

OBJECTIVE

Experienced **gameplay engineer** with extensive practice in established game engines and basic knowledge of **art, sound** and **design**, aiming to leverage effective game development skills

PERSONAL PROJECTS

SixD

2D/3D, Unreal, C++

Designed and built a 2D/3D platform game in Unreal

Simple3DRenderer

Computer graphics, C++

Created a simple 3D renderer with texture rendering, movement and animation

Love Yourself

Android, AR, Unity, C#

Built an Android AR puzzle game in Unity using ARCore

UniTool

Tool, Unity, Vue.js, C#, JavaScript

Designed and developed a prototype for making Unity tools. Applied Unity Editor extensions

SKILLS

Programming

C#, C++, C, HTML/CSS/JavaScript, Python, Docker, AWS, Google Cloud, Firebase, Unity Cloud

Software

Unity, Unreal Engine 4, Visual Studio, VSCode, Xcode, JIRA, Confluence, Perforce, Bitbucket, GitHub, Blender, Maya, Adobe Audition, Photoshop, After Effects, Premiere Pro

Language

English, Mandarin

EDUCATION

Carnegie Mellon University, Entertainment Technology Center

Master of Entertainment Technology

August 2019 - May 2021, Pittsburgh

Tongji University, School of Software Engineering

Bachelor of Software Engineering

September 2015 - June 2019, Shanghai, China

EXPERIENCE

Visual Concepts Entertainment

Associate Software Engineer

June 2021 - Present, Orlando

- Involved in the production of large-scale commercial quality 2K NBA video games
- Produced effective and clean C++ code and worked closely with production, programming, and art on a daily basis

Madison Square Garden Entertainment

Associate Software Engineer

August 2020 - May 2021, New York

- Tested game framework and prototyped multiplayer gameplay features using Photon Network and SpatialOS and deployed builds to cloud, windows and iOS
- Collaborated with UI/UX designers and tackled in-game UI wireframes
- Collaborated with artists and integrated art assets into different render pipelines

Jewish Healthcare Foundation

Software Engineer Intern

February 2020 - August 2020, Pittsburgh

- Designed and built an interactive WebApp for a healthcare conference with React.js
- Established a robust back end system using Firebase and designed RESTful APIs
- Composed the post-event report and visualized data using HTML Canvas APIs

X.D. Network Inc. B-Cat Studio

Gameplay Engineer Intern

September 2018 - April 2019, Shanghai, China

- Explored ECS system concepts and implemented gameplay features using an internal Unity-Lua ECS framework
- Summarized the extension of Unity Editor and delivered detailed documents

ACADEMIC PROJECTS

Interactive Academy

Gameplay Engineer

September 2020 - December 2020, Inanimate Alice Research Team & Entertainment Technology Center

- Created a WebGL based interactive experience for middle school students
- Implemented gameplay framework for puzzles, interactions, chat system, etc

Spline Tool for Skinning Weights Editing

Programmer

February 2020 - May 2020, Carnegie Mellon University

- Designed a spline-based interface for skinning weights editing
- Prototyped a Maya tool using Maya plug-in APIs in C++

Building Virtual World

Programmer, Sound Designer

August 2019 - December 2019, Entertainment Technology Center

- Worked with different platforms including Magic Leap, HTC Vive, etc. and built immersive game worlds
- Incorporated hand detection in Magic Leap and *ResonanceAudio* in HTC Vive