

# Sophie Qin

THIRD YEAR COMPUTER SCIENCE

## EXPERIENCE

### Wish / Software Engineer Intern

Jan - April 2020

Built the backend architecture, product selection/push notification infrastructure, and custom pricing logic for Flash Sale, a feature that showcases **100+ products on sale every 4 hours daily** using Tornado, MongoDB, and SQL.

Implemented redesigns of the current iOS UI, resulting in a **\$32M** increase on gross merchandise value per year.

Blocked over **160k fraud accounts** per month by modifying the iOS app's core requests to integrate an internal multi-factor authentication framework.

Reduced day 0 drop-off for new users by **12%** and increased a user's lifetime value by **5%**, through building new onboarding experiences.

### Hack the North / Backend Developer

Feb 2020 - Present

Reducing the server load by **hundreds** of calls to the Postgres database through implementing JWT token issuing and validation.

Migrating the server code from SQLAlchemy and Python to GraphQL and Typescript to simplify data requests.

### Wattpad / Software Engineer Intern

May - Aug 2019

Increased weekly paying users by **15%** through integrating Mopub rewarded video ads into the iOS platform.

Piloted a coin gifting experiment to **50%** of US iOS users, resulting in an estimated **\$10k** increase in monthly revenue.

Automated tests for purchasing coins using XCUITest to increase code coverage on the iOS app.

### TD Lab / Developer

Sep - Dec 2018

Improved the component locations of a YOLOv2 machine learning app that converts paper wireframes into interactive user interfaces by adding symmetry detection logic.

Prototyped a real-time iOS chat app using Firestore, chosen as best solution during Hack Week.

### UW Blueprint / Project Developer

Sep 2018 - Dec 2019

Developed an Android app in Kotlin to digitize the judging process for **500+ participants** at an annual Ontario dance festival.

Researched and prototyped an object detection machine learning pipeline to detect micro-plastics in liquids using OpenCV, LabelBox.

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## SKILLS

### Languages

Python, Swift, C++, Java, C, SQL, HTML/CSS

### Tools

Tornado, Flask, MongoDB, SQLite, Firebase, Treasure Data, JavaFX, Spring, Xcode

## PROJECTS

### Orpheus

A Spotify status menu bar plug-in for MacOS.

### Chamber Crawler 3000

A command line dungeon crawl role playing game in C++.

### Mi Melons / Hack the North 2019

An iOS and VoiceFlow app that guides women through their monthly breast exam.

## EDUCATION

### University of Waterloo

Candidate for Bachelor of Computer Science

Average: 85.3

Expected Graduation: May 2022

### Relevant Coursework

Algorithms

Data Structures

Object Oriented Programming

Human Computer Interaction

Introduction to AI

## INTERESTS

Greek Mythology, Brooklyn 99,

Lofi Hip Hop Beats, Zumba