

Adam Amin

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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, Synopsys

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

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.

Quality Assurance Engineer, Promenade Software – Irvine, CA

June 2020 – August 2022

- Worked on the DxTegrity 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.

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.