

Ran 'Ryan' Zhang, Gameplay Programmer

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EDUCATION

Carnegie Mellon University, Entertainment Technology Center (ETC)

Pittsburgh, PA

Master of Entertainment Technology

May 2021

Shanghai Jiao Tong University (SJTU), School of Software

Shanghai, China

Bachelor of Science in Engineering, Majoring in Software Engineering

June 2019

RELEVANT COURSES

Computer Graphics, Linear Algebra, Algorithm, Computer System, Software Engineering, HCI

SKILLS

Languages: C#, C, C++ (OpenGL, OpenCV), SQL, Java, JavaScript, Python

Applications: Unity, Visual Studio, Maya, Substance Painter, Photoshop, Unreal Engine 4, QT

ACADEMIC PROJECTS

Building Virtual Worlds, Artist

ETC, Fall 2019

- Created video games in 2-3 weeks, worked with 5 teammates randomly generated, 5 rounds
- Cooperated people with different backgrounds, iterated fast, communicated and brainstormed
- Used non-traditional devices including HTC Vive, Magic Leap, Phidgets, 3D Rudder, etc.
- Modelled, rigged, textured and animated. Assisted programmers on visual effects and mechanism
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Mixed Reality Chemistry Lab Simulator, Programmer

SJTU, July 2017 – June 2018

- Simulated chemical reaction and chemistry experiments with real senses of touching
- Utilized HTC Vive, Leap Motion and Unity3D to create virtual reality version of the application
- Utilized Kinect, Vuforia, Unity3D and OpenCV to create augmented reality version of the application

Reading Equipment Combining E-books and Paper Book

SJTU, Spring 2018

- Created new reading device offering both real touching and electronic storage
- Designed and implemented the user interface of both the software and hardware
- Constructed the pen-tracing system using computer vision algorithm and cameras

Glacier and Phoenix (Computer Graphics application)

SJTU, Fall 2017

- Developed a interactable scene consisting of particle systems with C++ and OpenGL

PERSONAL PROJECTS

Wonderland (Mobile Game), Designer, Programmer

Personal Project, Spring 2018

- A simulation game designed for left-behind children and their parents to facilitate their communication
- Attended the 2-day Game Jam held by Target, collaborating with artists and Target staff
- Realized the prototype with Unity3D guided by artists' procedure diagram and assets

Deer (PC Game), Designer, Artist, Programmer

Personal Project, Fall 2018

- A role play game controlled by voice completed with 2 months by 2 people based on Unity3D engine
- Designed the story and mechanism, built the scene, implemented partial logic in the game

EXPERIENCE

NVIDIA (Shanghai, China), Cloud Gaming Software Engineer Internship

June 2018 – Jan 2019

- Tested games performance on different devices and supported them to be streamed via Nvidia shield

ACTIVITIES

Debate team of Shanghai Jiao Tong University

March 2016 – June 2018

- Competed in nation-wide debates and won several awards