Kevin La

(415) 806-7800 kevin.la79@gmail.com GITHUB LINKEDIN

SKILLS JavaScript, React, Redux, Ruby / Rails, HTML5, CSS, SQL, Express, MongoDB, jQuery

PROJECTS

BottomCrab (JavaScript, HTML5)

live | github

An original game you can play right on a browser

- Developed collision detection algorithm for sprite characters, and integrated with dynamic keystroke event listeners to allow multiple inputs being handled at once.
- Reduced graphic rendering lag by incorporating HTML5 Canvas and animation frames, producing smooth animation between user actions and sprite animations
- Engineered layers of gaming mechanics by introducing game state changes that rely on OOP techniques and polar to cartesian coordinate calculations.

TypeFighter (MongoDB, Express, React, Node)

live | github

A type racing game you can play solo or compete with others

- Integrated Socket.io to allow bidirectional server to client communication, enabling real-time multiplayer functionality.
- Implemented responsive keystroke listener that provides instant feedback for incorrect letter input, ensuring accurate WPM reading over entirety game.
- Utilized Redux architecture's unidirectional data flow with React for predictable state and reliable DOM rendering.
- Created custom modal framework using React's component architecture allowing reusability and efficient adaptability for generating new modals.

Nomflix (Rails, React, Redux, SQL, Webpack, AWS, Heroku)

live | github

A seamless clone of Netflix

- Developed single page application to render dynamically based on JSON data from Rails server.
- Reduced loading time of main splash page by implementing click event handler for slow video fetch requests to AWS server.
- Implemented persistent profile preferences by bootstrapping selected profile to global Redux store, removing unnecessary server requests and smoothing out user experience.

EXPERIENCE

Mechanical Engineer II
Mechanical Engineer I

Mar 2019 - May 2019

Nov 2015 - Mar 2019

Airspace Systems Inc. | Specializes in detection, identification, and safe capture and removal of unauthorized or malicious drones.

- Led the Quality Assurance team in planning, designing, and executing 800+ hours of tests across multiple departments in preparation for demonstrating our core products at military competitions.
- Designed and built the company's first kinetic drone defense system, laying the foundation for future models.
- Improved security drone's machine vision detection and identification rate by 15% by integrating new sensors, and comms.
- Trained and supervised junior engineers on fabrication/assembly processes, best practices, and engineering documentation.

EDUCATION

Bachelor of Science in Mechanical Engineering - University of California - Los Angeles

2011 - 2015

• Curriculum Highlights: Introduction to Computer Science I & II (fundamentals of Computer Science, data structures, algorithms, Object-oriented programming)

App Academy August 2019

• In person 1000-hour full-stack web development course: TDD, scalability, algorithms, OOP, coding style, REST, security, single-page apps, and web development best practices.