

DAN BOURDIER

Software Engineer, Veteran, Volunteer

910-257-9773 [dfbourdier@gmail](mailto:dfbourdier@gmail.com) [/in/danBourdier](https://in.danBourdier) github.com/danbourdier angel.co/u/dan-bourdier danbourdier.github.io

EXPERTISE JavaScript (ES6), Frontend Web Development, React.js (Hooks/Class), Redux.js, Webpack, Babel, NPM, D3.js, HTML (5), CSS (3), Flex, Flexbox, Ruby on Rails (MVC Frameworks), REST API, PostgreSQL (Postgres), SQL, Express.js, jQuery, Node.js, Git (Version Control), GitHub, Heroku, Netlify, TDD, Jest, AWS

EXPERIENCE

Tutoria, Remote

June 2020 - January 2021

Frontend Engineer (Volunteer)

- Implemented embedded detection and conversion of links within the web application messaging feature using a regex parser that traverses a tree of DOM elements and closes anchor tags around identified links.
- Collaborated in a remote Agile environment to engage in code reviews to implement features built on React.js and Ruby on Rails, collaborative technologies included Trello, Slack, and GitHub pull requests.
- Developed mobile-responsive design with CSS 3 media queries that styled elements based on device screen size.
- Authored front end unit testing with Jest to add 15% coverage to shorten the app's SDLC for future features.
- Advanced SEO performance by 10% with Google Lighthouse by deferring expensive assets and updating metadata.
- Deployed pull request approved features to staging and production via AWS using the AWS CLI and site interface.

PROJECTS

Walk Around Town: Frontend Single Page Application

Live GitHub

- Employed React (v17) Hooks API to couple modular, functional components with ES6 asynchronous promise handling for seamless API calls to the YouTube Data API for manipulating and fetching video content.
- Improved initial load speed by 25% through lazy loading APIs and dynamic loading of UI bundled with Webpack 5 and Babel by leveraging life-cycle methods such as `useEffect` to load APIs upon change to state after mounting to DOM.
- Designed dynamically positioned UI using CSS 3 flexbox, absolute positioning, and device viewport size.
- Leveraged React Context API to mitigating state conflicts while updating only components wrapped with Provider tags.
- Utilized Google Cloud Platform to monitor web traffic, moderate API requests with HTTP restrictions, and track errors for specific API calls made from the application.

COVID-19 Int. Bubble Chart: Visualization Application

Live GitHub

- Authored a front-end web app bundled with Webpack 4 using D3.js to render visualizations of states' COVID-19 data such as recovery rate that iteratively instantiates nodes for each row of data fetched from an endpoint.
- Engineered nodes' visual repulsion using D3.js' force manipulation with an algorithm that passes and manipulates each node's radius, position, and data to simulate spacing with a value scaled to the node and its neighbors.
- Effectuated computer science fundamentals by developing a scalable algorithm that visually sizes node radii based on user chosen filters, while dynamically redrawing the SVG window on certain user events.

Tri' Harder: Full Stack Web Application

Live GitHub

- Solidified end-to-end development from wireframes with React 15, Redux 4, and Ruby on Rails 5 to store session tokens, implement user auth, and utilize state management to transfer data from input event changes.
- Leveraged data from Google Maps' API cached in Redux store to render React charting UI populated by geospatial data from calls to the API. Redux store is then parsed via React `componentDidMount` to render UI for each object.

EDUCATION & FURTHER EXPERIENCE

U.S Army Special Warfare Center of Excellence

January 2015 - May 2019

Human Resources Analyst

- Resolved an internal tracking system crash by leading the application of a new SQL-like database to track > 25K employees in 3 days, raising company standard to over 93% compliance.
- Reduced average processing time of awards and clearances by more than 25% in a fast-paced environment by leading training sessions for subordinate departments to benefit from.
- Earned awards in role-specific competitions through the embodiment of core Army values, positive attitude, continuous improvement, eye for detail, and a lasting impact on increasing responsibility positions.

App Academy - Full Stack Immersive - 2020

Fort Jackson HR Training - Database and Record Management – 2015