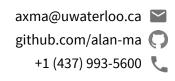
Alan Ma



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

- 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%
- Implemented an algorithm to introduce inline promotions to product feeds using **Python**, growing profit from ad revenue by \$2.3 million annually
- Engineered a push notification library which upgraded security to the OAuth2 framework, 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
- Prevented compensation errors related to paid time off by developing a more robust algorithm
- Wrote a script to migrate millions of rows of 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 facilitate client-server communication
- Built user interfaces with Angular, TypeScript, and Sass 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 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 to warn residents about wildfires, using **JavaScript** to display real-time satellite data

Extracurricular Activities ·

Google Code Jam | Competitor

2020 – Present

• Competing in Google's global coding competition, currently ranked in the top 11% of 40,000 contestants

Hack the North | *Organizer* (2019 Logistics, 2020 Sponsorship)

2019 - Present

• Currently raising sponsorship for Canada's biggest hackathon, with 1,500 students from over 20 countries