



INVITED SESSION SUMMARY

Title of Session:

Integrating Metaverse, Augmented Reality, and Virtual Reality for Smart 21st Century Education

Name, Title and Affiliation of Chair:

Prof. Dr. Robertas Damaševičius
Department of Applied Informatics, Vytautas Magnus University, Kaunas, Lithuania

Details of Session (including aim and scope):**Aim:**

To bring together educators, technologists, policymakers, and researchers to explore and discuss the potential, challenges, and best practices associated with the integration of Metaverse, Augmented Reality (AR), and Virtual Reality (VR) in modern education. This special issue aspires to delineate the pathways through which these immersive technologies can revolutionize pedagogical practices, learning outcomes, and the overall educational landscape. This special issue aims to ignite dialogue, inspire innovations, and cultivate a robust community of practice committed to harnessing the transformative potential of the Metaverse and AR/VR in sculpting the future of education.

Scope:

The special issue encompasses both theoretical discourses and empirical studies relating to the use of Metaverse, AR, and VR in education. It covers a broad spectrum ranging from early childhood education to higher education, professional training, and lifelong learning, addressing both formal and informal learning contexts.

List of Topics:

- Theoretical Foundations: Understanding cognitive, pedagogical, and socio-cultural implications of Metaverse, AR, and VR in educational contexts.
- Pedagogical Affordances: Exploration of novel teaching and learning strategies facilitated by these immersive technologies.
- Inclusive Education: Leveraging the Metaverse and AR/VR for personalized learning, catering to students with diverse needs and abilities.
- Skills Training and Simulation: Use of immersive environments for vocational training, medical education, engineering, and other skill-based domains.
- Cultural and Historical Explorations: Utilizing AR/VR for immersive history lessons, cultural exchanges, and virtual field trips.
- Collaborative Learning in the Metaverse: Strategies for promoting collaboration, communication, and co-creation in virtual learning spaces.
- Assessment and Feedback: Innovations in gauging learner performance, providing real-time feedback, and ensuring valid assessment in virtual contexts.
- Augmented Libraries and Learning Resources: Transforming traditional resources into interactive, augmented repositories and learning tools.
- Student Engagement and Motivation: Strategies to harness the immersive nature of AR/VR to boost student involvement and enthusiasm.
- Teacher Training and Professional Development: Preparing educators for the paradigm shift towards immersive tech-integrated pedagogies.
- Infrastructure and Accessibility: Addressing technical and infrastructural challenges for broad-based adoption of these technologies.
- Social Interactions and Networking: Opportunities for global interactions, cross-cultural exchanges, and expanding learning communities within the Metaverse.
- Challenges in Implementation: Overcoming barriers related to technology adoption, socio-cultural resistance, and potential health concerns.

- **Future Visions:** Speculating on the future evolution of Metaverse, AR, and VR in education and the implications for society at large.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

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Website URL of Call for Papers (if any):

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