

Ryan Monaghan

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SKILLS React.js, Redux, Ruby on Rails, Ruby, JavaScript, TypeScript, jQuery, SQL, HTML5, CSS3, Canvas, AWS, IndexedDB, Git

PROJECTS

Betzy (Ruby on Rails, React.js, Redux, JavaScript, jQuery, Ruby, SQL, AWS, NPM, Webpack, HTML5, SASS/SCSS) [Live Site](#) | [Github](#)

A single page full stack application inspired by the popular online store, Etsy

- Utilized Ruby on Rails to implement user authentication with BCrypt password encryption on the backend in conjunction with cookies to produce a user login that persists across browsing sessions.
- Established single set of Ajax requests to fetch relevant data pertaining to users, categories and products on initial render of the homepage, reducing backend calls and improving scalability.
- Applied SASS variables in conjunction with a simple check against the user table for toggleable color scheme, allowing for each user to enable or disable a Dark Mode theme while logged in.

AI Fitness Dash (JavaScript, IndexedDB, HTML5, Canvas, CSS3, Webpack)

[Live Site](#) | [Github](#)

An active visualization of machine learning using a genetic algorithm to produce navigating AI bots that adapt and evolve

- Developed an evolutionary algorithm using pure JavaScript, that combines the best genes from a batch of AI bots, sorted by the travel goal success or closest to goal position, to produce dynamically evolving generations that navigate a randomized map with increasing effectiveness.
- Integrated sliders with event listeners to trigger an update to its corresponding setting, allowing for easy user configuration of the algorithm and other settings such as population size and trial time.
- Created a collision system with directional triggers by checking the XY coordinates of Canvas rendered objects against each other within an update sequence, giving AI bots the ability to detect obstructions in their environment while navigating.
- Utilized the JavaScript requestAnimationFrame method rather than setInterval or setTimeout, resulting in reduced memory usage and smoother performance.
- Implemented IndexedDB with JavaScript promises to create a client-side database and store the new AI gene sets in the browser, allowing the page to be refreshed and reloaded on each round for a consistently smooth experience.

EXPERIENCE

Junior Web Developer

Moonfarmer, Dec 2019 - Present

- Coordinate with project managers, design teams and other developers to maintain and produce new features for projects that include the [GrownBy CSA app](#), and the [Johns Hopkins Coronavirus Resource Center](#).
- Utilize React, Typescript and CSS modules to create efficient, user-friendly client-side interfaces.
- Leverage protocol buffers for maximum speed and compatibility between API calls in various languages.
- Document and update the functionality of existing codebases.
- Manage project features and workflow using Git and the Git-flow extension.

IT Helpdesk Technician (Self-employed)

Ryan's Tech and Computer Services, Nov 2018 - Sept 2019

- Provide certified, on-site technical support and troubleshooting for computer and tech related issues.
- Professionally handle a variety of computer needs including: data transfer, Wi-Fi setup, hardware upgrades, installations and system maintenance.

Bartender

Tonchin, Feb 2018 - Oct 2018

- Handle all aspects of the bar from preparation and service to breakdown, cleanup and inventory.
- Mix classic and specialty cocktails using Japanese precision bartending techniques.
- Pour draft beer, wine, and sake.

IT Helpdesk Technician

RCS Professional Services, Jan 2017 - April 2017

- Provided remote technical support and troubleshooting for end-users of business-class computer systems.
- Assisted in the creation and maintenance of Active Directory user accounts and data backups.

EDUCATION

App Academy - (3% acceptance rate, 1000+ hours) Immersive full-stack software engineer course (Fall 2019)

Bergen Community College - Courses in Network Administration (Fall 2016)

Montclair State University - BS - English (Spring 2015)