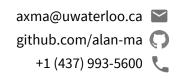
Alan Ma



Education -

University of Waterloo | B.Sc. Software Engineering

2018 - 2023

- 3.82/4.0 GPA; President's Scholarship of Distinction
- Relevant Courses: Database Management, Operating Systems, Data Structures, Combinatorics

Skills -

Languages: Python, SQL, JavaScript, Java, Go, C/C++, Ruby

Technologies: MongoDB, Hadoop, Flask, Vue.js, Node.js, AWS SQS, Firebase, Google App Engine, Git

Experience —

Shopify | *Software Engineering Intern*

Sept - Dec 2020

Backend developer on the Order Risk team, working on fraud detection and recommendations

Wish | Software Engineering Intern

Jan - Apr 2020

- Optimized automated marketing campaigns by designing and A/B testing ranking algorithms, using data from MongoDB and Hive SQL to boost notification click rate by 15%
- Implemented inline promotions in product feeds, growing profit from ad revenue by \$2.3 million annually
- Engineered a push notification library in **Python** 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 - Aug 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 scripts to migrate millions of rows of data in **Oracle SQL** to hotfix inconsistent account settings

Projects -

DECA Online Education Platform | hub.decawoodlands.com

2017 - 2020

- Developed a full-stack application for competition training using Python and Vue.js, leading to a 50% increase in members qualifying for international events
- Implemented user roles and token-based authentication to secure REST API endpoints in a Flask server
- Integrated Firebase Cloud Firestore 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

Competed in Google's global coding competition, placing in the top 11% out 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