

Michael Hollingworth

mhollingworthl@gmail.com San Francisco [PORTFOLIO](#) [GITHUB](#) [LINKEDIN](#)

SKILLS

JavaScript, React, Redux, HTML, CSS, SASS, Ruby, Ruby on Rails, Python, Mongoose, MongoDB, GraphQL, Node.js, Express.js, SQL, SQLite3, PostgreSQL, Webpack, jQuery, Jest, Git, Heroku, AWS S3, AWS IAM, AWS Elastic Beanstalk, Google Cloud API, Unity 3D, BCrypt, C++, CMake, Google Test, Valgrind, C, C#, Java, Object-Oriented Programming, Advanced Data Structures, TypeScript, Qt, Linear Algebra, Linear Optimization, Haskell, Unit Testing, E2E Testing

EXPERIENCE

Plugin Developer Intern

HealthStream Verity

Oct 2018 - Dec 2018

- Implemented 10 C# plugins that intelligently queried health provider databases so that users using the parent app could choose the database for their state
- Engineered sophisticated regex to scrape HTML results and parse them into data
- Adapted asynchronous request interface to different web technologies - React, Angular, and others - used by the database sites resulting in clean and efficient queries

Executive Leadership Team - Technical Support & Inductions

National Society for Leadership and Success

Mar 2018 - Jun 2019

- Developed an app which interfaced with the Google Sheets API to assign quarterly incoming members to advisors on the executive board, replacing a task that had previously been done manually
- Trained incoming executive board members on managing events and executive board logistics, resulting in a smooth transition to a new executive board after graduation
- Spearheaded induction strategy overhauls, increasing induction rate by 20%

EDUCATION

Web Development - App Academy

Summer 2020

Intensive 16-week program which focused on web development with Ruby, Rails, React, Redux and MERN.

BS Mathematics and Computer Science - University of California, San Diego

Spring 2019

PROJECTS

Turmoil (Rails, React, Redux, SCSS)

[live](#) | [github](#)

Turmoil is a discord-inspired app that provides live chat, server management, and permissions

- Implemented live chat with Rails ActionCable and Websockets, allowing users to communicate with little to no latency
- Designed the front and back end of a custom drag and drop system using a linked list, resulting in persistent reordering and nesting of servers and categories
- Developed a collection of React components in the vein of Bootstrap, giving the entire app a cohesive appearance

Bloom (MERN)

[live](#) | [github](#)

Bloom is a positive reinforcement-based habit-creating app which encourages users to achieve their goals

- Headed a development team of 4 in creating a fully-functioning, mobile-friendly web app in 5 days
- Integrated a custom canvas renderer with physics engine p2.js to display a unique and rewarding visual
- Engineered Mongoose schemas to take advantage of document nesting while maintaining a flat Redux state, allowing efficient backend queries and simple frontend logic

Reflector (JavaScript (ES6))

[live](#) | [github](#)

Reflector is a unique tower defense game built from scratch with HTML, JavaScript, and CSS

- Implemented Separated Axis Theorem collision from scratch to accurately detect when enemies are hit by lasers
- Programmed a custom ray marching algorithm resulting in pinpoint laser reflections and pixel-perfect UI interaction