# Andrew Xu

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#### Education

#### University Of Waterloo

Sep. 2020 - Dec. 2025

Bachelor of Mathematics - Computational Mathematics, Honours Co-op

Waterloo, ON

Relevant Coursework: C++ and OOP, Data Structures, Data-Intensive Computing, Neural Networks

## Experience

Intuit Inc Jan 2024 – April 2024

Software Engineer Intern - DevX

Toronto, ON

- Reduced time-to-merge by 40% by creating a service in **Node.js** leveraging GitHub and Slack APIs for build/pull request notifications, daily PR digests, enhancing productivity for 70+ teams.
- Managed CI/CD pipeline through **Jenkins** to deliver information from Github to the service.
- Automated schema change notifications for 500+ tax analysts using Python and Github Webhooks
  to extract concise summaries from diffs in Git commits.

Intuit Inc Sept 2023 – Dec 2023

 $Software\ Engineer\ Intern\ -\ Dev X$ 

Toronto, ON

- Enabled resource/asset aggregation based on user ownership using **SQL**, **GraphQL**, and **Java** with credential pre-processing through the Enterprise Identity and Access Management (**eIAM**) system.
- Optimized query times by 30% through migrating DAO implementations to Spring Boot JPA queries.

Favorite Medium Jan 2023 – Apr 2023

Software Engineer Intern

Singapore

- Used **Java** (Kotlin) in an MVVM structure to create custom view components for badging and customizing TabLayout components to spec throughout the TuneIn application.
- Designed time-to-live policies to automatically manage the lifecycle of audiobook data by building **SQL** queries and a worker for flagging and deleting content.

Achievers Inc May 2022 – August 2022

Software Engineer Intern - Binary Experience

Toronto, ON

- Improved accessibility of the notifications interface for clients by revamping the platform notifications microservice on the backend using Python (Django) impacting over 8000 users.
- Created batch publishing for push notifications by incorporating the **Google Cloud Pub/Sub** framework to create the required topics and subscriptions with **Docker** and **Kubernetes**.
- Engineered interface for testing Pub/Sub pipeline in integration testing.

### **Exponet Canada Inc**

Sept 2021 – Dec 2021

Full-Stack Developer Intern

Mississauga, ON

- Incorporated 6 complete end-to-end features for a logistics management application, utilizing React Redux w/Sagas, Java (Grails with GORM framework), and Mongo Compass.
- Reduced customer friction by centralizing package modification options for orders from Amazon.com such as fetching, rating, voiding, and printing shipping labels using the Amazon Marketplace Web Service API.
- Created and automated an inventory dashboard through data fetched from POs and Amazon sales removing the need to update stock at the end of each day manually

## **Projects**

#### PennApps XXIV Winner - Don't Ban Us | Python, NLTK, Node.js, Electron.js

Sept 2023

- Built a universal chat filtration system to rephrase negative comments into positive messages before being sent, placing top 3 in the Gaming category and receiving the Wolfram Alpha award.
- Used and trained an NLTK model to classify negative comments, ChatGPT API to rephrase messages and Electron.js to listen for text input discretely in the background as a system tray application.

## Skills and Interests

- Languages: C++, Java, Python, Go, SQL, JavaScript, Kotlin, MATLAB
- Frameworks: Spring, Django, Grails, gRPC, GraphQL, PyTest, Node.js, Spark, Numpy
- Interests: Freestyle skiing, urban planning, cooking