# Liheng Zou

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## Education

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| **Duke University** | Durham, NC |
| Master of Engineering - Game Design & Development Innovation | Aug 2024~Jun 2026 |
| **University of Electronic Science and Technology of China(UESTC)** | Chengdu, China |
| Bachelor - Electronic Information Engineering - GPA:3.2/4 | Sep 2020~Jun 2024 |

## Skills

- *Language Skills:* Native Chinese Mandarin speaker, with 22 years of residency in China and fluent in the Sichuan dialect.
- *Programming & Coding:* **Proficient in C#**; developed a general code framework system in Unity for Caged Phoenix, an indie game studio. With five years of Unity C# experience, mastered various design patterns and Game Core implementations, creating numerous editor tools to facilitate efficient iteration. **Skilled in C and C++**, including experience as a C++ engineer for Unreal Engine during an internship at Westward Journey, where I contributed to the combat system and developed editor tools for combat design. Experienced in microcontroller (STM32) and Playdate hardware game development using C and C++. Proficient in Plastic SCM, capable of setting up and managing Perforce repositories, and experienced with Git and SVN for collaborative projects.
- *Industrial Software:* **Five years of Unity** development experience specializing in AR, VR, 2D, and 3D game development. Skilled in utilizing **Unity's** functionalities, plugins, and C# program architecture design, employing design patterns to enhance team productivity. **Two years of experience in Unreal Engine, primarily in C++ development,** where I implemented combat functions and optimized performance, focusing on editor tool development.
- *Animation/Graphics Software:* **Proficient in Adobe products**, including Photoshop, After Effects, and Premiere Pro. Created advertisements with Premiere Pro for a nationwide student competition, achieving national recognition. **Former head of the university media department**, responsible for recording and editing instructional videos.
- *Hardware:* Experienced with **microcontrollers and circuit design**, including digital and analog circuits. Led a team to develop a lunar rover robot, designing circuit boards and creating a universal STM32 development system in C, significantly enhancing the team's hardware development capabilities.

## Patents

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| **Meta-UESTC Virtual Reality APP（Android）** | **Principal author, all rights reserved** |
| **Meta-UESTC Virtual Reality APP（IOS）** | **Principal author, all rights reserved** |
| **UESTC Circuit Board Campus Map.** | **Principal author, all rights reserved** |

## Internship & Research

*Programming and Development │ Kingsoft (tech company in games)* — Chengdu, China
Programming full time Intern (SNOWBREAK) — May~Sep 2023

- Focused on **UE4 C++ programming**, primarily working on AI development for various combat scenarios, skill functionalities, and the creation of planning tools for the game. Served as a C++ programmer dedicated to UE4 development, with primary responsibilities in developing combat system functionalities and editor tools. This involved programming modules for the **combat AI's Ability system**, including area-targeted bombardment skills and sustained damage buffs.
- Collaborated closely with combat designers to **develop tools** that monitor real-time in-game events, such as tracking the number and ID of enemies, current state logic, skills in use, targets aimed at, and associated values. These tools were structured in an editor table format, enabling designers to batch search and modify data efficiently. This streamlined the design and checking processes, significantly enhancing productivity for the planning team.

*Programming and Development │ Xindong Interactive Entertainment Co., Ltd* — Chengdu, China
C++ Programming full time Intern — Jan ~ May 2024

- Primarily responsible for designing the main framework and implementing core functions of the game using Unity with C#. Additionally, assisted in developing a suite of auxiliary production tools, including a combat skill editor, map editor, dialogue editor, and other functional plugins, which effectively enhanced project efficiency. This system remains in use within my personal studio and serves as a foundational base for development in each new project.

*Digital Media Laboratory & Caged Phoenix Studio │ UESTC* — Chengdu, UESTC
Outstanding Researcher — Jan 2022 ~ Sep 2024

- Led academic research in the Digital Media Laboratory at UESTC, focusing on the development of XR applications. **As one of the core team members, co-founded Caged Phoenix Studio (originally named Utopia Studio)** to design and create XR projects that promote Chinese traditional culture. The products generated from these efforts achieved a total revenue of **over 600,000 RMB.**

## Projects

**Mobile AR Product: Meta-UESTC 1.0 and 2.0**
**Mobile AR Product: Rural Vows with Me** — Utopia Studio, UESTC, China
Chief Programmer and Game Designer — Jul 2020 ~ Feb 2023

- Sent to over **1,0000** incoming freshmen for two consecutive years as the core content of the admission notifications, received extensive coverage from various prominent Chinese media outlets and consistently ranked first on trending lists.And the project profit exceeded ￥**400,000**. Second project produced as a souvenir for the National Rural Poverty Alleviation Work Conference, with over **1000 units** distributed and generating revenue exceeding ￥**200,000.**
- As the sole programmer on the team, I designed a comprehensive framework for XR development, ensuring efficient and rapid content creation. I also developed editor tools for non-programming team members, enabling them to visually (similar to blueprint style) implement various functionalities, thereby streamlining the development process.