

Call for Papers

Special Issue on AI X Metaverse

Multimedia Tools and Applications (Springer)

Link: <https://meg-r.github.io/mtap-metaverseai/>

Overview

The fusion of Artificial Intelligence (AI) and immersive multimedia is redefining how we experience digital environments. This special issue seeks original contributions at the intersection of AI and the Metaverse, spanning generative systems, multimodal perception, synthetic data, intelligent agents, and human-centered immersive design.

Topics of Interest

This Special Issue will provide a multidisciplinary platform for researchers and practitioners exploring the intersection of AI and immersive multimedia technologies. Topics of interest include, but are not limited to:

- **Generative AI for Immersive Environments:** Methods for creating realistic synthetic data, 3D worlds, and interactive digital content.
- **Synthetic Data Generation:** AI-driven approaches for robust model training when real data is scarce or sensitive.
- **Advanced Digital Twins and Real-Time Simulation:** High-fidelity digital replicas for learning, simulation, and adaptive environments.
- **Intelligent Avatars and Virtual Agents:** Design of AI-powered agents that interact naturally in the Metaverse.
- **Cognitive Modeling and Personalization:** User-adaptive systems and human-centered design through AI-based behavioral modeling.
- **Multimodal Interaction and Sensory Augmentation:** Fusion of visual, auditory, and haptic signals for richer immersion.
- **Ethical, Privacy, and Bias Considerations:** Responsible development of AI-driven immersive ecosystems.

- **Domain-Specific Applications:** Case studies in education, healthcare, engineering, manufacturing, training, and entertainment.

Submission Guidelines

Manuscripts should follow the *Multimedia Tools and Applications* submission format and be submitted through the Springer editorial system under the “Special Issue: AI X Metaverse” track.

Important Dates

- **Submission Deadline:** 1 March 2026
- **First Review Notification:** April 2026
- **Revision Submission:** May 2026
- **Final Decision:** May–June 2026