

论文总结 7.12

论文: Influence of temporal delay and display update rate in an augmented reality application scenario

task: AR 游戏

结论: 在 AR 应用程序中, 应该更多地强调降低延迟减少而不是提高刷新速率, 并且如果时间延迟显著高于刷新速率, 不能提高用户体验。

论文: The Influence of Interactivity Patterns on the Quality of Experience in Multi-party Video-mediated Conversations under Symmetric Delay Conditions

task: 最多五人的团体对话

结论: 会话中的每个参与者不同的参与模式导致每个人对延迟有不一样的 notice 阈值。

论文: Digital TV: the effect of delay when watching football

task: 对照实验, 用 18 种不同的欢呼音频来模拟不通过足球观看体验

结论: 延迟是数字电视需要考虑和最小化的质量因素

论文: Video stream quality impacts viewer behavior: inferring causality using quasi-experimental designs

task: 研究视频质量对观众行为的影响

结论: 如果视频启动需要超过 2 秒的时间, 观众开始放弃视频, 每增加 1 秒的延迟, 增加 5.8% 的放弃率, 经历了失败的访问者比不经历失败的访问者在一周内访问同一站点的可能性降低了 2.32%。

论文: Inter-destination multimedia synchronization: schemes, use cases and standardization

中对视频同步的十九个例子进行了分类, 我觉得可以参考

A 10us-10ms

task: for different audio outputs in a single physical location, for example, audio localization

相关论文: Usability engineering lecture notes, localisation of sound sources

B 10ms-100ms

task: for any use case in which fairness is important, for example, some games 抢答

C 100ms-500ms

task: various related media items are displayed somewhat simultaneous, but in which no real-time requirements, for example, 在线同步学习, Social TV

D 500ms-2000ms

task: is required in cases where media is consumed by different users at different physical locations, but the interaction level between users is not of a very competitive nature.

example: users in a distributed video watching scenario while communicating using voice conferencing services

很感性的分类, 没有进行任何实验, 而且是针对同步观看视频时 delay 的影响做的分类

论文: A Design and Evaluation Framework for a Tele-Immersive Mixed Reality Platform

提出了一种新的 QoS / QoE 模型和评估方法

论文: A QoE study of different stream and layout configurations in video conferencing under limited network conditions

task: 视频会议 小组讨论

结论: 丢包率和由此产生的失真对 QoE 有更大影响

论文: Video QoE killer and performance statistics in WebRTC-based video communication

task: 不同场景下的实时视频通讯

结论: throughput, packet loss, and bucket delay 是影响 QoE 的因素