

SIMON MARCOTTE



Engineering
Co-op Program

ASPIRING COMPUTER ENGINEER

ABOUT ME

I'm Simon! I am a third year student in BSc Computer Engineering Co-op at the University of Alberta. From a young age, I have maintained a deep curiosity about computers, how websites and applications operate, and how computer components store and process data we send it. I am very excited to continue my learning journey and pursue an engineering role within this exciting field.

I also consider myself a musician! I have played the drums for over 10 years and the violin for 7 years; both in bands or just for fun where I have ranked 1st in several jazz or symphony competitions!

CONTACT

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🌐 github.com/simonMarcotte

🌐 simonmarcotte.netlify.app

EDUCATION

University of Alberta, Class of 2026
BSc Computer Engineering Co-op

Availability: Jan. 2024 - up to 8 months

Completed Coop Terms: 1/5

Completed Academic Terms: 5/8

SKILLS

SOFTWARE:

- C/C++, Python, Java, Javascript, HTML, React, SQL, Fetch, Axios, GCP, Apps Scripts, Git, Linux, Solidworks, Visual Studio Code.

RELEVANT COURSEWORK:

- Calculus I II & III, Linear Algebra, Digital Logic Design, Circuits I&II, Electronic Devices, Signals and Systems, Object Oriented Software Design, Computer Architecture.

OTHER:

- LANGUAGES: English (Fluent), French (Intermediate)
- Canadian Citizen with Class 5 (GDL)

WORK EXPERIENCE

Bridge2Engineering Program Instructor

Faculty of Engineering - University of Alberta

2023: May to August

- Partnered with 4 other coop students in order to innovate and build more of the Bridge2Engineering program for incoming 1st year engineering students.
- Redesigned the curriculum and lead the second week of the virtual camp, where I taught over 45 students the engineering concepts around fuel efficiency, coding in Python, and Rocket Propulsion.

Produce Clerk

Food Basics

July 2019 - October 2020

- Complied to company safety standards when restocking, handling, and preparing produce. Performed under fast-paced and high intensity environments and took on multiple responsibilities at once. Communicated and responded to inquiries of upwards of 30 customers per day to ensure high efficiency.

Engineering Summer Camp Volunteering

University of Ottawa

June 2019

- Cooperated with a team of counselors to coordinate and arrange engaging activities for campers. Supervised campers to assure well-being while maintaining a high safety standard. Interacted with and provided feedback to parents daily.

PROJECT EXPERIENCE

Web App - Personal Portfolio

Personal Project

June 2023 - Present

- Created a personal portfolio Web App using ReactJS and styled with Tailwind CSS. The Web App features excellent design and UI, a light and dark mode, card components, glows, buttons, hover effects, and much more. Code available on GitHub, and website available for viewing here: simonmarcotte.netlify.app

Web App - Destiny 2 Statistics

Personal Project

May 2023 - Present

- Assembled a web application using JavaScript and ReactJS. Users may input a player's name, and statistics regarding the players performance are returned. The application uses Fetch to make requests from Bungie's RESTful API, and features a search engine to find players names. Code available on GitHub.

Python Discord Bot

Personal Project (Used for Bridge2Engg)

May 2023 - Present

- Created a functional bot using Python and the discord.py which was used professionally within the student and staff discord of 300+ people for Bridge2Engineering. The features of this bot include global slash commands, games, special message formatting, and other interactive commands. The bot was hosted using a Google Cloud Platform VM. Code available on GitHub.

Client-Server Maps Application

Introduction to Tangible Computing II

November 2022

- Used C++ to program the backend of a client-server application which found the shortest route between 2 points in Edmonton. The program created a weighted graph of Edmonton given information about intersections, and used Dijkstra's Algorithm to find the shortest path between the 2 points closest to the user's two inputs. Data from the backend was sent to the frontend using Pipelines.