

## Education

### Stanford University

Graduate Certificate, Visual Computing

2025-2027

### Oregon State University

Bachelor of Computer Science

GPA: 3.07 | Applied CS GPA: 3.88

Deans Honor List 2024

## Experience

### SIGGRAPH Student Volunteer

2024 & 2025

- Collaborated with teams to ensure the smooth operation of SIGGRAPH Confrence
- Facilitated immersive VR experiences in the immersive pavilion, 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

June 2024 - August 2024

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.

## Coursework

CG Animation/Simulation, Stanford | In Progress

Computer Graphics Shaders, OSU | Grade: A

Virtual / Augmented reality, OSU | Grade: A

## Skills

Programming languages: C++, Python, Javascript

Frameworks: USD, Three.js

DCCs: Unreal Engine 5, Maya, Blender

## Projects

### Realistic Flight Simulator | [View Project](#)

*Unreal Engine, Cesium, JSBSim*

- Built a real-time aircraft flight simulator in Unreal Engine 5, integrating the JSBSim plugin for advanced flight physics
- animated a rigged aircraft model, mapping player input to both visual animations and the JSBSim flight dynamics model for responsive, physically accurate gameplay
- Used Cesium's 3D geospatial streaming to provide a high-fidelity open-world flight experience grounded in real-world topography

### Procedural 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.

### Turntable Generator Addon | [View Project](#)

*Python, Blender Addon*

- Developed an automated turntable camera generator with scene geometry analysis for optimal camera positioning
- created a debug UI to adjust and reframe geometry to artists preference
- Designed to reduce manual setup time and meet fast-paced nature of production studio environments