Brendan Tsuda

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Skills

React.js, Redux, JavaScript, Ruby, Ruby on Rails, HTML5, CSS3, SQL, PostgreSQL, Node.js, Express, Mongoose.js, MongoDB, Canvas, AWS, render.com, Webpack

Projects

Lifelift Coffee (JavaScript, React / Redux, Ruby on Rails, PostgreSQL, HTML5, CSS3, AWS)   live site | github
A single-page coffee website clone where users can view, purchase, review, and search for various coffee products.
- Integrated custom SQL queries to organize products by category and simplify organization of data fetched from PostgreSQL database.
- Utilized local Redux state to conditionally render and style selected purchasing options for each coffee product for a more dynamic user interface (UI).
- Leveraged Jbuilder and Active Record associations to calculate and render average review ratings.

.catch() (JavaScript, React / Redux, Mongoose.js, mongoDB, Express, Node.js, HTML5, CSS3, AWS)   live site | github
A modern dating web app designed for software engineers to connect and communicate with others in the industry.
- Implemented sliding and swiping capabilities on user profiles using react-tinder-card library, Swiper JS, and Redux, allowing users to like/match with other users for a more interactive user experience (UX).
- Designed a user profile algorithm that guarantees any user an instant guaranteed match and initial message.
- Constructed Mongoose.js user schema using JavaScript's Map class, allowing for efficient and easy access to user's likes and matches.

Tanks (HTML5, Canvas API, JavaScript, CSS3, Webpack)   live site | github
A fully interactive JavaScript and HTML5 Canvas game based on the classic Nintendo game Wii Play.
- Built a custom physics engine that supports collision of many objects at once and manages complex movement patterns for each tank and bullet.
- Created an enemy tank algorithm that moves and shoots according to player movement.
- Implemented capability for mine placement utilizing JavaScript's asynchronicity that conditionally explodes after a given time interval or upon bullet impact.

Experience

Research Assistant I, Chemistry | June 2021 - June 2022
Calibr at Scripps Research
- Delivered 2 small-molecule drug candidates with sub-100 nM potency for further *in vivo* studies.
- Instructed 10 oncoming researchers on usage and maintenance of analytical and purification machines.
- Collaborated with Pharmacology Department on conducting quantitative analysis of lead formulation purity.

Director of Site Leading / Outreach Committees | August 2018 - May 2021
Berkeley Engineers and Mentors (BEAM)
- Communicated with 25 after-school coordinators and teachers to organize weekly sites for mentors to attend.
- Directed a committee of 20 staff members to organize and resource education and social events for the club.
- Managed a team of 5 mentors on weekly hands-on science and engineering lessons at local elementary and middle school sites.

Education

App Academy | November 2022 | San Francisco, CA
Immersive software development course with focus on full stack web development
University of California, Berkeley | May 2021 | Berkeley, CA
College of Chemistry, Bachelor of Science in Chemical Biology