# Zi Wang

Email: akiriin0@gmail.com

#### **EDUCATION**

Carnegie Mellon University, Entertainment Technology Center, Pittsburgh PA Master of Entertainment Technology

#### University of California, San Diego San Diego, CA **B.S Computer Science**

#### **RELEVANT SKILLS**

**Programming Languages** C++, C, Java, C#

#### **Technology Stack**

Unity Engine, Git, OpenGL, Linear Algebra

#### Natural Languages

Chinese, Japanese, English

#### PERSONAL PROJECTS

#### Neverever Dungeon, Programmer and Designer

- Used Unity2d to create a roguelike game with abundant content including weapons, characters.
- Implemented level auto generators that could generate levels randomly to bring players new experiences. •
- Finished basic levels and boss fights, 8 characters and unique different abilities. •

#### Magic of Hanzi, Programmer and Designer

- Used Unity2d to create a Japanese Role Play Game with a complex system.
- Used C# to implement a special battle system that gives players multiple options to fight enemies.
- Accomplished a complete template that could be easily extended to create further levels and story.

#### Star Fantasy, Programmer and Designer | TrainJam

- Finished a classic Raiden game combined with storytelling with Chinese/English support in 48 hours.
- Two storylines with two characters that use different perspectives to tell the same story. •
- Used C# to accomplish enemy spawner, player shooting mechanism, and story screen changing.

#### ACADEMIC PROJECTS

### Building Virtual Worlds, Programmer, ETC, Fall 2020

- Total of 5 Rounds, team of 5, 2 3 weeks. Used rapid prototyping. •
- Communicated and collaborated with students from all over the world in different roles.
- Used a webcam and a microphone as player input to control character to move and jump.
- Developed a VR game as a programmer. Projected player's head movement into character's head in game, and used inverse kinematic to simulate human movement on the character in game.
- Contributed as gameplay programmer and designer by implementing game flow and designing levels. •

## Gaia, Gameplay Programmer, UCSD, Spring 2020

- 3D, multiplayer online game. Group of 6 people, 2 for gameplay, 2 for network and 2 for graphics
- Used C++ to implement everything without using any game engine. Featuring real time map editor.
- Used Json as a data format, collaborated with the network team and optimized between client and server.

## Computer Animation, UCSD, Spring 2020

- Used C++ and OpenGL to load file and render models, skins of wasp, dragon.
- Implemented Keyframes and animation and cloth simulation.
- Used SPH algorithm with poly/spike kernel function to implement fluid simulation. •

Jan. 2020 - Mar. 2020

Jun. 2019

Dec. 2019

Mar. 2019

Expected Graduation May 2022

Jun. 2020

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Mar. 2020 - Jun. 2020

Sep. 2020 - Dec. 2020