

Katharine Zhong

SECOND YEAR · COMPUTER SOFTWARE ENGINEERING CO-OP STUDENT

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Technical Skills & Achievements

Programming & Scripting Languages: Python, C/C++, HTML/CSS, Javascript, LaTeX, MATLAB, VHDL

Developer Tools: Unix/Linux, Git, VIM, VS Code, Shell (Bash), Microsoft Office

Honours & Awards: Faculty of Engineering Inspiring Leadership Award (2021), Duke of Edinburgh International Bronze Award (2021), Alexander Rutherford Scholarship (2021), Archbishop MacDonald Outstanding Service Award (2021), Cadet League Service Award (2020), Archbishop MacDonald Magna Cum Laude (2019-2021)

Education

University of Alberta

Edmonton, AB

BSc in Computer Software Engineering Co-op

Sept 2021 - Current

• **Relevant Courses:** Introduction to Tangible Computing I & II; Formal Systems and Logic in Computing Science; Introduction to Microprocessors; Introduction to Digital Logic Design; Continuous Time Signals and Systems; Electrical Circuits I; Calculus I, II, & III; Applied Linear Algebra

Project Experience

Recipe Website Project

Edmonton, AB

HackED Hackathon

Jan 2023 - Jan 2023

- Developed an archive-style interactive recipe website, with an idea of using **machine learning** to sift through recipes based on website filters set by the user and **web scraping** to gain more recipes in the archive.
- Worked with a team of five to create a website using **HTML, CSS, and Javascript** alongside employing **GitHub** for collaboration, playing a lead role in fleshing out project idea, website purpose, and functionality.
- Utilized **Figma and Canva** to create a UX design mock-up, as well as design of team logo and general look of website.

Google Chrome Extension Project

Edmonton, AB

Personal

Dec 2022 - Present

- Designing a Google Chrome extension that blocks a hardcoded URL using **HTML, CSS, and Javascript**, working with **JSON and APIs** to obtain the desired functionality.
- Reinforcing computer technology abilities through connecting different programming languages and utilizing **web technologies** and **extension components**.

Kick Off Project: Ground-Station Software

Edmonton, AB

AlbertaSat

Sept 2022 - Present

- Applying various programming-related tools, for example, **Python, React, and Git**, to satellite-related projects for awareness of technical aspects of various subsystems.
- Enhancing **full-stack development** skills with an emphasis on **back-end** development, by employing use of various **programming languages, frameworks**, and **REST APIs**, while gaining familiarity with **object-oriented** programming and networking concepts like **TCP** and **IP**.

Community Involvement

699 Jasper Place Royal Canadian Air Cadet Squadron

Edmonton, AB

Senior Air Cadet

Sept 2016 - Jul 2019

- Led a flight of **30+** cadets on and off parade square, holding meetings addressing concerns in preparation for parade or in response to questions or issues for example regarding proper uniform maintenance or wear or correct drill.
- Taught air, leadership, and survival-related classes in-person and remotely to groups of **20+** cadets by adopting various methods to keep a large group engaged.
- Mentored next-generation senior cadets by giving advice and recommendations for leadership opportunities and assessments such as for instructing classes or leading flights.

Archbishop MacDonald High School

Edmonton, AB

President/Chief Editor of MacSource News

Aug 2020 - Jul 2019

- Redesigned and updated the MacSource website, getting up to 200 views per week in Canada and internationally, using a combination of website template and **HTML**.
- Designed to be flexible to any case with low time complexity compared to the existing models which were only useful in specific scenarios.
- Established new ground rules and standards for team and implemented throughout year by communicating with members and addressing issues as needed.