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, Apollo, Ruby on Rails, Express, MongoDB, SQL (PostgreSQL), GraphQL, Prisma, Git (GitHub), Netlify, Heroku

PROJECTS

notAirbnb | TypeScript, React, SCSS, PostgreSQL, Apollo, GraphQL, Prisma, Heroku, Netlify | live | repo

A creatively named fullstack web application that replicates Airbnb's website, which features anonymized listings web scrapped via Puppeteer

- Fully responsive, mobile-first design. Complete with all of the animations modeled after Airbnb's website
- Complete GraphQL API, which includes the ability to reserve listings as well as a robust search feature with the ability to filter on a variety of fields
- Includes many advanced React patterns such as the Context-Reducer pattern in order to reduce app complexity, as well as other creative solutions that enable code reusability

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

Collaborated with a team of three others to create a multiplayer game where players walk around a casino floor and are able to interact with poker and blackjack tables to play with other users seated at those tables

- 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 via a RESTful API

Travel Seville | Gatsby, SCSS, Netlify | live | repo

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

- Utilized the GSAP and react-transition-group library to integrate custom animations via keyframes and CSS transitions in order to manipulate SVGs and HTML elements
- Integrated the Google Maps API to allow users to visualize their trip, in addition to 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 modeling complex, real-world physical systems

- Utilized the d3.js library in order to generate live animations of one-dimensional and two-dimensional systems
- Designed 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, wherein the results were communicated with the 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 (unit, and integration testing), scalability, algorithms, OOP, REST architecture, security and authentication, and web development best practices* (Spring 2020)

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

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