

ZIRUI HUANG

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EDUCATION

University of Southern California	Los Angeles, CA
The Master of Science in Computer Science (Game Development)	August 2023-May 2025
<ul style="list-style-type: none">GPA: 3.68/4.0	
University of Pittsburgh	Pittsburgh, PA
Bachelor of Science in Computer Science	August 2018-May 2022
<ul style="list-style-type: none">Minor: JapaneseGPA: 3.71/4.0	

EXPERIENCE

Foundry Six	Los Angeles, CA
VR Game Developer Intern	February 2025-April 2025
<ul style="list-style-type: none">Wrote multiple documents, including Playtest feedback reports, VR slingshot system design, and improvement suggestionsIntroduced hand models, implemented hand animations based on controller input, and optimized the slingshot grabbing actionDesigned and implemented a rapid-fire mode for the slingshot, supporting multiple bullets firing, scattering, and velocity decay	
Seasun Games	Zhuhai, China
Software Engineer Intern	May 2024-August 2024
<ul style="list-style-type: none">Collaborated in a team to extend the Lyra Starter Game with new gameplay mechanics in Unreal Engine 5Regularly engaged with project leaders to review progress, refine design decisions, and troubleshoot challengesImplemented a stratagem system for weapon drops via player's directional commands, with real-time UI feedbackDeveloped enemy AI by using behavior trees and environmental query system to simulate stealth and combat behaviors	

ACADEMIC PROJECTS

MFA Thesis Project: The Witch in Shadow	Los Angeles, CA
Lead Engineer	August 2024-Present
<ul style="list-style-type: none">Directing the technical team for a 2D platformer game, managing programming efforts and communications with other teamsSet up and maintained GitHub version control, reviewed pull requests, resolve conflicts, and established coding standardsImplemented key gameplay features, including character control, pet path-finding algorithm, and world-switching mechanicsCreated character death dissolve effects and world-switching visual effects	
Interactive Design and Production Project: Ruin Raider	Los Angeles, CA
Designer, Programmer	January 2024-April 2024
<ul style="list-style-type: none">Co-designed and developed a 2D action game set in a post-apocalyptic world, featuring three different mapsDesigned gameplay mechanics, story background, map layouts, characters and enemy behaviorsHandpicked and organized art assets, and configured animations for player and enemiesDeveloped key features, including player mechanics, enemy AI, interactable objects, scene transition, and UICollaborated with students from Berklee College of Music on sound design and maintained a regular communicationProduced gameplay video and game trailer, handling footage recording and organization, music selection, and editing	
Cartoon-Style Character Rendering Project	Los Angeles, CA
Technical Artist	October 2023-December 2023
<ul style="list-style-type: none">Developed a custom Cel Shading shader in Unity using ShaderLab and HLSL to create a stylized cartoon look for 3D modelsCreated stylized two-tone shading and outline effects to enhance cartoon-like visual styleApplied different light maps to the model's face, hair, and clothing parts to add shadows, achieving depth variation in shadowsResolved face shadow distortions, fixed breaks in outline edges, and smoothed overall lighting transitionsAuthored the introduction and technical analysis sections of the project paper	

TECHNICAL SKILLS

- Good knowledge of algorithms, data structures, and Agile methodology
- Programming Language: Java, C, C++, C#
- Tool: Github, Visual Paradigm
- Game Engine: Unity, Unreal Engine
- Graphics Development: ShaderLab, HLSL, OpenGL