Qingzhi You

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EDUCATION

University of Southern California

Aug 2023 - Present

MS of Computer Science(Game Development), USC Game and Viterbi School of Engineering

Los Angeles, CA

Relevant Coursework: 3D Graphics and Rendering, Game Design Workshop, Game Engine Development, Interactive Design and Production, and Experiments in Interactivity I

Georgia Institute of Technology

Aug 2020 - May 2023

Computer Science: Intelligence&Media, BS in Computer Science, College of Computing

Atlanta, GA

Relevant Coursework: Procedural Content Generation and Computer Animation

PROFESSIONAL EXPERIENCE

Amazing Seasun Games
Game Developer Intern

Jun 2024 - Aug 2024

Zhuhai, China

- Collaborated with the Fusion team to develop **Procedural Content Generation (PCG)** functionality in Unreal Engine 5, streamlining workflows for level designers
- Conducted in-depth research on PCG implementation, studying resources such as the "Deep Dive into the Electric Dreams Project | Inside Unreal" talk and the "Level Design Summit: Urban Planning in Games" from GDC 2024. Gained a comprehensive understanding of Epic's PCG tool development logic and level designers' modular segmentation strategies
- Created an environment generation tool in UE5 using the **Spline system** and **Blueprint**, featuring two modes: one for auto-generating objects based on size and another for manual placement with optional randomization
- Implemented a PCG rule to prevent environment-road intersections by updating the valid line segments on the Environment Spline and regenerating the environment when intersections occurred

PROJECTS EXPERIENCE

The Glitch Witch

Jan 2024 - May 2024

Gameplay Engineer

- "The Glitch Witch" is an Advanced Games Project (AGP) at USC Games, inspired by games like Stardew Valley and wire circuit puzzle games, developed using Unreal Engine 5 by a team of over 30 members
- Contributed to various aspects of the project, including setting up background music, configuring the settings menu, creating the game start cutscene, providing ideas for the tutorial, and implementing the control tutorial

Knight and Princess Jan 2024 - May 2024

Game Developer

- Collaborated with a partner during a game production course to develop a two-player 3D puzzle-solving RPG in Unity
- Gained experience in the full game development process, including ideation, pre-production, production, and post-production
- Implemented character control and combat systems using Unity's event system, ensuring proper synchronization across the network and accurate player and enemy status updates
- Resolved a loophole in the enemy generation system by adding unique IDs to each enemy spawn point and generation trigger

Fan Experience (Vertically Integrated Project)

Jan 2022 - May 2023

Software Development Engineer/Team Lead

- Participated in a Junior Design's Vertical Integrated Project, focusing on the Fan Experience sub-team within The Future Esports Experience team
- Leveraged Unity to create an innovative **scannable AR/VR cards** demo showcasing Esports content, including highlights, training videos, plot summaries, and statistics
- Pioneered the integration of **Geolocation updates** upon card scanning, enhancing user engagement and paving the way for future application scenarios, including exhibitions
- Orchestrated productive meetings with esteemed partner organizations such as Hi-Rez Studios, Ghost Gaming, and Blue Mammoth. Championed a collaboration with Blue Mammoth to design exclusive AR cards for their fan base during my final semester

SKILLS

- **Programming Languages:** C#, Python, C++, Java
- Tech Skills: Unity, Unreal Engine, Perforce, Git, NumPy, MySQL