

EECE5698: Networked XR Systems
Homework4 – Due 03/21/24

The objective of this homework is to explore a new approach to streaming videos. We will focus on compressing and streaming spatial videos using Apple's HLS framework. The end goal is for you to show me your spatial video on Apple Vision Pro. Unlike previous homeworks, this is more open ended. You are free to discuss the homework with your classmates to make a decent progress. You will probably not be able to complete the homework, but that's okay since it is open ended.

Part I: Compressing spatial videos (50 points)

1. Get started with Apple vision Pro, and its tools related to spatial videos.
2. Use Apple's HLS tool to compress a spatial video into multiple segments. Make sure they are in the spatial video format, not the regular format.

Part II: Streaming spatial videos (50 points)

1. Create a python based or nodejs based web server to host the above spatial video segments.
2. Use a spatial video player to receive the spatial video segments and play them.