

# Zhehao Xu

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## EDUCATION

**University of Southern California, Viterbi School of Engineering** Los Angeles, CA  
**Master of Science, Computer Science** August 2024-May 2025  
**University of Southern California, Viterbi School of Engineering** Los Angeles, CA  
**Bachelor of Science, Computer Science (Games), Relevant Course Work ([Link](#))** August 2020-May 2024  
**Honors:** Dean's list (2021 – present) GPA: 3.89  
**Technical Skills:** C++ - Proficient (4 years); C# - Skillful (2 years); Unity Engine – Skillful (2 years); HTML/CSS – Skillful (4 years);  
Perforce / GitHub - Skillful (2 years); Python – Advanced; UEFN – Advanced; Java – Advanced; MySQL – Intermediate; JSP – Intermediate;  
Unreal Engine – Intermediate; UEFN – Intermediate; Autodesk Maya (3D Animation and Modeling) – Intermediate;  
Spring Boot – Basic; JavaScript – Basic;

## EXPERIENCE

**USC AGP Program** Los Angeles, CA  
*Gameplay Engineer* May 2023-Present

- Work as gameplay engineer for the Advanced Games Project program on the Oasis Blitz team.
- Implement gameplay mechanics for a platformer game that uses drilling as the main mechanic.
- Utilize different libraries such as FMOD and DOTween along with Unity Engine and C#.

**USC Viterbi School of Engineering** Los Angeles, CA  
*CSCI Course Producer* August 2022-Present

- Work as course producer for CSCI104: Data Structures and Object-Oriented Design and CSCI103: Introduction to Programming.
- Become students' go-to person for explanation of complex algorithmic concepts and trusted by Professor Goodney to grade exams.

**Sony** Culver City, CA  
*Summer Associate – Sony Immersive Music Studios* June 2023-August 2023

- Used UEFN and Unreal Engine to quickly create working prototypes that combine music with gaming.
- Built a working rhythm-based third-person shooter with concept art and music from a Sony Music Artist inside of UEFN.
- Built a system of audio synchronization with gameplay using the Sequencer Tool inside of UEFN.

## ACADEMIC PROJECTS

**Multi-agent Pathfinding** Fall 2022

- Addressed the difficult concept of pathfinding and built a multi-agent pathfinding C++ solution with A\* pathfinding.
- Experimented with time-space A\* and prioritized planning using constraints satisfaction, uploaded to [GitHub](#).

**Perceptron Learning** Fall 2022

- Implemented a perceptron learning model for classifying IMDB movie reviews using C++, uploaded to [GitHub](#).

**Hack SC – Lipstick Web Application** Summer 2021

- Innovated in makeup industry by deploying an application for users to try out different lipstick colors online.
- Achieved functionality using facial recognition libraries in Python along with PHP, HTML/CSS, uploaded to [GitHub](#).

## GAME PROJECTS

**Game Prototypes** Spring 2023

- Constructed various game prototypes, each with a unique theme using Unity game engine.
- Created each game idea through rapid iteration and prototyping within a short time of two weeks.
- Practiced C# and game design skills under different constraints. Prototypes are uploaded to [Itch.io](#).

**Tencent Games Open Course Unreal Engine Projects** Summer 2022

- Constructed various demos that each demonstrated a core skill related to Unreal Engine using UE 4.27.
- Achieved a certificate from Tencent Games by completing the course.
- Practiced C++ and Blueprint programming, learned about animation blending, multiplayer, and graphics, uploaded to [GitHub](#).

**An Average Day** Spring 2022

- Worked in a team of two to create a 2D puzzle game with Unity published on [Itch.io](#).
- Went through the process of pre-production, production, and post-production working in pairs.
- Designed levels and coded gameplay with Unity.

## LANGUAGES AND INTERESTS

- Languages:** English – Fluent; Chinese (Mandarin) – Native.
- Interests:** Game Development; Drumming (Rock or Jazz); Music Production; Gaming; Skiing.