Rui Zhu

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Education

University of Toronto, Faculty of Arts and Science	September 2018 - June 2022
Toronto ON Canada	*cGPA - 3.45*
Honours Bachelor of Science	Specialist in **Computer Science**

Skills and Qualifications

Languages: Python, C, C++, C#, HTML, CSS, JavaScript, VBA, Java, SQL, Bash
Frameworks: React/React Native, MongoDB, Opengl, Node.js, MySQL Flask, Postman, .NET, Bootstrap
Version Control: Git, Perforce, Plastic SCM
Game engine: Unity, Unreal5

Personal Project

Unity Tool development   June 2021
- Developed a procedural map generator for Unity3d using the Raycasting method
  develop log: https://zhuruisy.itch.io/a-tresaure-finding-game/devlog/252566/landscape-design

GameJam project *portal arena*   July 2022
- Responsible for the UI and game object functionality with Unreal5 C++.
  Link:https://papacashew.itch.io/portal-arena

GameJam project *Microcosm*   June 2023
- Responsible for the UI and Enemy script programming with Unity C#.
  Link:https://blackbytebrigade.itch.io/microcosm

XNA Game   June 2020
- 2D zombie shooting game using XNA framework.
- Responsible for level design, gameplay programming, UI programming. 2D character animation.

Course Project

Computer Graphics   Jan 2021
- Implementing Ray tracing, Ray Casting, forward and inverse Kinematic with OpenGL and C++
- Implementing noise shader, normal map, uv map with HLSL

Robot arm by Embedded System   April 2022
- 4 DOF Robot arm controlled by stm32 Arm microcontroller.
- Responsible for implementing the interface for the step motor
- Responsible for designing the movement algorithm by using inverse Kinematic

Stolen Valour   April 2021
- A 2.5d fighting game made with unity3D
- Responsible for Level Design, UI programming, and GamePlay programming
- link:https://zhuruisy.itch.io/stolen-valour

AI Development   Sep 2021
- Implementing different search methods including Uninformed and Heuristic search
- Implementing decision tree using the Entropy method

Software development   October 2021
- React Native based multiplatform educational game with Frogskin U
- Responsible for Menu function and backend api puls Database with MongoDB
- Responsible for communicating between the team and manager across 3-time zone