

Abraham Fong

San Francisco, CA Portfolio LinkedIn GitHub

Skills

React, Redux, JavaScript, HTML5, CSS3, Ruby, Ruby on Rails, jQuery, noSQL, SQL, SQLite3, PostgreSQL, Heroku, Webpack, Node, Express, Git, Bootstrap, C/C++, Java, Mongoose, MongoDB

Education

App Academy | Fall 2021 | San Francisco, CA | Immersive software development course

University | Spring 2020 | Santa Cruz, CA | UC Santa Cruz, **B.S. in Computer Science**

Relevant Coursework | *Abstract Data Types, Accelerated Introduction to Computer Science, Advanced Programming in C++, Algorithm Analysis, Comparative Programming Languages, Computational Models, Computer Architecture, Computer Systems and Assembly Language, Computer Systems in C, Data Structures, Fundamentals of Compiler Design I, Mobile Applications, Networking, Operating Systems, Precalculus, Probability and Statistics, Software Engineering I, Vector Calculus, Web Applications*

Projects

Code-Op • JavaScript, Node, Express, React, Redux, Mongoose, MongoDB, CSS3, Heroku [live site](#) | [github](#)

A project management and sharing platform where users can look for team members or ideas to join

- Provided a scalable backend code base that follows the MVC pattern — accelerated the startup process, allowing production-ready code to be built within 4 days
- Implemented protected routes and resource filtration to secure resources and allow custom filtration of data
- Limited requests to API per IP address to protect from DoS attacks and maintain network stability
- Sanitized query data of noSQL injections, XSS, and parameter pollution using third-party modules in Express middleware to protect server against malicious attacks

Paimo • JavaScript, React, Redux, Ruby on Rails, PostgreSQL, CSS3, Heroku, Webpack [live site](#) | [github](#)

A clone of the popular transaction service, Venmo

- Ensured virtual money transaction reliability through protected routes and database transactions
- Crafted a single page application using React components and Redux's state container to dynamically load, update and display appropriate data
- Designed an front-end error system using toasts to display guiding error messages generated by invalid input

Dino Bets • Vanilla JavaScript, Webpack, Canvas WebAPI, CSS3, HTML [live site](#) | [github](#)

Dino Bets is an implementation of a tradition established by App Academy cohort 2021-08-30-SF in which people would guess on what dinosaur or in what sequence the dinosaurs would win in a [Dino Timer](#) race

- Constructed a Drawable and Moveable class to manage animation control by separating the concern over displaying an image and moving its position within a canvas element
- Combined animation control with recursion, setTimeout, and a randomly generated time interval between 1 and 5 seconds to animate character running movement and randomize race results
- Employed consistent animation rates across devices through frame rate throttling algorithm

Skribble Custom Words • JavaScript, CSS3, HTML, Node, Express, Pug, Mongoose, MongoDB, Heroku [live site](#) | [github](#)

A group word sharing platform meant to be used in conjunction with private [skribbl.io](#) games

- Protected network and user data through rate limiting, data sanitation, authentication using the JWT strategy
- Streamlined customization of private game lobbies on parent app through group word sharing and a random words generator

Experience

Modified Supplemental Instruction (MSI) Tutor | UC Santa Cruz | September 2016 - June 2017

- Supported 30+ students through collaborative activities and interactive environments — successfully scaffolded firm foundation in Java and data structure basics that enhanced performance in future courses
- Went above and beyond my scheduled time by 7+ hours per session to ensure students' success — saw 100% passing rate with all grades in range B- to A+
- Fulfilled required tutoring qualifications for MSI position — acquired in-depth knowledge of tutoring techniques