




Alan Ma

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Education

University of Waterloo | B.Sc. Software Engineering

2018 – 2023

- 3.51 GPA – 88% Cumulative Average; 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

January – April 2020

Software Engineering Intern

Toronto, ON

- Designed a new product feed in **Python**, resulting in annual profit growth of \$2.3 million in ad revenue
- Optimized automated marketing campaigns by using **MongoDB** and **Hive SQL** to tap into historical data, boosting notification click rate by 15%
- Engineered a secure messaging library to deliver 500 million notifications per day using new API standards

Oracle NetSuite

May – August 2019

Software Engineering Intern

Waterloo, ON

- 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

SOTI Inc.

July – August 2018

Software Engineering Intern

Mississauga, ON

- 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 learning platform for business club members using **Python** and **Flask**, leading to a 50% increase in members qualifying for international competitions

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

2018

- Built an application that warns local residents about dangerous wildfires, using **JavaScript** and **Vue.js** to display real-time data from NASA satellites

Extracurricular Activities

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