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### Education

## University of California, Los Angeles

B.S. Computer Science and Engineering, 3.94 GPA

Sept 2018 – exp. June 2022

## Skills

Programming: Python, C++, JavaScript, MATLAB, Java, HTML, CSS, VueJS, ReactJS, NodeJS/Express, Flask, MongoDB, SQL Other: Figma, Computer Hardware Assembly

# Work Experience

#### Kinematics Manufacturing

June - Sept 2019

Test and Data Analysis Intern

- · Optimized data processing and analysis of rotary dampers via signal processing and writing MATLAB scripts
- Created a Python program to parametrically predict the durability of slew drive worm gears using NumPy and Matplotlib
- Improved the efficiency of damper tests by writing a PLC program to automate servo motor
- Managed the Research and Development test area and worked with industrial machinery

# Extracurricular Experience

### Institute of Electrical and Electronics Engineers

Nov 2018 - Present

Full Stack Web Developer

- Assisted in making the IEEE project portal for members to keep track of their progress
- Developed the member roster and project checkoff pages using HTML, CSS, JavaScript, and Vue.js
- Implemented the backend server and RESTful endpoints for users, projects, and assignments using Flask
- Maintained data persistence and relationships using SQLAlchemy

Walnut Robotics Aug 2014 - May 2018

**Engineering Captain** 

- Oversaw the mechanical and electrical process and design of the team robot
- · Served as the main driver of the robot in all qualifier, regional, and super-regional level competitions

# **Projects**

**IDEAHacks Website** July 2019

- Worked with a committee to develop this year's website for IDEAHacks, UCLA's hardware-based hackathon
- Implemented the parts checkout and team creation functionalities with jQuery and MongoDB
- Designed the frontend pages for team parts, parts inventory, parts checkout, and team creation

#### Gesture-Based Music Controller

May 2019

- Built remote control for Spotify desktop player based on motion gestures using IoT device with gyroscope and accelerometer
- Implemented Python script that handled serial communication and computer key bindings using Pyserial and Pynput libraries

#### Zero Waste 2020 (LA Hacks)

Mar 2019

Dec 2018

- Created a complete 2D platformer video game in Unity using C# about recycling and sustainability
- Wrote all of the scripts for player movement, camera control, UI, and collisions

Zombie Dash

- Developed a shooter-survival video game for player to fight zombies and rescue hostages
- Implemented game logic using C++ and rendered the application with an XQuartz server

# Achievements and Recognition

Honor Societies: Tau Beta Pi National Merit Finalist, National Merit Raytheon Scholarship Raytheon Management Scholarship

2019

2018

2018