

(650) 302-0386 ckuo15@gmail.com PORTFOLIO GITHUB LINKEDIN

React, Redux, Ruby, Rails, Javascript, HTML5, CSS3, Express, NodeJS, MongoDB, GraphQL, Amazon Web Services, Apollo, Github, Heroku, Docker, postgreSQL

### **PROJECTS**

LIFESHARE (Ruby, Rails, JavaScript, React, AWS(S3), Heroku, HTML5, CSS3, postgreSQL)

live | github

- An Instagram inspired web application that allows users to upload images to share their life.
  - Constructed a user-friendly feed page using Ruby on Rails backend in conjunction with a JavaScript frontend that combines and reuses multiple components to enhance efficiency.
  - Created custom multilayered-modal using React on the front end to improve UI experience and allow users to display a single post, edit caption, or delete a post.
  - Showcased Amazon Web Services (S3) for image upload and storage through Active Storage to allow profile customization.
  - Incorporated dynamic animation through CSS3 opacity on the splash page that displays the content of the application, switching between the profile page and feed.

WHOOP (JavaScript, React, MongoDB, Express, NodeJS, Docker, HTML5, CSS3, Heroku, AWS(S3))

live | github

A Yelp inspired web application that displays various businesses in San Francisco that can be filtered through their business category.

- Developed review system that allows fetching of user data and creating reviews for a specific business.
- Formulated dynamic search feature that accounts for keywords other than a specific business name to increase flexibility.
- Implemented Google Maps API through documentation to display businesses in the San Francisco area.

**DOTIFY** (JavaScript, React, GraphQL, Apollo, MongoDB, Node.js, HTML5, CSS3, Docker, Heroku, AWS(S3)) <u>live</u> | <u>github</u> A Spotify inspired web application that allows users to play music of their choosing and create a playlist with their favorite songs.

- Established custom user authentication using bcrypt in conjunction with jwt (JSON Web Tokens) and a custom age verification function to ensure the user meets the age criteria.
- Built a custom audio player using HTML5 audio that contains sub features such as repeating a song, an album, volume control, etc.
- Designed a dynamic album show page using React that updates the current album with corresponding songs within it.
- Launched search feature that fetches information in the database through GraphQL queries, which allows users to search for information more efficiently.
- Utilized Apollo Client cache and local storage on the frontend to store album and artist data that are accessible to all components.

Jogger (JavaScript, HTML5 Canvas, CSS3)

live github

A Frogger-like game that used JavaScript to navigate the main character and dodge enemies.

- Implemented sprites to improve visual appearance and user experience as a player.
- Incorporated key event listeners and conditional frame logic to animate sprite movement.
- Utilized vector logic and coordinate geometry to construct collision logic when touching enemies.

## RELEVANT COURSEWORK

- CS 4 Computer Science Bootcamp at UCSB
  - Data representation, number and character representation, iteration, recursion, image and sound representation, cryptography
- CS 8 Introduction to Computer Science at UCSB
  - o Intro to Python
  - Conditional statements, loops, strings, lists, dictionaries

# **EXPERIENCE**

#### **UCSB Violence Intervention and Prevention Intern**

University of California, Santa Barbara

2018

 Collaborated and created a campaign that raised awareness about interpersonal violence that reached over 10,000 students at UCSB.

### Molecular, Cellular, and Developmental Biology Research Lab Assistant

University of California, Santa Barbara

2017-2018

- Performed SDS-PAGE gel casting that used glass/metal plate, space, and comb to create Wester Blot gel for gel loading.
- Executed gel loading using pipetting technique and electrophoresis to run 5-6 protein samples at a time.
- Operated Western protein transfer using Immobilon-FL PVDF membrane, OWL electroblotting machine to transfer protein samples onto the membrane for analysis.

## **EDUCATION**

**Web Development -** *App Academy* | 2019-2020

Bachelors of Science, Psychological and Brain Sciences - University of California, Santa Barbara | 2015 - 2019