The Future of Shared Experiences – XR is a Lonely World

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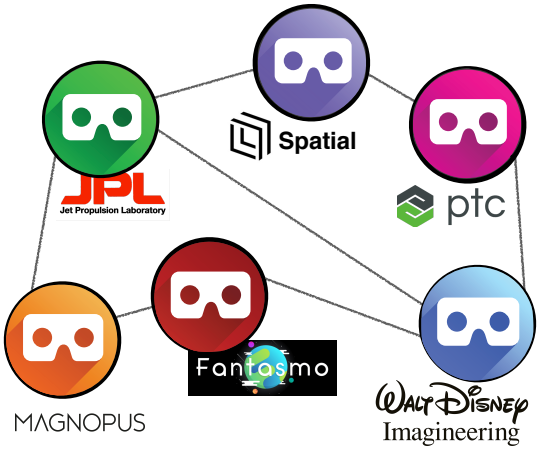

ABSTRACT

XR has never been more immersive, entertaining and dynamic than it is now. So why is the virtual world still such a lonely place? Shared virtual experiences are slowing becoming a reality, with the potential to transform the way XR is used in education, entertainment, telepresence and the enterprise. But will technology and content finally coevolve to support realistic, real-time, multi-person interactions? This panel explores the expanding dimensions of shared experiences in XR, offering views on emerging trends, applications and breakthrough technologies.

KEYWORDS

extended reality, virtual reality, augmented reality

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1 Introduction

Extended Reality (XR) promises to impact virtually every aspect of modern life as we know it, but until now, the technology was ready for widespread engagement. Only recently have hardware and content creation tools converged to provide the necessary ingredients for a thriving ecosystem for XR, with limitless applications across platforms and industries. While these core components have given XR new life in the 21st century, much of the promise of XR in applications like enterprise training, telepresence and even entertainment rely on the ability to immerse multiple people *simultaneously* in both imagined and reality-inspired settings. This facet of XR is developing quickly and draws upon the state of the art in a variety of fields, including motion capture, real-time kinematics processing and rendering, high-precision sensing, haptics and hybrid content that integrates real world objects and 3D reconstructions alongside imagined environments. The breadth and depth of expertise necessary to collect these disparate pieces into new applications requires a unique group of innovators. This panel consists of members from government research, corporate innovation as well as groundbreaking startups, each pushing XR forward in unique ways to deliver shared experiences.

The topics below will be the primary focus of this panel, with special emphasis on the potential for shared experiences in XR to impact new application areas in enterprise training, collaboration, therapeutics and entertainment.

- What are the major differences between shared experiences in AR vs VR?
- As XR moves beyond entertainment into applications like emergency response training will headsets be enough to create believable modes of interaction? Or will haptics become a necessity?
- With telepresence and AR gaming quickly becoming ubiquitous, will social interactions and workplace culture be forced to adapt to these new platforms?
- Multi-person immersive XR is already featured prominently at entertainment venues across the globe; how will curated experiences and storytelling leverage these new forms of content?
- One of the most compelling visions for XR is the ability to interact with others while sharing physical objects and environments. In fields as diverse as product design, architecture and clinical medicine, the ability to attend the same operating room or examine the latest blueprint is unmistakable. What developments are necessary both in hardware and software to realize this vision?