Ryan Woods

(508) 901 1004   ryanwoods14@gmail.com   Portfolio   LinkedIn   Github

Skills
JavaScript, React.js, Redux.js, Ruby, Ruby on Rails, HTML5, CSS3, Git, PostgreSQL, jQuery, Node.js, Docker, GraphQL, MongoDB, GraphQL / Apollo, Express.js, AJAX, Webpack, SCSS / SASS, RSpec, Firebase, AWS, Heroku, Matlab, C#(basics), C++(basics), C(basics), Swift(basics), EagleCAD(basics), Machining(basics), Soldering, Cypress PSoC, Arduino IDE, VS Code, Atom

Projects

Spoti-Fly (JavaScript, React / Redux, Ruby / Rails, HTML5, CSS, PostgreSQL)   Live Site | Github
A bug themed Spotify Clone
- Incorporated Rails' polymorphic association pattern to reduce database constraints with a constantly growing database
- Implemented a site-wide music player which follows the current user throughout their current session
- Designed a custom search feature which filters results from multiple data-types including playlists, songs, and artists.

FantasyPay&Play (JavaScript, MongoDB, Express.js, React/Redux, Node.js, Apollo/GraphQL, HTML5, CSS) Live Site | Github
A fantasy football and football betting site rolled into one
- Created and Updated Player and Bet data through weekly API calls to NFL and betting odds databases
- Designed smooth and agile updates to filterable available players table through GraphQL calls
- Evaluated weekly data from calls to fantasy and betting APIs through a custom algorithm to determine wins and losses on both bets and fantasy football matchups automatically.

Pushy Penguins (JavaScript, Canvas, HTML5, CSS)   Live Site | Github
A "Pushy-Penguins" minigame clone
- Developed customized sprites for use in a canvas library walking animation for all characters
- Designed spawning algorithm for enemies to give game a level of increasing challenge as time goes on
- Strengthened game by incorporating a story-book interface game start feature, which increases player engagement

Experience

Circuit Lab(MA/RI)   Summer 2018
    Head Instructor
- Taught the students, ages 5-13 in classes of 6-20, how to build projects from craft stick flashlights to self-driving cars and program through Scratch, Arduino IDE, App Inventor, and other programs
  .

Colgate University Physics Department(Hamilton, NY)   Fall 2016, Fall 2017
    R&D Assistant
- 2016: Researched bluetooth arduino microcontrollers, created demos, wrote manual for use in Electronics Course
- 2017: Researched and tested low-cost Bluetooth microcontrollers for use in transferring signals from circuit to smartphone.
- 2017: Created test circuit to amplify and filter voltage readings from a thermocouple and send to iPhone over Bluetooth

CAB (Sömmerda, Thüringen, Germany)   Winter 2016
    Electrical Engineering Intern
- Assembled various components of label printers as part of the on-site production line
- Programmed Cypress microcontrollers through C# and an I2C bus for use in a wire testing circuit, which tested third party wires for defects

Education

App Academy   July 2019 - Dec 2019
Immersive software development course with focus on full stack web development.
Brown University   Aug 2018 - Dec 2018
Master's in Electrical Sciences and Computer Engineering
Colgate University   Aug 2014 - May 2018
Bachelor of Arts, Physics & German; Overall GPA: 3.3/4.0
- *Selected Coursework*: Math Methods in Physics, Electronics, Intro to Special Relativity and Quantum Mechanics, Upper-Level Electricity and Magnetism, Computational Mechanics, and Bluetooth Microcontroller Design

Languages: English (Native), German (Professional working proficiency)