ZHIYUAN HAN

Game Developer experienced in Unreal Engine, Unity, Matlab and Git

zhiyuanhan0928@gmail.com | (608) 901-8578 | GitHub

EDUCATION

University of Pennsylvania

M.S. in Computer Graphics & Game Tech

GPA: 3.7

Sep. 2023 - Sep. 2025

University of Wisconsin-Madison

B.S. in Computer Science

GPA: 3.9

Sep. 2020 - Dec. 2022

SKILLS

Programming:

C++, C#, Python, Java, JavaScript, VB

Software:

Unreal Engine 4 & 5, Unity, Matlab, Git

Language:

Chinese (native), English, Japanese

INTERESTS

Gaming & Esports

FPS Genre, Esports Events, Competitive Game Analysis, Game Design/ Thinking

Others

Japanese Culture, Street Food in Asia, Home Cooking & Baking, Urban Exploration

EXPERIENCE / PROJECTS

Jiangsu Sound Future Musical Instrument Technology Co

Lead Unity Game Developer Intern Feb - Sep. 2023 | Shanghai, China

- Spearheaded a Unity-based music game with real-time note recognition, achieving 95% accuracy across 12 instruments.
- Led weekly sprints with a 5-person team, delivering alpha/ beta builds and 30+ gameplay improvements.
- Launched the game with custom hardware, helping sell 2,000+ units to 15+ music schools.

Fly Fish [Released on Steam]

Lead UE4 Engineer

Feb - Jul. 2020 | ABOUTDEPT Creative Studio [Project]

- Developed gameplay systems and a level editor with customizable parameters using UE4.
- Collaborated with an 8-member team to design controls, abilities, and interactive scenes.
- Shipped and published the game across platforms, selling 1,000+ copies worldwide.

Extensible Physics Simulator

Java Programmer

Sep - Dec. 2022 | Individual Project

- Built a 2D/3D physics simulator with custom scene creation and interactive object behaviors.
- Designed a physics library supporting tensors, elasticity, torque, momentum, and collisions.
- Created presets for motion in vector fields, pendulum chaos, spring dynamics, and rigid body impact.

Animator Toolkit

C++ Programmer

Sep - Dec. 2024 | Individual Project

- Built a modular animation toolkit with skeleton binding, FK/IK solvers, behavioral systems, and a particle simulator in C++.
- Transplanted a Java-based physics engine to C++, added support for .fbx/.bvh/.obj formats, and compiled as a Unity plugin.
- Implemented Dual Quaternion Skinning and controllerbased animation (PD/PID) for realistic motion and seamless pose editing.