Jeff Varela
Software Engineer

Contact
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(347)-854-4668
Brooklyn, NY
github
Portfolio Site
LinkedIn

Skills
JavaScript React/ Redux, JBuilder, jQuery, Ruby, Ruby on Rails, SQL, PostgreSQL, Mongoose, MongoDB Node.js, Express.js, Webpack, HTML5, CSS3, GitHub, p5.js

Education
App Academy
16 Weeks Remote
Full-Time Software Engineering Program, 3% acceptance rate and 1000+ hours of immersive coding
May – Sep 2020

City College of New York
Bachelor of Science
Major: Physics
Con. Standard Physics
Aug 2016 – May 2020

Hobbies
Cooking
Competitive gaming
Health and Fitness

Technical Projects:

Physics_JS – Gravity Simulation *(JavaScript ES6, p5.js, HTML, CSS)*   live | github
An interactive physics simulator for visualizing the physical phenomenon of gravity
- Implemented vector field properties using JavaScript and p5.js which resulted in particles experiencing vector gravitational forces between a mover and a attractor
- Designed and integrated user inputs to set the properties of particles such as mass and number of particles using event listeners
- Engineered a multiparticle interaction system by developing algorithms that simulates gravitational forces between a network of particles and collision detection using native JavaScript and p5.js library resulting in a realistic model of gravitational behavior

Muse of Wire – **Team Lead** *(Mongoose/ MongoDB, Express.js, React, Node.js)*   live | github
A website that connects performers, students, and subscribers to the performing arts
- Mentored team performance by testing frontend and backend interfaces during various stages of development using google dev tools to debug coding issues
- Coordinated frontend and backend user authentication using React to update HTML elements on client side and encrypted JSON web token using Axios for server side
- Oversaw and delivered backend and frontend project design architecture using product management principles resulting in a fast paced and open communication environment

JSX Space Time *(Ruby on Rails, React / Redux, HTML5, CSS3)*   live | github
A full stack clone of PBS Space Time that streams PBS public broadcastings
- Incorporated React components to stream online videos using ReactPlayer API to fetch data from database and render online content from 3rd party platforms
- Constructed user authentication by employing BCrypt encryption on backend server and utilized rails MVC framework to persist login data across sessions that allows users' protection when entering sensitive information
- Established custom AJAX request to communicate with PostgreSQL database to persist backend data to frontend for DOM manipulation using react/redux life cycle

Experience:

Adjunct Researcher   Spring Semester 2018
The City College of New York Center for Discovery and Innovation
- Publicized investigative research into quantum information processing and the application of quantum based technologies explicated for a general audience under CUNY Academic Commons: https://jeffvarela.commons.gc.cuny.edu/

Accounts Payable Associate   Sep 2016- May 2017
Teach for America
- Processed expense transactions into Financial Edge database for major account holders
- Produced internal metric reports using Excel VLOOKUP for task management, resulting an increase in workflow productivity
- Ran custom payment reports using Excel Macros to analyze organization spend trends over a 6-month period, saving 15% on project budgets