Ada Jiang

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Portfolio | GitHub | LinkedIn

Education

Northeastern University — Boston, MA
Master of Science, Game Science and Design — *Sep 2021 – Dec 2023*
Related Courses: Data-Driven Player Modeling, Spatial and Temporal Design, Mixed Research Methods for Games

Oregon State University — Corvallis, OR
Bachelor of Science in Computer Science — *Jan 2017 – May 2021*
Related Courses: Computer Graphics, Analysis of Algorithms, Artificial Intelligence

Experience

Cyber Sentinel | *Designer & Programmer* — Jun 2024
- Developed a third-person shooter game in Unreal Engine 5 with AI-driven combat and interactive environments
- Implemented weapon systems, shooting mechanics, and win/loss conditions using C++ and Blueprints
- Designed enemy AI with Behavior Trees and advanced combat logic for dynamic encounters
- Applied Physics-Based Animation for realistic ragdoll effects and corpse physics simulation

Game Dev Game Jam: The Ocean-Marinefall | *Designer & Programmer* — May 2022
- Developed a 2D Zen art game in a team of 7 using Unity
- Participate in the design of game mechanics and coordinate with other team members to assign tasks using Trello
- Responsible for programming, wrote scripts for camera and character movement, and created ending animation

Projects

School Showcase: Escave | *Designer & Programmer & Modeler*
- Designed and developed an original 3D game in a team of 5 using Unity 3D engine
- Used PHYSICS.Raycast to pick up the implemented game and create animation for mining action
- Wrote a backpack system and material synthesis system with C# scripts
- Made the game's ends the animation and used the coordinate point to achieve the cable car movement

Unreal Engine 5 Dynamic Weather System | *Designer & Programmer*
- Developed a real-time weather system integrating day-night cycles, dynamic lighting, and procedural snow accumulation
- Implemented Blueprint-driven weather transitions, enabling seamless switching between sunny, cloudy, and snowy conditions
- Created Niagara-based snow particles and wind effects, with real-time footprints using Anim Notify and Decals
- Designed adaptive cloud formations using volumetric cloud shading and altitude-based procedural adjustments
- Optimized performance and automation with Material Parameter Collections, Blueprints, and post-processing techniques

Master Degree Capstone: Weapon Master | *VR Developer & Programmer*
- Developed a physics-driven VR melee combat system in Unity as part of Northeastern University's Capstone Project
- Implemented Inverse Kinematics (IK), real-time collision detection, and procedural animation blending for realistic weapon handling and enemy hit reactions
- Designed an AI combat system using Behavior Trees and State Machines, enabling adaptive enemy behaviors and strategic decision-making
- Optimized motion tracking, input mapping, and haptic feedback, ensuring precise controller-based interactions for an immersive VR experience
- Conducted user experience evaluation with mPXI modeling, analyzing player immersion and refining combat mechanics based on behavioral data

Technical Skills

Languages: C#, C/C++, SQL, Java, Python, JavaScript, HTML/CSS, R
Utility Tools: Vuforia, ARToolkit, OpenGL, AR Foundation
Developer Tools: Unity, Unreal 5, Blender, Visual Studio
Video Editing Tools: Adobe Photoshop, Adobe After Effects, Adobe Premiere Pro