

Mark Toh

SOFTWARE ENGINEER, FULL STACK

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EDUCATION

University of Wisconsin-Madison

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Madison, WI

Fall 2018

Skills

Fullstack MERN (MongoDB, Express, React, Node)

Frontend JavaScript, HTML, CSS, Redux, Sagas, Leaflet, D3.js, Plotly.js, Jest, Cypress

Backend Node, Python, Go, SQL

Software Heroku, Github, Visual Studio Code, Adobe XD, draw.io

Experience

DataChat - Dashboard

Madison, WI

SOFTWARE ENGINEER - REACT, REDUX, SAGAS, GO, PYTHON, POSTGRESQL

June 2019 - PRESENT

- Developed a dashboard for monitoring data in business intelligence and business analytics applications.
- Leveraged third party APIs and Python scripts to automate data collection pipeline.
- Drafted client/server architecture user flow.
- Designed user interface for dashboard selection menu and dashboard display.
- Managed dashboard CRUD functions through database operations in PostgreSQL.
- Supported dashboard sharing across users within an organization via React card menu and Go routes.
- Expanded company toolset, opening portals to complete BI/BA suite for many companies.

DataChat - Messenger

Madison, WI

SOFTWARE ENGINEER - REACT, REDUX, SAGAS, GO, PYTHON, POSTGRESQL

Jan 2019 - June 2019

- Developed a web messenger that uses a natural language chat interface for data analytics.
- Incorporated React-Redux container and Redux selector patterns to architect highly scalable front-end state management that enabled access to messages, charts, and user information.
- Applied Redux-Saga middleware to organize asynchronous logic, reducing mental overload.
- Constructed component library for internal brand use.
- Integrated Leaflet.js with geomapping to display listings on map.
- Implemented responsive charts using Plotly.js to present data findings.
- Led a team of engineers to deliver onboarding software for a fluid new user experience.

DataChat

Madison, WI

SOFTWARE ENGINEER INTERN - REACT, REDUX, SAGAS, GO, PYTHON, POSTGRESQL

May 2018 - Dec 2018

- Improved application usability by redesigning UI.
- Embellish application by tuning cursor and transition effects.
- Enabled file upload and deletion by developing a file manager in React and Go.
- Engineered an end-to-end test automation framework using Jest and Cypress based on Unit Testing, Regression Testing and Behavior Driven Development (BDD).

Projects

Open Formula 1

marktoh.github.io/open-f1

WEB DEVELOPER

- Developed a web application for tracking circuits across Formula 1 seasons.
- Mapped locations of 1400 circuits since 1950 using a Formula One API, React, and Leaflet mapping library.

Email Feedback Collector

SOFTWARE ENGINEER

- Developed a credit-based application to collect user feedback via email surveys.
- Built using MERN, mongoose, passport.js and deployed on Heroku.
- Implement login system using Google OAuth and passport.js.
- Integrate database system using Mongoose and MongoDB.
- Organize multi page application with React-Router.
- Implement billing service using Stripe API.