# Simon Chase

smchase@protonmail.com | linkedin.com/in/simon-chase | github.com/smchase

## SKILLS

Languages: Java, C, C++, JavaScript (p5.js), Racket

Tools: Git, GitHub, Bash, Visual Studio Code, IntelliJ, LATEX

#### Experience

## Assistant Manager

Oct. 2019 – Aug. 2021

Gravity Climbing Gym

Hamilton, ON

- Managed staff and handled sales, with broad responsibilities throughout the gym
- Took ownership of new initiatives, such as a Bluetooth music system
- Worked as part of a team to ensure smooth gym operations

## **Belay Instructor**

Aug. 2019 – Aug. 2021

Gravity Climbing Gym

Hamilton, ON

- Led in-depth courses of up to a dozen customers
- Taught customers how to belay, as well as best safety practices

### Youth Coach

Feb. 2018 – Dec. 2020

Hamilton, ON

Gravity Climbing Gym

- Head coach of a semi-competitive youth climbing program
- Developed and led lessons, workouts, drills, etc.

# PROJECTS

## Physics Engine | Java, Java AWT

- Created a basic physics engine from scratch using Java AWT
- Explored and implemented optimizations to handle large numbers of objects
- Implemented a hybrid of time-based and event-based calculations to improve efficiency

## Sudoku Solver $\mid C++$

- Researched optimal strategies to solve sudoku problems
- Implemented the dancing links algorithm using doubly linked lists to maximize the program's solving speed

## Carrier Pigeon | Java, Socket

• Utilized socket to create a local messaging application in Java from scratch

#### Awards

#### Computing

- Distinction in the 2021 Canadian Computing Competition (Senior Division), Ranked 379/2920
- Distinction in the 2020 Canadian Computing Competition (Senior Division), Ranked 204/2827

#### Other

- UWaterloo Financial Literacy Competiton Junior 1st Place
- Ontario Lead Climbing Provincials Finalist

#### EDUCATION

# University of Waterloo

Waterloo, ON

Bachelor of Computer Science, 90% Average

Sept. 2021 - April 2026

• President's Scholarship of Distinction