# Alex Li

Github: <a href="https://github.com/1liale">https://github.com/1liale</a>
Email: <a href="mailto:a336li@uwaterloo.ca">a336li@uwaterloo.ca</a>
Cell: <a href="mailto:905-616-1816">905-616-1816</a>
1208 Bonnybank CT, Oakville, ON

## Education

2020 - 2025

University of Waterloo, Waterloo - Bachelor of Computer Science (3.84/4.0 GPA | 88.4%)

## Skills

Languages: Java (2 years) / Python (8 months) / C#, C++ (6 months) / HTML, CSS, JS (3 months)

Technologies: Git / ROS / CAD / 3D Printing / Bash / Linux / Vim / Unity Game Engine / XML / JSON

# **Projects**

#### Personal Website

https://lliale.github.io/PersonalWebsite/

- Created an original <u>HTML</u> webpage with <u>CSS</u> styling and embedded <u>JavaScript</u>.
- Elegant formatting with clear visual representation of my coding experience and creativity.
- Implemented an interactive gallery that strongly demonstrated my interest in STEM.

#### BlackJack-Trainer

https://github.com/1liale/BlackTack-Trainer

- Created a responsive <u>Java</u> program that trains users to become better at the card game BlackJack using card-counting and basic strategies.
- Applied <u>Object Oriented Programming</u> to organize game elements into a structured hierarchy and implemented <u>FileIO</u> to read the basic strategy chart stored in txt file.

#### EvolutionGame AI

https://github.com/1liale/EvolutionGame

- Created a python game using the <u>pygame</u> module.
- Modelled a neural network using the <u>numpy</u> library.
- Explored <u>ML</u> using the <u>Genetic Algorithm</u> to modify the weights and biases of the network.

#### RollingBall Game

https://github.com/1liale/RollingBall

- Created a clean, engaging windows desktop game where users control a ball rolling down a hill collecting coins while avoiding obstacles along the path.
- Developed the game using the <u>Unity Game Engine</u> with scripts coded in <u>C#</u> and custom-made game assets, including satisfying ball collision animations made with the help of **Blender**.

# Experience

August 2018 - March 2020

### YMCA Lifeguard and Instructor, Oakville, ON

- Demonstrated positive leadership and influence for children. Showcased responsibility and decision making skills when creating weekly lesson plans.
- Communicated effectively with patrons and staff.