

# Abdullah Sherwani

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## ACADEMIC & CO-OP STATUS

<b>BSc, Computer Engineering Software Co-op, University of Alberta</b>	Class of 2026
Academic Terms Completed	5/8
Work Terms Completed	0
Available Starting	January 2024
Term Duration	8 Months

## TECHNICAL SKILLS

**Programming:** Python • C++ • JavaScript • Java • HTML • CSS • SQL

**Frameworks:** React.js • Node.js • Tailwind CSS

**Tech:** Git • MS Office • MySQL • PyTorch • OpenCV

## PROJECT EXPERIENCE

**Personal | C++ Map Assignment** Apr 2023

- Parsed a road network text file to construct a weighted directed graph, optimizing data representation.
- Calculated edge weights by determining the Manhattan distance between graph vertices, enhancing accuracy
- Implemented a function to efficiently compute least-cost paths from a given vertex, utilizing Dijkstra's algorithm with a C++ priority queue (binary heap). This optimization significantly enhanced the efficiency of the algorithm compared to a C++ list.
- Extended the server code to handle route requests from a client using named pipes, clarifying and optimizing communication.
- Integrated communication protocol for synchronized interactions between the client and server to allow for multiple instructions to be parsed.
- Implemented the server's capability to compute optimal routes using a multitude of functions and relayed waypoint and path information back to the client through pipes.

**Personal | Wheel Spinner** Mar 2023

- Developing a wheel spinner entertaining personal customization and suitable for 100+ inputs or options.
- Designating one source code for personal use, and another to be constructed into a website.

**Personal | Portfolio** Feb 2023

- Creating a personal website containing a resume, qualifications and previous employment/achievements, and interests or personal description.
- Website stylistic preferences are implemented using CSS and HTML, and JavaScript is used to implement user-interface.

**ICSC | Website Creation Project | Calgary, AB** Jan 2021

- Created and maintained the website for the ICSC (Islamic Center of South Calgary) with 1 supervisor and 2 other coworkers.
- Developed Eventbrite events to allow 50 people to sign up for 4 Friday prayers and reserve a spot during times of Covid.
- Delivered notifications using MailChimp to the existing 500+ community members about new events or programs occurring.

## WORK EXPERIENCE

**Fine Machine Works | Lathe Machine Operator | Calgary, AB** Jul 2021 – Aug 2021

- Operated and cleaned the main CNC saw producing 50+ parts per day.
- Organized and stored the 50+ produced parts and delivered to coworkers.

## EXTRACURRICULAR

**The Games Den | Game Development** Sep 2023 – Current

Developed video games with other club members.