

AMIR AFZALI

(647) 898-2647 | amir@afzali.ca | [linkedin.com/in/amirafzali](https://www.linkedin.com/in/amirafzali) | github.com/amirafzali

EDUCATION

McMaster University - Hamilton, ON

Expected April 2023

Bachelor of Engineering, Software Engineering - CGPA: **3.8/4.0**

- Related Coursework: Data Structures & Algorithms, Operating Systems, Software Design, Computer Architecture

EXPERIENCE

Facebook

August 2021 – November 2021

Incoming Software Engineer Intern

Menlo Park, CA

Akuna Capital

June 2021 – August 2021

Incoming Software Engineer Intern

Chicago, IL

McMaster University

September 2020 – April 2021

Undergraduate Teaching Assistant

Hamilton, ON

- Taught the empirical analysis of runtime and space complexity for various data structures and algorithms
- Led weekly labs and performed code walkthroughs for algorithm implementation in **Python** and **Java**
- Automated the marking of **200+** student coding assignments through testing with **Pytest** and **JUnit**

Loadlink Technologies

June 2020 – August 2020

Software Engineer Intern

Toronto, ON

- Developed a real-time notification delivery API to drive **250k+** push notifications per day, using **.NET** and **Redis**
- Independently created an **Angular** web app to prototype two-way communication through **SignalR** WebSockets
- Minimized the size of web notification payloads by up to **75%** by implementing a key-based message retrieval API

Alstom

May 2019 – August 2019

Software Engineer Intern

Toronto, ON

- Built a **Python** based XML parser that extracts equipment work procedures and returns a configurable **CSV** output, saving over **300** hours of manual work time per year
- Created a responsive data visualization dashboard for tracking project progress, using **React**, **Redux**, and **Chart.js**
- Overhauled functionality on the task management tool by creating RESTful APIs with **Node.js** and **Express.js**
- Improved query performance on over **500k** MongoDB documents by pre-aggregating frequently used statistics

LEADERSHIP

DeltaHacks

May 2019 – June 2021

Technical Lead

Hamilton, ON

- Managed a team of **8** developers and organized a university hackathon of over **850** participants
- Led the development of full stack apps for the attendee and judging platforms, facilitating the submission and marking of over **4000** unique applications, using **TypeScript** and **Firebase**
- Created front-end components that update in real-time following database changes, with **Vue.js** and **Vuex**

TECHNICAL SKILLS

Languages: JavaScript, Python, Java, TypeScript, C++ , C, HTML, CSS

Frameworks: Node.js, React, Vue.js, Express.js, Flask, Selenium, MongoDB, MySQL, Firebase, Bash

PROJECTS

Citation Scraper | [GitHub](#)

March 2020

- Created a news article web scraper that extracts citation information, using **Python** and **BeautifulSoup4**
- Implemented a tag priority system that yields a **98%** accuracy rate on over **100** major news sites, by determining which HTML fields are most likely to contain correct citation data

ChatApp | [GitHub](#)

January 2019

- Built an iOS mobile application that allows for sending and receiving image messages, using **Swift**
- Implemented SMS verification and account authentication through the **Twilio API** on a **PHP** backend with **MySQL**