Fontana, CA 92336

SKILLS:

- C, C++ Programming
- Python Programming
- Verilog Programming
- MATLAB Programming
- Web Development
- Embedded Systems
- Extraction, Classification, Actuation
- PID Controller
- VLSI Design
- HSPICE

- Unix Administration
- Operating Systems
- Linux Commands
- Github
- 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.