

Xiyuan (Simon) Chen

2A Mechatronics
Engineering

✉ x454chen@uwaterloo.ca
☎ (613) 404-1194

🐙 github.com/xychenSimon
🌐 linkedin.com/in/1995simonchen
🔗 xychenSimon.github.io

SKILLS

- C++, C#, Swift 2, Python
- HTML, CSS, JavaScript, jQuery
- SQL, Firebase
- Git, GitHub
- Bootstrap
- Xcode, Unity 3D, Brackets, DevC++, Mono-develop
- Autodesk Inventor, SolidWorks, AutoCAD, Autodesk Maya
- MS Office, Apple iWork
- Arduino, PLC
- Mac OS X, Windows

INTERESTS

- Origami
- Piano
- Ping pong
- Holograms

QUALIFICATIONS

- Solid skills in designing responsive websites using HTML, CSS, and JavaScript.
- Experienced in using C# to create 2D/3D games with the Unity 3D engine.
- Exposure to the fundamentals of protocol-oriented programming (Swift 2) used in iOS App designs.
- Passionate and willing to learn new skills and technology, currently developing skills related to machine learning.

PROJECTS

Glitch Garden | UNITY 3D PROJECT

A 2D multi-level tower defence game aimed for Android.

- Implemented a centralized wrapper class to improve the utilization efficiency and safety of a unity scripting API (PlayerPrefs).
- Applied skeletal and frame-based animation for better user experience.

Gundam Defender | UNITY 3D PROJECT

A web build 2D shooting game with neat user interface.

- Combined two particles systems to create a realistic sense of planet motion in a star field.
- Managed game object collisions using the layer-based collision detection method.

Memorable Places | IOS APPLICATION

An iOS App that allows users to record noteworthy places.

- Deployed segues that allow users to easily navigate through multiple view controllers.
- Integrated maps to keep track of user location and allow user to pin an unforgettable place on the map.

Tracking Antenna Power Circuit | HARDWARE DESIGN

A circuit design that distributes power to servos and Arduino.

- Used comparator logic to negate current consumption from DC battery while both sources contain power.