

---

**SKILLS:**

- |                       |   |                               |
|-----------------------|---|-------------------------------|
| • C, C++ Programming  | • Embedded Systems                      | • Unix Administration         |
| • Python Programming  | • Extraction, Classification, Actuation | • Operating Systems           |
| • Verilog Programming | • PID Controller                        | • Linux Commands              |
| • MATLAB Programming  | • VLSI Design                           | • Github                      |
| • Web Development     | • HSPICE                                | • Bilingual(English, Spanish) |

**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)**

- Investigated and assessed building a small scale prototype soccer ball launcher.
- Developed 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

**PROJECTS:**

**Pattern Recognition System for Recyclables (Dec 2020)**

- A system that classifies plastic bottles, aluminum cans, and glass bottles with 100% accuracy.
- Main components are rgb sensor, load cell, 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 variables reduced runtime by 600%.
- The system is simulated on the Riverside-Irvine-Microcontroller Simulator (RIMS).

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

- Coordinated a team of 4 to implement a server and client in C++.
- Application for analytics on Uber and Lyft usage in New York.
- 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.