




ANDREW LIU

✉ andrew.liu2@uwaterloo.ca ·  andrewliu00 ·  andrewliu00 ·  andrewliu.tech

SKILLS

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

Tools/Technologies: React, Redux, Express, Node.js, GraphQL, MySQL, Figma, Git, \LaTeX , VSCode

EXPERIENCE

XE.com | Full Stack Developer

Sept 2021 - Dec 2021

- Reduced **CLS** to improve user viewing experience on XE's website
- Modelled and implemented Heroic pages in **Contentful** as part of an overhaul of XE's category pages
- Increased user traffic by updating metadata to promote XE's **SEO visibility**
- Developed new card component in **React** allowing for marketing team to have more display options

Remitbee Inc | Full Stack Developer

Jan 2021 - Apr 2021

- Optimized queries in a **MySQL** database to decrease core platform load times by **15%**
- Implemented crucial bug fixes in **React** and **Redux**, improving client portal functionality
- Developed streamlined page templates with **React** and **Strapi CMS** by designing new components and refactoring existing code to be more dynamic
- Updated backend transaction flows using **Next.js** and **GraphQL** in preparation for new user group

Waterloo Hyperloop Team | Software Developer

Dec 2019 - May 2021

- Built responsive page components using **React** and **TypeScript** for Waterloo's client facing website
- Collaborated with team to redesign and wire frame new website in **Figma** to display team information
- Displayed sensor data on the hyperloop pod dashboard by connecting to serial ports

Crystal Claire Cosmetics Inc | Assistant Software Engineer

May 2020 - Aug 2020

- Designed and developed industrial robotic solutions with vision systems using **PC/PLC** control
- Led the programming of robotic arms to reduce operational costs and increase manufacturing output
- Involved in full development life cycle to build applications used for robotics and mapping
- Worked with the engineering & maintenance teams to physically install, setup, and troubleshoot automatic equipment

PROJECTS

Re:Action | React, Python, MongoDB

 Re:Action

- Developed a web app at Hack the Valley that allows users to query keywords and visualize relevant tweets according to their geographical locations around the world
- Used **React**, **TypeScript**, and a custom library to create a seamless and intuitive front-end
- Scraped relevant tweets using the Tweepy **Python** library to access **Twitter API**
- Stored tweets using **MongoDB Atlas** to be used later in data visualization

Avarosa Bot | Python

 Avarosa Bot

- Programmed a web scraping Discord bot in **Python** to collect player statistics for League of Legends, allowing for easier access to relevant data in a Discord server
- Used the **BeautifulSoup** library to parse and analyze **HTML** data from the statistics site op.gg
- Displays players' seasonal ranked statistics in the form of a Discord embed

EDUCATION

University of Waterloo

B.ASc in Computer Engineering

Waterloo, ON

Sept 2018 - Apr 2024