ANDY YU









EDUCATION

University of Waterloo, Computer Engineering

• Bachelor of Applied Science

April 2024

SKILLS

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

Tools: React.js, Node.js, Restify, MongoDB, Mongoose, Material UI, Cypress, Git, Restful APIs

EXPERIENCE

Autodesk, Frontend Developer

September 2021 - Present

January 2021 - April 2021

MetricWire. Full Stack JavaScript Developer

React.js, TypeScript, Node.js, Restify, MongoDB, Mongoose, Material UI, Cypress

Waterloo, ON

- Built a comprehensive CRM system for the MetricWire platform with React.js, MongoDB,
 Mongoose, and Material UI to manage participant data and increase data analytic efficiency,
 utilized by researchers from Harvard and John Hopkins University
- Developed bulk account creation feature with **React.js** and **Material UI**, allowing researchers to create numerous accounts for their participants at once, enhancing efficiency and user experience
- Integrated custom participant variables in which researchers can use throughout the platform to dramatically increase flexibility when creating questionnaires and triggers for questionnaires
- Implemented a page builder with **React.js** and **Material UI** where researchers can customize and build their own study landing page, increasing researcher productivity, satisfaction, and retention
- 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

Vixual, StarterHacks

React.js, Semantic UI, Socket.io, Heroku

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

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
- Coded the logic and functionality of the game to handle real-time user commands and responses with websockets