

Graham Haedrich

Education

Waterloo, Ontario

Waterloo University

Sept 2020 - May 2025

- **Major:** Mechatronics Engineering, B.A.Sc
- **GPA:** 3.96
- **Programming Coursework:** Algorithms & Data Structures, Digital Computation (C++)

Software Projects

Covid-19 Tracker: CSS, HTML, JavaScript

- Website that displays live COVID-19 statistics for Canada
- Fetches up to date information using an API sourced from GitHub

Minesweeper Game: CSS, HTML, JavaScript

- Minesweeper game using JavaScript objects to keep track of data for each game square
- Includes a recursive algorithm to perform square revealing
- Utilizes CSS flexbox layout to arrange squares orderly in grid

Snake Game: CSS, HTML, JavaScript

- Snake game with graphics drawn using HTML canvas along with JavaScript
- Incorporates a start page styled by CSS that allows the user to select a game difficulty

Goose Escape Game: C++

- 2D escape game constructed using BearLibTerminal library
- Began with a skeleton of the game and worked alongside a partner to fix bugs and implemented new features using C++ objects

Bop-It Video Game: MakeCode, JavaScript

- Worked with a team of 4 to build a Bop-it like game which can be controlled by the Adafruit Circuit Playground
- Visuals for the game designed in Microsoft MakeCode

Mancala Game: Java

- Two player Mancala game which features classes to construct objects to store board information and various functions to carry out gameplay

Skills

Programming Languages: JavaScript, CSS, HTML, Java, C++

Other: AutoCad, Git, MakeCode, Microsoft Office, Solidworks

Work Experience

Camp Counsellor: 06/2019 - 08/2019

Today's Family

- Worked alongside staff members to care for young children
- Supervised small groups of children on day trips using leadership and organization skills to maintain the safety of the kids

Awards

University of Waterloo President's Scholarship of Distinction: 06/2020

- Awarded to students with a high school admission average of 95%+

French Immersion Certificate: 06/2020

- Awarded to students who have completed the required number of French courses from Grade 4 to Grade 12