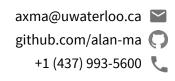
# Alan Ma



### Education -

# **University of Waterloo** | *B.Sc. Software Engineering*

2018 - 2023

• 3.8/4.0 GPA; President's Scholarship of Distinction

Skills —

Languages: Python, SQL, JavaScript, Java, Go, C/C++, Scala, C#

Technologies: MongoDB, Hadoop, Flask, Vue.js, Node.js, Angular, AWS SQS, Firebase, Git

## Experience -

# **Wish** | *Software Engineering Intern*

January – April 2020

- Designed a new product feed in **Python**, growing profit from ad revenue by \$2.3 million annually
- Optimized automated marketing campaigns by A/B testing ranking algorithms that compiled data from MongoDB and Hive SQL, boosting the click rate of notifications by 15%
- Engineered a push notification library to improve security with the OAuth2 model, using distributed processing and **AWS SQS** to deliver 500 million notifications per day

## **Oracle NetSuite** | *Software Engineering Intern*

May - August 2019

- Built APIs and user interfaces in **Java** to streamline the management of bonuses in payroll software
- Developed a more robust algorithm to calculate accrued paid time off, preventing compensation errors
- Migrated data in **Oracle SQL** as part of a team effort to hotfix inconsistent account settings

# **SOTI Inc.** | *Software Engineering Intern*

July – August 2018

- Developed REST API endpoints in **C#** to deliver vehicle information in a fleet management application
- Created components and services in **Angular** and **TypeScript** to enable vehicle customization

#### Projects -

# **DECA Online Education Platform** | hub.decawoodlands.com

2017 - 2020

- Developed a full-stack application for business club members using Python and Vue.js, leading to a 50% increase in members qualifying for international competitions
- Implemented user roles and token-based authentication to secure REST API endpoints in a **Flask** server
- Integrated with Firebase Cloud Firestore to allow for a flexible and scalable NoSQL database

## FireWatch – Hack the North 2018 Winner | devpost.com/software/firewatch

2018

• Built a website that warns local residents about dangerous wildfires, using **JavaScript** to display real-time satellite data

## Extracurricular Activities -

## **Google Code Jam** | Competitor

2020

• Competed in Google's global coding competition, placing in the top 11% of 40,000 contestants worldwide

# **Hack the North** | Organizer

2019 - Present

• Coordinated transportation logistics to bring 1,500 students from over 20 countries to Waterloo for Canada's biggest hackathon