# **ANDREW LIU**

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# **EDUCATION**

## University of Waterloo

Class of 2024

#### **Bachelor of Applied Science in Computer Engineering**

Relevant Coursework: Systems Programming and Concurrency, Real-Time Operating Systems, Software Design and Architectures, Programming for Performance, Database Networks, Computer Networking

# **SKILLS & TECHNOLOGIES**

JavaScript Ruby	Elixir	Python	TypeScr	ript HTN	/IL/CSS	C++	SQL	Git	React	Redu	ıx Rails
Phoenix Liveview	Docker	AWS	Next.js	Express	Node.js	Redi	is Sid	ekiq	Postgre	SQL	GraphQL

# **EXPERIENCE**

### theScore

**Software Engineer** 

Sep 2023 - Dec 2023

- Improved business-critical ingestion systems of 5 data providers for real-time sports data using **Elixir/Phoenix** and **Rails**, enabling the **4.1 Million** monthly active users on the premiere sports media platform
- Reduced developer debugging time by 15% by designing and implementing a file-archiving pipeline using PostgreSQL and AWS S3 for payloads from data providers
- Deployed data monitoring solutions using **Datadog** and **Splunk**, creating custom dashboards to oversee key performance indicators, service uptime, data ingestion metrics, and service-level agreements
- Integrated a sports data source via a **persistent SSE connection** in **Elixir** for continuous replay of historical NFL games, testing real-time data ingestion resilience during core service updates

## Drop

#### **Backend Developer**

May 2022 - Aug 2022

- Reduced fraud rates by **60**% by designing and implementing a back-end service in **Rails** and **Postgres**, featuring a purchase limit check algorithm to protect the integrity of the loyalty-point system
- Enhanced internal admin portal by developing tools with **ActiveAdmin** and **Rails**, streamlining user management for marketing and customer service teams, boosting efficiency and customer engagement
- Boosted user engagement by 80% after updating existing models with important fields to accommodate new redemption item
- Implemented test suites with RSpec and type checking with Sorbet to ensure code reliability

#### XE.com

## Full Stack Developer

Sep 2021 - Dec 2021

- Developed new information card component with **React** and **Next.js** to standardize content layout on all XE marketing pages
- Reduced Cumulative Layout Shift by 35%, increasing visual stability across pages to improve user viewing experience
- Modelled and implemented pages in Contentful as part of a modernization of XE's category pages
- Increased user traffic by updating metadata to promote XE's Search Engine Optimization visibility

### Remitbee

#### **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