

ICN for AR/VR

Cedric Westphal
Huawei and UCSC

ICN & AR/VR

- **Lots of interest in the community:**
 - **AR/VR projects over ICN demos (ACM ICN conference)**
 - **ATIS document w/ AR/VR use-case:** Evolution to Content Optimized Networks, Issue 2, Value Assessment Report: A Comparative Study of ICN vs Conventional Approaches
- **Presentation at IETF 98 in Chicago in March 2017:**
“Challenges in Networking to Support Augmented Reality and Virtual Reality”
- **Submitted a draft: draft-westphal-icnrg-arvr-icn-00**

ICN & AR/VR draft

- **Attempts to frame the issue for AR/VR:**
 - **definition**
 - **use case**
 - **application/benefits of ICN**
- **Initial version, to start the conversation and encourage contributions**

ICN & AR/VR draft

- ToC:

Table of Contents

1.	Introduction	2
2.	Definitions	3
2.1.	Use Cases	4
2.1.1.	Office productivity, personal movie theater	4
2.1.2.	Retail, Museum, Real Estate, Education	4
2.1.3.	Sports	4
2.1.4.	Gaming	5
2.1.5.	Maintenance, Medical, Therapeutic	5
2.1.6.	Augmented maps and directions, facial recognition, teleportation	5
3.	Information-Centric Network Architecture	6
3.1.	Native Multicast Support	6
3.2.	Caching	7
3.3.	Naming	7
3.4.	Privacy	7
3.5.	Other benefits?	7
3.6.	Security Considerations	7
4.	References	8
4.1.	Normative References	8
4.2.	Informative References	8
	Author's Address	8

ICN & AR/VR draft

- **v1 to include updated list of related research projects and references**
- **Actual protocol design?**
- **Welcome suggestions/contributions**