

Alan Ma

✉ axma@edu.uwaterloo.ca

☎ (437) 993-5600

🐙 github.com/alan-ma

Skills

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

Technologies: Angular, Vue.js, Node.js, TypeScript, Git, Jira

Experience

Development Operations Intern

Mississauga, ON

SOTI Inc.

Jul – Aug 2018

- Developed a new process to sign security certificates on executables using PowerShell, reducing costs by \$30,000 annually
- Refactored tools for cross-platform capability and integrated scripts into CI/CD pipelines

Software Engineering Intern

Mississauga, ON

SOTI Inc.

Jul – Aug 2017

- Built new components for a fleet management application using Angular
- Created TypeScript services to contact REST APIs, monitoring database changes using SQL
- Resolved UI issues affecting cross-browser compatibility using HTML, CSS, and Sass

Projects

FireWatch – Hack the North 2018 Winner | Web

- Built a website that alerts users about dangerous wildfires based on location proximity
- Leveraged HERE's Maps API to display over 40,000 live fires from NASA's Terra satellite
- Integrated evacuation centre data from the Red Cross to direct users to safety

DECA Online Learning Platform | Web

- Designed a web application for business club members to receive personalized training
- Implemented individual progress tracking stored in a NoSQL database
- Deployed the website with a Nginx web server on Ubuntu, configured through AWS EC2

Employee Management System | Java

- Developed an application to manage an employee database, applying object-oriented programming principles to improve efficiency
- Implemented a hash table with a custom hashing function for optimized data storage

Education

University of Waterloo

Waterloo, ON

Bachelor of Software Engineering

2018 – 2023

- Cumulative Average: 90.3% – Dean's Honours List