

### **Education**

# **Pasadena City College**

August 2017 - June 2020

- Degree: Mathematics, AS-T
- Area of Study: Computer Science
- Coursework: Unix Scripting, Discrete Mathematics, Data Structures, Object-Oriented Programming

## **California State University, Fullerton**

August 2020 - Present

• **Degree**: Computer Science, B.S. (Expected 2022)

# **Projects**

## **Spotify Playlist Sorter** Developer / Maintainer

github.com/jaasonw/spotify-new-music-sorter

- Worked in a team to develop a web app in Python that places liked songs on Spotify into a playlist using the Spotify Web API
- Developed and designed the frontend using Flask and Bootstrap
- Deployed the app onto an Amazon EC2 instance

## **SQL Relational Database System** Developer

github.com/jaasonw/Database

- Developed a relational database management system in C++ that supports a subset of SQL commands (SELECT, INSERT INTO, CREATE TABLE, DROP)
- Implemented a B+Tree to index database entries for fast querying
- Implemented a finite state machine to develop an SQL command parser

#### **Graphing Calculator** Developer

github.com/jaasonw/graphing-calculator

- Developed a graphing calculator in C++ and SFML using a modular, object-oriented design
- Plots 2D cartesian functions with panning, zooming, and controlling individual graph visibility
- Implemented the shunting yard algorithm to parse mathematical expressions to postfix notation with respect for order of operations

#### Sushi Shop Developer

github.com/jaasonw/sushi-shop

- Led a team to develop a sushi making game in Java and JavaFX
- Developed a game where the player is given a randomized sushi order and must move a plate to catch falling ingredients to construct the order
- Designed and built an object-oriented game engine framework and implemented game logic

## **Work Experience**

# PCC Learning Assistance Center Computer Science Tutor / Lab TA

January 2019 - Present

- Worked one-on-one with students to teach computer science concepts and debugging techniques
- · Worked with professors to help improve lectures and build long term study habits within students
- Provided assistance to students with software issues in classrooms and computer labs

#### **Involvements**

### **She.Codes** Webmaster, Treasurer

September 2019 - Present

- A club at PCC that aims to provide a sense of community and support to women in the tech industry
- Collected new member sign up information
- · Wrote and sent weekly newsletters to club members
- Hosted and co-hosted workshops during club meetings
- · Designed and maintained the club website

#### **Skills**

**Languages**: C++, Python, Java, JavaScript/TypeScript, HTML/CSS, I₄T<sub>E</sub>X, bash

Libraries/Frameworks: Bootstrap, Flask, jQuery, Node.js

Tools/Software: git, Unix/Linux, AWS EC2