

Immersive Teamwork: Exploring the Potential Virtual Reality for Collaborative Teamwork

Kyaw Htet Oo, Rong Peng, and Siam Sarwar
Asian Institute of Technology

Objective of the session

This workshop aims to provide participants with a brief introduction to the potential of immersive virtual reality for collaborative 3D design and development. Through a concise overview and a hands-on experience, participants will gain an understanding of the benefits of collaborative virtual reality interaction and explore the possibilities it offers for teamwork and coordination in a limited timeframe. By the end of the session, participants will be inspired to further explore the potential of immersive collaboration and its application in their own professional contexts.

Summary of the activities

1. Introduction to Immersive Collaboration: Participants will be introduced to the concept and advantages of immersive collaboration in virtual reality environments. They will gain an understanding of the potential impact on teamwork and creativity in 3D design.
2. Hands-On Virtual Reality Experience: Attendees will have the opportunity to don Oculus VR headsets and enter an immersive virtual reality environment. Guided by facilitators, they will explore collaborative tools and interactions within the virtual space.
3. Collaborative Design Challenges: Participants will engage in collaborative design challenges, working together in small teams within the virtual reality environment. They will tackle specific design tasks, applying their creativity, problem-solving skills, and teamwork.
4. Group Discussions and Knowledge Sharing: The session will conclude with group discussions to reflect on the experience, share insights, and exchange ideas on best practices for effective collaboration in immersive virtual reality.

Expected outcomes

1. Increased Awareness: Participants will gain a basic understanding of the potential benefits of immersive virtual reality for collaborative 3D design.
2. Exploring Collaborative VR Interaction: Participants will gain familiarity with the potential of immersive virtual reality for collaborative work and engage in hands-on interaction with 3D design elements using virtual reality equipment.
3. Insight into Collaborative Tools: Attendees will gain exposure to collaborative tools and interactions within the virtual reality environment, experiencing the potential for teamwork and coordination.
4. Inspiration for Further Exploration: The workshop will serve as a starting point for participants to explore immersive collaboration further in their own time, encouraging them to continue exploring the possibilities of collaborative 3D design in virtual reality.

Target audiences

1. **Educators and Researchers:** Educators and researchers in design-related fields who are interested in incorporating immersive collaboration and virtual reality into their teaching or research methodologies.
2. **Technology Enthusiasts:** Individuals passionate about exploring the potential of immersive technologies, virtual reality, and its application in collaborative design.
3. **Professionals in Related Fields:** Individuals working in fields closely related to design, such as engineering, architecture, virtual reality development, and human-computer interaction, interested in expanding their knowledge and exploring new collaborative possibilities.

TE2023 Topics

- Product Design and Development
- Team Working
- Engineering Education