Duke Nguyen

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SKILLS

Proficiency with JavaScript (TypeScipt), Node.js, Ruby, HTML, CSS (SCSS/SASS), React (Hooks), Gatsby, Redux, jQuery, Jest, GSAP, d3.js, Ruby on Rails, Express, MongoDB, SQL (PostgreSQL), GraphQL, Git (GitHub), Netlify, Heroku

PROJECTS

React Colors | React, SCSS, GitHub Pages   live | repo

A web application that enables users to create custom color palettes to help jumpstart their design process

- Fully responsive, intuitive custom UI based on neumorphic design principles
- CRUD system of managing colors within palettes, wherein users can create, edit and delete colors and save palettes which are then persisted through window.localStorage
- Calls on an external API that utilizes machine learning models in order to generate a random palette and recommend complementary colors based on the color theme of the palette

Chimp Casino | MongoDB, Express, React, Node.js, Heroku   live | repo

Collaborated with a team of three others to create a multiplayer game that was developed on the MERN stack with the use of the Phaser library for game development

- Role included the full implementation of the game of blackjack, which involved dispatching WebSockets to allow for multiplayer capabilities, OOP with JavaScript, and React for the UI
- Enabled the use of a leaderboard and individual profile statistics via the use of a MongoDB server and Axios requests

Travel Seville | Gatsby, SCSS, Netlify   live | repo

A guide to Seville, Spain, this project helps users plan a one day trip around the city

- Utilized the GSAP and react-transition-group library to integrate custom designed animations via keyframes and CSS transitions in order to manipulate SVGs and HTML elements
- Integrated the Google Maps API, allowing users to visualize their path along with giving them the ability to click on individual waypoint markers within the map in order to create an interactive experience
- Implemented a pathfinding algorithm for use with Google Maps in order to solve for a cyclic shortest distance path; algorithm based on a genetic algorithm that features simulated annealing in order to efficiently solve for the most optimal path

Cellular Automata | JavaScript, HTML, CSS, GitHub Pages   live | repo

A visual journal detailing the process of cellular automata and its applications in complex and real world physical systems

- Utilized the d3.js library in order to generate live animations of one-dimensional and two-dimensional systems
- Designed custom algorithms that mimic complex systems such as traffic, forest fires and urban sprawl
- Optimized algorithms with ES6 features such as the use of Sets in order to allow for animations to run smoothly and simultaneously on a single page

EMPLOYMENT

Data Analyst | *NovaBay Pharmaceuticals,* Sep 2017 - Oct 2019

Managed the data pipeline for a multi-million dollar biopharmaceutical company that specializes in eyecare

- Analyzed Rx data using Excel and Tableau in order to present actionable insights to executive-level management on a weekly basis
- Established a new company best practice to evaluate sales territory viability in order to boost sales volume and efficiently target hotspots that were previously unaccounted, results led to about a 15% growth in sales volume over a single quarter

EDUCATION

App Academy *1000-hour full stack bootcamp with a <5% acceptance rate. Topics include: TDD, scalability, algorithms, OOP, coding paradigms, REST architecture, security and authentication, and web development best practices* (Fall 2019)

University of California, Berkeley *BA - Economics* (Spring 2017)

Orange Coast College *AA - Architectural Design* (Spring 2015)