

# Michael Chang

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## SUMMARY

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- 5+ years of experiences in frontend web development, highly proficient in **ReactJS, HTML5, CSS3, SASS/SCSS, jQuery, JavaScript, Typescript, ES6**.
- Solid understanding of essential React concepts such as **functional and class components, JSX, Virtual DOM, life cycle methods, higher order components (HOCs), and custom hooks**.
- Skilled with **Python** and **Flask** for backend deployments.
- Adequate knowledge of **SQL** and used **Google Big Query (GCP)** to extract data from data warehouse.
- In depth knowledge of React libraries such as **React router v5 & v6, Redux, Redux toolkit, and React Testing Library**.
- Working experience in using **Redux** for managing one global storage for states and using **React Router** to create **single page applications**.
- Hands on experiences in conducting **unit tests** by using **Jest** and **React Testing Library** and checking the coverage to maintain quality and consistency.
- Expertise in using **SASS/SCSS** to create **reusable style logics** (nesting and mixins) and **Typescript** to ensure code consistency and flexibility.
- Familiar with **Agile and Scrum software development** and utilized **version control** management tools such as **Git** and **JIRA**.
- Proficient in building **RESTful APIs** for web applications.
- Hands-on experience for using **Figma** and **MUI** to create reusable and stylish React UI components such as Pagination, button, and dropdown.
- **Self-motivated fast learner, goal-oriented team player, and excellent communicator** that will get things done in time under pressure without losing quality.

## TECHNICAL SKILLS

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<b>Programming Languages:</b>	JavaScript, Typescript, Python, Java
<b>Web Development:</b>	HTML5, CSS3, jQuery, React, React Router, JSON, JSX, SASS/SCSS, Webpack, Babel, MUI, ES6 Redux, Bootstrap, Flask, Storybook
<b>Databases:</b>	SQL, GCP
<b>Version Control &amp; Testing:</b>	Git, Jest, React Testing Library
<b>Methodologies &amp; SDLC:</b>	Agile/Scrum, Jira

## PROFESSIONAL EXPERIENCE

### New York Health + Hospitals

*Oct 2021 - present*

Full Stack Developer

#### Project Name: Data Visualization Application

New York Health + Hospitals are an integrated network of hospitals and offers responsive care to more than one million patients every year across the five boroughs of NYC. As a safety net health system, they are not only treating injuries and illness but also committed to make health care accessible and affordable. The data visualization application collects the patient's information from doctors through an interface designed for easy user readability. The application has modules for applying algorithms and displaying analysis graphs according to each patient's data.

#### Responsibilities:

- Created reusable **React components** with **TSX** for frontend UI.
- Integrated application styling using **SCSS** and **Material-UI framework**.
- Used **Typescript** to ensure **code consistency** and **maintainability**
- Coordinated **React** with **Python Flask** to handle data in the backend.
- Applied clustering and classification algorithms to handle data processing in the backend.
- Performed **Unit tests** with **Jest** to ensure desired outputs are generated.

### Full Rich

*Apr 2020 - Aug 2021*

Software Engineer

#### Project Name: Financial Management Application

Full Rich is a financial planning company that helps clients to plan the best use of their cash flow. This includes some risk planning to purchase insurances and retirement planning to purchase the worthy assets. The financial management application offers an automatic solution for the planning by calculating the potential risks and providing available plans based on the client's information. This application was designed in a clean and user-friendly UI that elders could understand.

#### Responsibilities:

- Designed and developed a financial management application that gets data from multiple input forms and applies relative algorithms to calculate the risks and show multiple plans as outputs.
- Developed frontend applications by using **React**.
- Worked with backend engineers under **agile/scrum methodology** and actively participated in daily standups
- Used **React Router** to create **single-page application (SPA)** rendered on client side and keep the browser URL in sync with what's rendered on the page.
- Created **react.js reusable components**, used **JXS** with **ES6** to define components and **redux** as state management library.

- Dispatched the state by using **reducers**.
- Applied **unit testing** and **integrated testing** by using **Jest** and **React testing library**.

## Chewy

*Jan 2019 - Feb 2020*

Software Engineer

### Project Name: Dashboard Application

Chewy is an online retailer for pet food and other pet-related products. It offers more than 2000+ brands. The dashboard application is used internally for Chewy's internal employees. The goal is to allow users to build dashboards such as pie chart or line graphs to have a clear understanding of the data. They could build dashboards through the application and send them directly to the BI team for further analytic uses.

#### Responsibilities:

- Built well-structured and responsive website that retrieve data from the company and show dashboards for analytic uses by **React**
- Utilized **redux and redux tool kit** to manage **react component states** for maintaining scalability and code readability.
- Built excellent reusable styles with **SCSS nesting and mixins**.
- Used **React-Router** to implement dynamic routing.
- Participated in daily **scrum meetings** and **seasonal sprints**.
- Guaranteed reliable collaboration with **Git Version control**.
- Tested every component with **Jest** and **React testing library**

## Bose

*Nov 2017 - Dec 2018*

Frontend Developer

### Project Name: Customer Management Application

Bose is an American manufacturing company that sell audio equipment. The application is mainly about to write the whole customer management page to show their account summary, order history, subscription list and personal profile. Customers could manage their shopping history and add or delete their payment methods.

#### Responsibilities:

- Utilized modular structure within **React** application in which different functionalities within the application were divided into different modules.
- Experienced in developing responsive website with **HTML5, React, Bootstrap**, and **CSS media queries**.
- Developed a **single page** and cross-device/cross-browser web application for real-time product capacity utilizing **React router** and **JavaScript**.
- Reviewed customer feedback about debugging issues, fixed bugs with **HTML5, CSS3** and **JavaScript** codes and worked on resolving browser compatibility issues.
- Developed application code and unit testing with **Jest**.

## PERSONAL PROJECTS

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### Web3 Blockchain App

- Used **Vite** to create **React** application that could connect your virtual wallet and send Ethereum to any address with a GIF or message.
- Used **Tailwind CSS** for styling and **Solidity** to deal with smart contracts.

## **Credit Card Fraud Detection**

- Compared 3 sampling techniques to mitigate class imbalance in the data along with 4 model architectures like ANN, CNN & auto encoders to predict credit card fraud using **Keras** in **Python**
- Incorporated hyper parameter tuning and 5-fold cross validation to achieve 95%+ accuracy and recall.