

SUMMARY:

- I am a computer science graduate seeking opportunities for entry level or internship positions in embedded systems or software development. I am willing to learn new skills while continuing to develop my own..

WORK EXPERIENCE:

Cal-Flame: Full-Time - Pomona

Detailing/Quality Assurance, (June 2020 - Sept 2020)

- Tested and wired electrical/gas components for barbeque islands, fire places, and fire pits.
- Inspected and packaged units for shipping.

AZtech Labs: Internship - Riverside

Software Engineer Intern (Jan 2020 - Mar 2020)

- Researched and assisted in building a small scale prototype soccer ball launcher to test the maximum curve of a ball.
- Wrote frontend components with React for an ecommerce website.
- Performed anodization on aluminum RFID blocking wallets.

UCR Transportation Services: Part-Time - Riverside

Student Employee (Aug 2019 - Mar 2020)

- Worked in mobility, the university kiosks, and as a parking attendant for campus events.

EDUCATION:

University of California, Riverside - (Mar 2021)

- Bachelors of Science - Computer Science
- Area of Focus – Embedded Systems

Relative Courses:

- Logic Design(A-), Intro To Embedded Systems(B+), Intermediate Embedded & Real Times Systems(A)

PROJECTS:

Pattern Recognition System for Recyclables (Dec 2020)

- The system uses 3 phases, feature extraction, classification, and actuation to classify plastic bottles, glass bottles, and aluminum cans with a 100% accuracy.
- I use an arduino mega, a load cell module, an rgb sensor, a training set, and k nearest neighbors algorithm.

Proportional Integral Derivative (PID) Controller (Nov 2020)

- A PID controller written in C that actuates a fan and gets a ball to rise to a desired level. Fine tuning of the PID values reduced the settling time of the ball by 600%.
- The system is simulated on the Riverside-Irvine-Microcontroller Simulator (RIMS).

Smart Chicken Coop (Oct 2020)

- Features: maintains temperature 65F-75F, food/water dispenser, motion/night light system, laser triggered door system, egg counter display system.
- The embedded system is written in C and simulated on the Riverside Irvine Microcontroller Simulator (RIMS).

Uber vs Lyft Analytic Windows Application (Mar 2020 – May 2020)

- Led a team of 4 to implement a server and client using C++ for doing analytics on Uber and Lyft application usage in NY.
- Incremental analytics and data structures I implemented improved the initial recalculation of analytics by 90%, and the runtime by 50%.

Atmega1284 Reaction Game (Nov 2019 – Dec 2019)

- A game implemented on the Atmega1284 microcontroller where a user matches arrows displayed on a led matrix with an analog joystick. The game implements game logic with different levels and increasing difficulty.

SKILLS:

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| • Proficient C, C++ Programming | • Competent with Web Development | • Competent in Verilog and VLSI |
| • Proficient in Embedded Systems | • Competent with Python 3 | • Bilingual(English, Spanish) |
| • Proficient with Linux Commands | • Competent with Unix Administration | |
| • Proficient with Github | • Competent in Operating Systems | |