

Education

Oregon State University

Bachelor of Computer Science

GPA: 3.07 | Class of 2024

Experience

SIGGRAPH Student Volunteer (2024)

- Collaborated with teams to ensure the smooth operation of ACM SIGGRAPH 2024.
- Facilitated immersive VR experiences in the VR Theater, including guiding guests and assisting with VR headset usage.
- Enforced conference policies such as "No Photography" and monitored attendee compliance.
- Assisted with attendee management tasks, including checking badges and providing directional support.

Undergraduate research assistant

Developed an AR construction visualization software for the Magic Leap 2 using Unity's OpenXR library.

- Implemented marker tracking and plane detection with Magic Leap's features, enhancing model placement accuracy.
- Collaborated with a professor to integrate 3D models with ArUco codes, resulting in improved visualization and user customizability.

Relevant Coursework

Intro to Computer Graphics, Grade: A

Computer Graphics Shaders, Grade: A

Virtual / Augmented reality, Grade: A

Cloud App Development, Grade: A

Technical Skills

- C/C#/C++
- Python
- Javascript
- Raytracing
- OpenGL
- GLSL
- Unreal Engine
- Unity

Projects

BallQuest AR (Senior Capstone) | [View Project](#)

Quest 3 Headset, Unreal Engine

- Contributed to the design and development of an immersive AR maze game.
- Leveraged the passthrough feature of the Quest 3 for enhanced user experience.
- Implemented real-world physics for interactive gameplay, allowing users to manipulate virtual balls using a physical box.

AR Model viewer | [View Project](#)

Magic Leap 2, Unity

- *Designed and developed an AR application enabling users to place four anchor points and visualize 3D models in real-world environments.*
- Implemented user interface for selecting and spawning 3D models inside of anchor point boundaries

Realistic Wave Simulation | [View Project](#)

OpenGL, GLSL

- Developed a dynamic wave simulation using Gerstner waves.
- Incorporated real-time user interaction to control wave parameters, enhancing visual realism.
- Implemented vertex and fragment shaders to accurately model wave motion.