel: +61 438 627 158

Recent Computer Engineering B.S. graduate with passions in electronics and software design seeking an entry-level role in embedded systems or software development.

Software Engineering Skills

Programming Languages: C, C++, C#, GoLang, Java, JavaScript, HTML5/CSS, Python
Technologies and Protocols: Docker, Embedded Linux, Git, GDB, GitLab CI/CD, Yocto Project
Frameworks: Selenium, React, Django, Robot

Electrical Engineering Skills

Programming Languages: ARM Assembly, MIPS Assembly, Verilog
Technologies and Protocols: Arduino, FreeRTOS, SPI, UART, VDHL
Simulation Tools: MATLAB, OrCAD, PSpice, Synopsis

Education/Certifications

University of California, Riverside – Bachelors of Science — December 2024
Irvine Valley College – Associates in Computer Science and Mathematics — June 2022
NCEES Fundamentals of Engineering – Electrical and Computer Engineering Certification — **In Progress**

Experience

Quality Assurance Engineer, Promenade Software – Irvine, CA — June 2020 – August 2022

- Worked on the DxTerity COVID Project, a high-priority initiative to develop a web-based solution for purchasing test kits and securely storing COVID-19 related data.
- Ensured software quality by designing and executing test cases, identifying and reporting bugs, and verifying fixes.
- Maintained detailed documentation of performed test cases, test validation, and test verification.
- Contributed to the successful delivery of a scalable, reliable, and secure system that met client requirements.

Software Developer, Planet Innovation – Melbourne, AU — July 2025 – *Current*

- Worked on Project Archimedes, involved software implementation and maintenance of an embedded Linux system for several manufactured peristaltic pumps.
- Utilized Yocto Project to build lightweight embedded Linux images and Python for integration across several applications in the software system.
- Facilitated software development using Docker containers, virtual environments, and Gitlab CI/CD.
- Developed automated test suites in Python and Robot Framework, increased test coverage and reduced manual QA efforts.
- Assisted in debugging and resolving system-level issues in production units, ensuring reliability of the pumps.

Projects

Synthesizer - FRDM K64F Microcontroller

- Built a digital synthesizer using the FRDM-K64F microcontroller by implementing signal processing algorithms in C.
- Designed the circuit and hardware which allowed to user to adjust volume and add effects to the audio signal.
- Utilized ARM Cortex-M4 capabilities for real-time audio synthesis and debugging with GDB.

Volumetric Display Visualizer - Raspberry Pi 5

- Designed a 3D visualizer using a Raspberry Pi 5 to display real-time images and video.
- Integrated the system with TouchDesigner, an app for live visualization and user interaction.
- Currently iterating on the design to improve performance and functionality.