

# Jayro Alvarez

Fountain Valley, CA

✉ jayroalvarez0@gmail.com  
🌐 jayroalvarez.com  
🐙 github.com/jalvarez24  
🌐 linkedin.com/in/jayroa

## EDUCATION

### California State University, Fullerton

Bachelor of Science, Computer  
Science

- Aug 2015 - Jan 2020
- Major GPA: 3.3/4.0

## SKILLS

### Languages:

- C++, Python, JavaScript,  
HTML, CSS, SQL, Bash

### Frameworks/Technologies:

- React, Django, Firebase,  
Flask, Docker, Node

### Databases:

- MySQL, SQLite3, MariaDB,  
Google Cloud Firestore

### Tools:

- Git, Github, Vim, Xcode,  
Visual Studio

### Methodologies:

- AGILE, SCRUM

## COURSEWORK

- Object-Oriented Programming
- Data Structure Concepts
- Artificial Intelligence
- Operating System Concepts
- File Structures and  
Database Systems
- Foundations of Software  
Engineering
- Algorithm Engineering
- Software Testing

## AWARDS

- Dean's List (2016, 2019)
- Certificate of Recognition:  
AppJam+ Mentor

## PROJECTS

### Real-time Multiplayer Board Game

[Github](#) | [Website](#)

React, Firebase Real-time DB, Firebase Functions, HTML, CSS, JavaScript

- Each round, random Category and Letter generated. Users race to be the first to respond. Players vote whether or not to award point.
- Users can create/join a lobby, invite friends, and start the game.
- Custom in-game real-time messaging UI.

### Budgeting Web Application

[Github](#) | [Live Demo](#)

Django, SQLite3, Python, HTML, CSS, JavaScript

- Budgeting application to track individual user expenses.
- User-defined budget and categories for each budgeting project.

### Music Microservices API

[Github](#)

Flask, SQLite3, Python, Kong, Foreman, MinIO

- Four main microservices hosted as separate applications to support: Tracks, Users, Playlists, and Descriptions API endpoints.
- Features include: database sharding for tracks, traffic load balancing via Kong, and MP3 file storage via MinIO cloud server.

### Tidey (Hackathon- BeachHacks 2019)

[Github](#)

React, Python, Django, SQLite3, Google Maps API

- Generates blog-like page for each beach on Google Maps API.
- Users can update progress of beach cleanup on each page.

### Guitar Looper

[Github](#)

C++, Bash, arecord, aplay, ALSA (Advanced Linux Sound Architecture)

- Simulates the functionality of a "Looper" guitar pedal and can handle direct input through USB. Built on Raspberry Pi (Raspbian).

## EXPERIENCE

### Virun Nutra-BioSciences

Aug 2019 – Jan 2020

Backend Engineer (School Sponsored Industry Project)

Remote

- Development of web-based inventory management system to speed up company productivity.
- Development of algorithm to validate if purchase orders can be processed based on inventory quantities.

### Dreams for Schools

Mar 2018 – Jun 2018

Student Mentor

Yorba Linda, CA

- Taught middle school students the basics of programming through Thunkable platform.
- Mentored my group of four students through creation of mobile app while exposing them to careers in STEM.