Marcos Henrich

Software Engineer

413-717-5354 Github Profile LinkedIn Profile Personal Site jmarcoshenrich@gmail.com

SKILLS

Languages JavaScript, TypeScript, Python, Ruby, SQL, Rails, React, Redux, Mongo, Express, Node.js, Git, HTML5, CSS3, Docker

EXPERIENCE

Septerna (contract), Full Stack Development Consultant - June 2023 - August 2023

San Francisco, CA

- Lead developer building internal tools using React, Redux, Flask, SQLAlchemy, and PSQL. Designing applications end-to-end including developing user stories, UX, frontend and system design, API endpoints, and database migrations.
- Engineered a tree visualizer to display complex relational data using an API endpoint to package relationships and parsing it with a modular frontend component, enabling users to quickly comprehend intricate data relationships.

Sun Basket, *Project Manager* - March 2017 – August 2022

San Francisco, CA

- Directed creative projects across Sunbasket's Creative Studio, producing quality deliverables on aggressive timelines and controlling costs, managing a \$2.1M yearly spend.
- Executed cross-company strategy, planning, and resourcing of massive company rebrand, executing creative development, production, and delivery across all physical and digital channels within 3 months.
- Applied continual improvement principles to quarterly marketing campaigns using data-driven insights and retrospectives to identify, resolve, and improve process issues, leading to higher deliverable throughput and top-of-funnel market reach.

PROJECTS

Willow (Ruby on Rails, JavaScript, React, Redux, CSS3, Webpack, PostgreSQL)

Live Site | Github

Functional clone of zillow desktop site with thematic elements

- Built an interactive map using Google Map API and location data. Developed preview modals and custom markers using CSS to dynamically respond to user data and inputs, increasing interpretability.
- Implemented search functionality using custom routes and backend Active Record queries to surface relevant results to the user.
- Designed and implemented RESTful endpoints using Rails, defining clear and concise URL patterns, HTTP methods, and response formats to allow the frontend to interact with the backend's data resources.

Friend.ly (JavaScript, HTML5, CSS3, Mongo, Express, React, Node.js, Socket.io)

Live Site | Github

Connects users in chatrooms based on location and shared interests

- Managed a team of five engineers to develop and deploy a functional prototype in one week.
- Enabled real-time chat functionality with websockets and socket.io, engaging frontend and backend connections upon component mount and disabling them upon component unmount using React hooks.
- Leveraged Mongo's NoSQL structure and the immediacy of websocket updates to dynamically update the Redux state across connected users, allowing for immediate state changes in friendships and new chatrooms.

Kelpscape (JavaScript, Canvas)

Live Site | Github

Simulation / immersive experience of a Pacific kelp biome

- Engineered a quadtree data structure to significantly improve efficiency of spatial data and collision evaluations. Extended base functionality with modular methods to detect different types of collisions.
- Implemented various behaviors such as hunting, fleeing, trapping, and mating, using algorithms and data structures to simulate realistic ecological interactions.
- Applied OOP principles to abstract shared behavior across different species, increasing readability and development speed.

EDUCATION and CERTIFICATES

App Academy - Curriculum of Study in Web Development (Ruby on Rails and JavaScript) **Project Management Institute -** Project Management Professional Certificate (PMP) **Bard College -** Bachelor of Arts (Concentrations: Critical Theory)

Oct 2022 – Jan 2023 September of 2022

Class of 2010