

Bo Peng **NYU Computer Science | software engineer**

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Experience

ManageGo | *Software Developer*

Aug - Dec 2019

- Implemented new website designs in React for software applications, improving user experiences for thousands
- Created new custom React hooks using React history module to manipulate query strings when handling API calls and state management with Redux and Redux Saga for the utmost dynamic front-end performance
- Designed and finalized an API schema on a new commercial application feature/software for concierge users
- Utilized styled-components to design multiple React components to ensure optimization, stability, and consistent universal styling throughout the entire application structure and user interface
- Wrote polished tests on redux actions, reducers, and sagas to ensure proper functionality in application state

Nova | *Software Engineer*

Feb - July 2019

- Combined React's dynamic rendering and D3 to generate a continuously animated interactive data-driven SVG representation of GraphQL schemas that are capable of persisting throughout the application life cycle
- Maintained aspect ratio of SVG schema nodes represented as a directed graph using an algorithm that branches the nodes outward along specific X coordinates on the canvas by using force to control the motion
- Architected custom React Hooks to eliminate the need for lifecycle methods and shifting the Class paradigm into a more organized functional architecture by isolating functionality into multiple reusable methods
- Implemented Redis cache to handle high volumes of incoming GraphQL endpoint fetch requests which minimizes the number of asynchronous calls resulting in reduced latency and a streamlined UX
- Deployed Node.js application as a multi-container docker application, isolating Node.js environment and Redis images, resulting in a modularized and standardized service infrastructure across all platforms
- Utilized session storage to store user's introspection query to persist sessions within the application view
- Implemented React Router to enable client-side dynamic routing which reduced server calls and produced seamless view transitions between multiple documentation pages across the application infrastructure
- Developed a breadth-first search algorithm to produce a specific color pattern based on the schema's correlation with one another to display a clear understanding and overall visual structure of the nodes
- Enforced unit testing with Jest's assertion and mocking library combined with Enzyme across the application infrastructure to ensure maintainability and clean code structure and to reduce production bug density
- Utilized AWS EC2 and S3 to store the dockerized app in the cloud for reliable elastic web-scaling and security

Open Source Projects

Webpack Starter | *NPM package CLI tool*

2019

- Harnessed Node and the NPM packaging ecosystem to create an extensible and modular CLI tool to abstract webpack complexities for easy configuration and setup on the user's behalf
- Leveraged Node Child Processes to execute parallel bash commands inside the shell to develop user-facing API and to write and generate files and folders that are necessary for Webpack within the client's local file system
- Implemented node environment variables to handle production and development modes inside scripts
- Assembled React Hot Loader as a webpack plugin to prevent re-rendering of the entire page view, which kept logs intact and maintained application state at runtime resulting in a better, faster development experience
- Utilized Babel NPM package to transpile ES6 syntax down to readable browser-compatible Javascript code

Education

New York University | BA in Computer Science with a minor in Economics and Web Design

2014 - 2018

Relevant Coursework

Data Structures, Basic Algorithms, Computer System Organization, Operating Systems, Applied Internet Technology Discrete Mathematics, Web Development and Programming, iOS Development, Natural Language Processing

Technical Skills

Strong: Node, Express, Javascript ES6+, React/Hooks, React Router, Webpack, Bcrypt, JWT, MongoDB, RESTful API, GraphQL, Authentication, Git Version Control, Vim IDE, VSCode, CLI, Bootstrap, Redux/Saga, HTML5/CSS3

Experienced: TDD, Jest, Enzyme, Supertest, Postgres, Websockets, Apollo, OAuth, Docker, AWS, Travis CI, Java, Python

Public Talks

Build With Code NYC | Memory Allocation

2019