

Nathan Peel

Software Engineer

San Diego | (619) 633 - 8772 | peelnathan@gmail.com | github.com/nathanpeel | [linkedin.com/in/nathaniel-peel](https://www.linkedin.com/in/nathaniel-peel) | <https://www.nathanpeel.dev/>

Skills

React, Next.js, Redux, React Native, HTML, CSS, Tailwindcss, TypeScript, JavaScript, Python, Java, Node, Express, MongoDB, PostgreSQL, Accessibility, UI/UX

Experience

Software Engineer

Next.Nav (Open Source) - VS Code extension for viewing/modifying routes in Next.js. June 2023 - Present

- Spearheaded implementation of Next.js to leverage the server-side rendering and lazy loading to develop a landing/promotion website, improving SEO performance and enhancing UX, resulting in 10K+ downloads from the VS Code Extension store.
- Enhanced the introspective navigation dashboard and Data Ingestion Layer using TypeScript for strong type checking and compile-time error identification, improving the DX by increasing maintainability and readability and reducing debugging time by 20%.
- Collaborated with another engineer to incorporate React and ReactFlow for the component-based architecture and efficient diffing algorithm to display an interactive hierarchy tree using backend data, resulting in a 25% time reduction when navigating and creating routes in Next.js.
- Leveraged the VS Code Extension API for its availability within the VS Code application to communicate between the frontend and backend and allow users to open files from the extension, accelerating the user workflow and improving the DX for the team of 4 engineers.
- Integrated the ELK.js library to position nodes evenly within ReactFlow for its compatibility with ReactFlow and efficient calculation, streamlining the development of the tree by 60% and ensuring that any folder structure is displayed with visual appeal.
- Applied Chakra UI and Next UI to access pre-styled and accessible React components such as modals, pop-ups, and buttons, leading to rapid UI development and improved user workflow.

Engineering Projects

Shelph - *Reading list management web application*

- Designed and developed a MongoDB for quick implementation and flexible schemas to store user information while preventing data loss because MongoDB is ACID-compliant.
- Engineered an Express/Node RESTful API using the Model-View-Controller architecture to process requests from the client and make queries to MongoDB using request routes for maintainability and further modularity.
- Decreased development time using Tailwindcss for the intuitive shorthand CSS and lower cognitive overhead due to the lack of class names.

Req, Res, Next - *Restaurant Recommendation web application*

- Utilized Redux Tool Kit for the opinionated design and scalability to manage state within the React application while decreasing debugging time by using the Redux dev tools.
- Created a PostgreSQL database for ACID compliance to handle complex queries and store relational data about restaurants while ensuring data consistency.

Parken - *Parking finder mobile application*

- Deployed React Native to develop a mobile frontend for reusable components, compatibility with other libraries, and cross-platform support for IOS and Android.
- Implemented React-Native-Maps to display interactive Apple Maps component in the React Native Application and the Google Places API to load available parking data onto the map.
- Harnessed Zustand to organize the state in the React Native application for the minimal setup, limited boilerplate, small library size, and fast performance.

Talks/Publications

- Tech Talk: Why and How to Use Design Patterns (with examples).
- Next.Nav official release announcement, which received 2.4K claps on Medium.

Education

Grossmont College

Computer Science

Relevant Coursework: Intro to Linux, Logic, Precalculus, Intro to Java