# **Casey Manning**

### **EDUCATION**

Stanford University Computer Science / Graphics 2020 - 2024

#### **EXPERIENCE**

## Virtual Reality Instructor SEPTEMBER 2023 - DECEMBER 2023

Taught Stanford course on virtual reality (<a href="https://cs11si.stanford.edu">https://cs11si.stanford.edu</a>) where students custom VR app/game. Designed VR assignments & curriculum, teaching Unity game development, 3D modeling, VR design techniques.

## **Apple** June 2023 - September 2023

Software engineering intern in color management technologies. Perception research and systems for accurate color display. Applied and expanded technology for concretely measuring brightness and color perception, with applications to HDR display algorithms and environmental adaptation.

## Meta Reality Labs June 2022 - SEPTEMBER 2022

Software engineering intern, computational photography for XR products. Developed raw image processing pipeline in C++ and GLSL, created GPU-accelerated image dehazing system and creative photo editing effects.

## Stanford Virtual Human Interaction Lab AUGUST 2021 - SEPTEMBER 2022

Worked as a VR developer creating 3D environments for holding virtual discussion sections. Led Unity development of VR experience for Oculus Quest showcasing lab research via interactive demos.

## Temple Allen Industries MARCH 2021 - JUNE 2021

Designed and built production web app for remote control and monitoring of robotic systems. Worked on computer vision to control motion planning. Created web visualizer and data analytics to show real time abrasion patterns.

## Playground Global JUNE 2019 - AUGUST 2019

Set up and programmed robotic arm to autonomously cook omelets. Designed and trained computer vision system to control the cooking routine. Designed and built iOS app and database for custom omelet orders.

## **PROJECTS**

## Stanford XR SEPTEMBER 2021 - JUNE 2024

VP of Education, prev. VP of Projects. Taught course CS11SI. Organized and taught workshop series on AR/VR development, organized projects cohort of XR developers. Organizing and developing curriculum for new spatial computing design course involving Quest & Vision Pro headsets.

## 3D Art & Game Development

Various personal game development projects: <a href="https://spaaace.itch.io/">https://spaaace.itch.io/</a>. 3D art: <a href="https://caseymanning.github.io/portfolio">https://spaaace.itch.io/</a>.

## **SKILLS**

Unity C++ Java JavaScript Python Blender Houdini GLSL Swift C# VR