# Leo (Yuanzhe) Zeng

(+1) 647 639 9946 I39zeng@uwaterloo.ca github.com/leoyzeng leoyzeng.github.io

## SUMMARY OF QUALIFICATIONS

- Highly adaptive and quick learner; can easily pick up new concepts while maintaining an attention to detail.
- Outstanding problem solving and logical thinking skills, effective at troubleshooting the root cause and debugging problems.
- Learning and improving object-oriented programming for 4 years, ongoing learning of C++.
- Excellent communications skills, always motivated to contribute to the team.

### TECHNICAL SKILLS

Languages
Library/Frameworks
Technologies

Python, Java, C, C++, C#, JavaScript, HTML/CSS, Apps Script, BASIC React, jQuery, Bootstrap, Selenium, Unity, PyGame, JMonkey, Java Swing Linux, GitHub, GitHub Pages, Violet UML, Arduino, Raspberry Pi

## **PROJECTS**

Personal Website 2021

JavaScript, HTML/CSS, ¡Query, WebStorm, GitHub Pages

leoyzeng.github.io

- Self-taught JavaScript, CSS, HTML, React, and Bootstrap to better understand web development and user interface.
- Designed a multi-page website with responsive elements in mind to improve user interface.
- Implemented an interactive slideshow that users can flip through to display project portfolio.
- Hosted and deployed website on local machine as well as GitHub Pages for easy access.

Chef Boy – 3D action-adventure game where the player explores and fights in an alien world 2020 Java, JMonkey, Swing, Violet UML, IntelliJ, Blender leoyzeng.github.io/projects/chef-boy

- Designed game entity classes with object-oriented concepts such as inheritance, abstraction, polymorphism, and visualized class interactions with Violet UML.
- Utilized Blender to create 15 models & textures, and JMonkey Engine to display 3D graphics & lighting.
- Developed sorting algorithms from scratch to quickly organize player's inventory.
- Implemented data structures such as lists and queues to store items and AI enemies as objects for more efficient organization of game objects.

Toony Wars – 2D strategy game where the player can battle Al by placing troops to attack 2019 Python, PyGame, PyCharm leoyzeng.github.io/projects/toony-wars

- Used functional programming to implement game logic and algorithms.
- Optimized game loop by reducing algorithm complexity while doubling frame rate.
- Efficiently utilized PyCharm IDE to code, test, and debug program.
- Collaborated and communicated with partner which improved overall productivity.

### **EDUCATION**

University of Waterloo Candidate for BASc 2026 September 2021 – Present Computer Engineering