Gordon O. Cooper III

(925) 413-2157 gcooper7@mail.csuchico.edu Portfolio Github LinkedIn

SKILLS: React, JavaScript, Node, Express, Redux, HTML, CSS, Ruby, Rails, SQL, PostgreSQL, MongoDB, GraphQL, Docker, object-oriented programming (OOP), MVC, Heroku deployment, git, Visual Basic, R, Python

PROJECTS:

Eventlight (React, Redux, Node, Express, JavaScript, Mongoose, MongoDB)

live | github

An event management and ticketing web application

- Designed the search bar using Express and Mongoose to incorporate an autocomplete feature to allow users to explore the site more intuitively
- Enabled filtering by a custom date range by utilizing React-Calendar providing an interactive way for the user to browse events by date
- Created modular React components for reusability and for colleagues to easily "plug and play" preconfigured code into new and existing features

93Gly (React, Redux, JavaScript, Ruby, Rails, PostgreSQL, AWS S3)

live github

A social media application for astrophotographers to share their photography with the universe

- Maximized the density of displayable images by creating a custom masonry grid that respects each photograph's aspect ratio using vanilla JavaScript and CSS
- Incorporated a Rails backend to CRUD images on AWS S3 to increase scalability and provide a secure method for storing application data
- Employed dynamically rendered React components and DOM elements with respect to user input to increase the clarity
 - and familiarity of the profile management UI
- Constructed a global application state using Redux to store previously queried data to reduce load times and the frequency of HTTP requests

Monolith (JavaScript, HTML, CSS)

live | github

An original tower defense video game developed using only vanilla JavaScript

- Integrated an animated HTML canvas and DOM elements to dynamically construct the UI allowing for smooth and seamless gameplay
- Introduced a Queue abstract data type for targeting AI and pathing systems to store incoming commands in a logical order and easily manage outgoing commands
- Leveraged JavaScript's prototypal inheritance to structure classes ultimately resulting in DRY code and customizable subclasses while still preserving expected behavior

Handlebar (GraphQL, Apollo, React, JavaScript, Express, Node, Mongoose, MongoDB)

live | github

An online store for users to browse and purchase cutting-edge products

- Facilitated handling complex, nested queries using GraphQL ultimately resulting in straightforward query creation and reduced server load when compared with a RESTful API
- Stabilized the global application state using a persistent Apollo cache allowing for the user's cart to be stored safely on the client-side between logouts and page refreshes

EXPERIENCE:

Junior Engineer

FlowWest, March 2018 - February 2019

- Structured geographic and hydrologic data sets to be easily parsable by R scripts for big data analysis and web app creation
- Drafted engineered solutions in AutoCAD for projects using hydraulic models and environmental data meeting traditional engineering standards with an emphasis on reduced environmental impact
- Reconciled databases of digitized data sets for Alameda County through a QA / QC process in ArcGIS for thousands of data points

EDUCATION:

Web Development: App Academy (February - July 2019)

BS Education: California State University, Chico; Civil Engineering

Tau Beta Pi: The Engineering Honor Society, California AA Chapter