Andy Yu

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EDUCATION

University of Waterloo   Waterloo, ON, Canada
Bachelor of Applied Science in Computer Engineering, BASc   *September 2019 - April 2024*

SKILLS

Languages: JavaScript, TypeScript, C++, C, Python, MATLAB, HTML, CSS

Tools: React, Redux, Node.js, Restify, MongoDB, Mongoose, Material UI, Cypress, Jest, Git, Jenkins, Yalc, Storybook

EXPERIENCE

Autodesk   San Francisco, CA, USA
Frontend Developer   *September 2021 - December 2021*

- Adopted **React**, **TypeScript**, and **Redux** to streamline the upload flow process of construction sheets and maintained a sortable log list of published sheets to improve the efficiency of getting sheets out into the field
- Cooperated on an internal **React** components package used by nearly all web developers in the company's construction solution teams
- Built a slack bot as a tool to inform developers of any user feedback on a beta feature
- Incorporated permission level access to certain features and areas of the platform to allow construction managers finer control over their project
- Employed **Cypress**, **Jest**, **Yalc** and **Storybook** to test, develop, and document new UI components

MetricWire   Waterloo, ON, Canada
Full Stack JavaScript Developer   *January 2021 - April 2021*

- Spearheaded development of a comprehensive CRM system for the MetricWire platform with **React**, **Material UI**, **MongoDB**, and **Mongoose** to manage participant data and increase data analytic efficiency, utilized by researchers from Harvard and John Hopkins University
- Reduced time spent from hours to seconds for researchers to create accounts for their participants by developing a bulk account creation feature with **React** and **Material UI**, allowing researchers to create many accounts at once
- Increased researcher productivity, satisfaction, and retention by implementing a page builder with **React** and **Material UI** where researchers can customize and build their own study landing page
- Integrated custom "participant variables" in which researchers can use throughout the platform to boost flexibility when creating questionnaires and triggers for questionnaires
- Used **Node.js** and **Restify** to build out RESTful apis to support new features
- Created fully automated end-to-end test suites with **Cypress**, to ensure over 90% of the MetricWire platform features and tools were working as intended, automating 10+ hours of manual testing

PROJECTS

Youtube Party | *React, Semantic UI, Socket.io, Heroku*

- Created a scalable responsive website using **React** and **Semantic UI** where users can host joinable rooms to allow multiple users to queue YouTube videos and music simultaneously
- Developed a backend server with **Socket.io**, deployed with **Heroku**, to provide communication for queuing music and video requests from user to host
- Utilized YouTube API to query YouTube database for desired results based on search keywords

Shadow Hunters | *JavaScript, Node.js, HTML, CSS, Socket.io*

- Used **JavaScript** to create board game "Shadow Hunters" as an online player versus player game
- Implemented a backend server with **Socket.io** and **Node.js** to allow multiple users to utilize the same lobby as opponents and to handle real-time user commands and responses
- Built user interface on the front-end with **HTML** and **CSS** improving the visual and user experience