

# ALEXANDER MCCOLM

Software Developer

☎ 250 899 2390

✉ mccolmalex@gmail.com

📍 Nanaimo, BC

🌐 github.com/awmc000

🌐 /in/awmc2000

## SUMMARY

Highly motivated computer science student and aspiring developer seeking co-op opportunity. Passionate about technology, constantly learning through study and by building software, both for coursework and personal projects. Creative and love to collaborate and help my peers.

## SKILLS

**Languages:** C, C++, Python, BASH, Java.

**Technologies:** Git, Linux, Make, GDB, Check, unit testing, test driven development, technical writing, Microsoft Office.

## PROJECTS

- 12/2023 - Ongoing **World Map Graph and Geography Game** [github.com/awmc000/worldpath](https://github.com/awmc000/worldpath)
- Representation of the countries of the world and their land borders as vertices and edges in a graph with pathfinding functionality.
  - Foundation of a geography game that has players find the shortest possible "path" between two countries by selecting countries that border one another.
  - Test-driven development from scratch in C and making use of the Check library for unit testing.
  - Still in early stages but world map graph and pathfinding between countries are operational.
- 08/2023 - Ongoing **Reading Difficulty Calculator** [github.com/awmc000/readability](https://github.com/awmc000/readability)
- Tool which estimates the level of education required to read English writing without difficulty.
  - Based on the Dale-Chall formula developed in the 1940s for public communications and marketing.
  - Currently integrating a new Trie module I implemented and tests for.
  - First development build released on Github for Linux.
- 09/2022 - 12/2022 **Retail Management System Group Project**
- Provided direction by scheduling meetings, writing agendas and setting goals for my group.
  - Wrote planning documents such as requirements specification, logical and physical design, and test plan.
  - Implemented features in C++ making use of STL, CMake, and Git.
  - Delivered a satisfactory product and received an A+ in the course.

## EDUCATION

- 9/2022 - 9/2026 **Bachelor's of Science, Major in Computer Science** [Vancouver Island University](#)
- GPA: 4.1
  - Dean's Honour Roll
  - Active member of the Computer Science Club, gave a talk on network programming at the Student Talks event in December 2023.

## EXPERIENCE

- x/2023 - x/2023 **Director of Federation and Governance Relations** [North Island Student Union \(BCFS\)](#)
- Developed strategies and policies at regular Board of Directors and Committee of the Whole meetings.
  - Represented membership to Federation by delivering quarterly reports to provincial meetings.
- 10/2019 - 5/2021 **Team Member** [Toys "R" Us Canada](#)
- Assisted customers on the sales floor and at the register with a friendly demeanour.
  - Stocked and organized merchandise while maintaining a high standard of cleanliness.

## LANGUAGES

**English** - native, **Mandarin Chinese** - HSK2-3 / B2+, **French** - A2+