James Huang

New York, NY

Software Engineer | jhuang4647@gmail.com | (917) -774-7027 | LinkedIn | GitHub | Personal Website

Technical Skills

JavaScript (ES6+), TypeScript, HTML, CSS, Sass, Git, React, Redux (Toolkit), Next.js, Node.js, Electron.js, Express, RESTful APIs, Postman, SQL, PostgreSQL, NoSQL, MongoDB, webpack, Vite, dnd-kit, MaterialUI, Tailwind CSS, D3.js, Prism.js, Jest, Actions, Jira, OAuth, bcrypt, Docker, AWS, Babel, React Native, Python, Flask, NumPy, Matplotlib, Pygame, C

Experience

Software Engineer - OSLabs | NextSketch - Next.js Prototyping Tool — August 2023 — Present

- Incorporated TypeScript to add static typing to codebase for compile-time error detection and enhanced readability.
- Leveraged React to build reusable, interactive functional and container components for an unidirectional, modular codebase.
- Utilized React Context API to streamline data sharing between components for accessibility to a single source of truth.
- Designed with MaterialUI to enhance user experience by using a suite of customizable pre-built components and intuitive theming system for a consistent design pattern and responsive functionality in application.
- Engineered sortable, hierarchy-based drag and drop code element interfaces with dnd-kit to provide intuitive user interaction and minimize DOM mutations for generation of Next.js boilerplate code and refined application performance.
- Elevated user visualization with D3.js to showcase real-time tree hierarchy of endpoints and Prism.js to provide a syntax highlighted, live-code snippet preview for improved and dynamic file representation.
- Constructed an Express server to handle client-server requests with middleware that facilitates directory and file creation using Node.js file system module and export functionality of prototyped Next.js project for real-time user engagement.
- Built with Vite to enable efficient dependency handling and hot module reloading for faster build and server cold start speeds.
- Launched the application with Node.js runtime in Electron to leverage Chrome's V8 Engine and to access cross-platform reachability for high performance desktop applications with no requirement of recompilation for each platform.
- Refined with Jest to create unit tests to mock folder and file creation and drag and drop interaction for increased reliability.
- Facilitated daily stand-ups, sprint planning, and code reviews to adhere to Agile principles for emphasized collaboration.

Open Source Contributions

Software Engineer | Rackdar - Tennis Court Locator

- Integrated Redux with React to maintain and update state across an application for multiple components to share by creating a centralized data store and predictable state container for improved state management and data flow.
- Implemented React Router to elevate user experience and to optimize client and server-side rendering of single page application (SPA) by routing users to various paths that render components based on conditional logic.
- Established a MongoDB to store tennis court geolocation data as schemaless document models for accelerated data retrieval.

Software Engineer | Memo - Vocabulary Assistance Application

- Deployed a PostgreSQL database to store relational vocabulary data allowing for connections from users with persistent data.
- Created the application with webpack as a module bundler to utilize a bundle based development server by writing a custom configuration file to compile a single lightweight file to deploy for production.

Education

Stony Brook University, *B.A. Biology* 2023

Publication/Talks

Speaker | Tech Talk - Cross Site Security Risks and Data Prevention Mechanisms
Author | Medium Article - Supercharge Prototyping with NextSketch

Interests

Paddler | Dragon Boat Racing - Paddling in large canoe vessels amongst a 20-person crew team across rivers for good fortune