

EECE5698: Networked XR Systems
Homework1 – Due 09/24/24

Part 1: Headsets Exploration (30 points) – No more than 1 page

- Literature Review (15 points):
 - Research and provide a detailed overview of 2 popular XR headsets.
 - Include information on their 2 key features.
 - Write down the 2 strengths and weaknesses of each headset.
- Comparison (15 points):
 - Create visual plots comparing two capabilities of above 2 headsets. Consider 2 factors such as display resolution, field of view, tracking options.
 - Discuss how these factors impact the user experience in XR environments.

Part 2: XR Software Frameworks (40 points) – No more than 1 page

- Framework Analysis (20 points):
 - Investigate and summarize 2 popular XR software frameworks.
 - Discuss the functionalities, ease of use, and compatibility with various headsets.
 - Highlight any notable applications that are using these frameworks.
- Case Study (20 points):
 - Choose one XR software framework and present a case study.
 - Explore a real-world example that successfully utilized the chosen framework, and discuss its impact.

Part 3: Basics of Networked XR Problems (30 points) – No more than 1 page

- Networked XR Systems (15 points):
 - Explore the concept of networked XR systems.
 - Discuss the challenges and benefits of integrating XR systems into a networked environment.
- Collaborative XR Experience (15 points):
 - Propose a hypothetical scenario where multiple users collaborate in a shared XR experience.
 - Discuss 2 key technical requirements and potential challenges of implementing such a collaborative environment.