



# Andrew Liu

3B Computer Engineering Student

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## EXPERIENCE

### Drop | Back End Developer

May 2022 - Aug 2022

- Developed internal tooling for admin portal to allow marketing and customer service teams to easily create important items with **ActiveAdmin** and **Rails**
- Reduced fraud rates by **60%** after designing a backend service with a purchase limit check algorithm in **Rails** and **Postgres**
- Increased user activity by **240%** after updating existing models with important fields to accommodate new redemption item release
- Implemented test suites with **RSpec** and **Sorbet** to ensure code reliability

### XE.com | Full Stack Developer

Sep 2021 - Dec 2021

- Developed new card component with **React** and **Next.js** to standardize content layout on all XE marketing pages
- Optimized Cumulative Layout Shift by **35%**, increasing visual stability across pages to improve user viewing experience on XE's website
- Modeled and implemented Heroic pages in **Contentful** as part of an overhaul to modernize XE's category pages
- Increased user traffic by updating metadata to promote XE's **SEO visibility**

### Remitbee Inc | Full Stack Developer

Jan 2021 - Apr 2021

- Decreased core platform load times by **15%** by optimizing queries in a **MySQL** database
- 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

## PROJECTS

### Avarosa Bot | Python

- 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

## SKILLS

### Languages

JavaScript, Ruby, Python, TypeScript, HTML/CSS, SQL, C++

### Frameworks & Tools

React, Rails, Next.js, Redux, Docker, Express, Node.js, Redis, Sidekiq, PostgreSQL, MySQL, GraphQL, Git

## EDUCATION

### University of Waterloo

Sep 2018 - Apr 2024

**B.ASc in Computer Engineering**

## Interests

Volleyball

Photography

Keyboards

Music

Basketball