

## Special Issue Editorial



**Editor-in-Chief**

**Adrian-Victor VEVERA**

Romanian Journal of Information Technology and Automatic Control

We are delighted to welcome our readers to “Metaverse, Generative AI and Immersive Technologies” special issue of the Romanian Journal of Information Technology and Automatic Control.

Romanian Journal of Information Technology & Automatic Control (RRIA) is a lodestar of the publication efforts of ICI Bucharest, having been ESCI indexed and on the path of joining the most prestigious scientific databases. This success is due to our community of contributors and the dedication of our ICI Bucharest colleagues to maintaining the highest ethical and professional standards.

Extended Reality and Generative AI are, right now, the most disruptive technologies, opening immense opportunities virtually all domains. Therefore, it is a high moment to explore their already wide impact, as well as emerging trends and challenges – technological, conceptual, and social.

Indeed, while their transformative potential is undeniable, their widespread adoption still faces significant challenges. These challenges include technical limitations, infrastructure constraints, economic factors, and social and regulatory complexities. Overcoming these hurdles is essential for realizing the full potential of the digital revolution.

The articles in this special issue cover a diverse range of topics, reflecting the breadth of technologies and applications encompassed by its title.

We highlight articles on AI ideological imprints, political biases, and community resilience strategies in the Metaverse to address concerns about the potential misuse of new technologies for deception, disinformation, and fake news.

Security and defense are well represented, with articles on the accelerated AI integration and effects on vulnerabilities of critical infrastructure, on the use of Metaverse technologies in the military domain, and on AI driven solutions for cyber security.

On the side of positive transformational analyses, we find articles on the use of digital emerging technologies for digital workplaces, for more rapid digitalization of public administration through AI chatbots, and on using Metaverse technologies for a more modern and efficient public administration.

The human dimension has not been forgotten, especially since healthcare, safety, sustainable lifestyles, and wellness are key uses-cases of the new technologies. Our special issue features articles on virtual reality for the elderly, on leveraging AI solutions for healthcare, and on use of immersive technologies in space tourism and exploration.

The development and implementation of these technologies will determine their success in fostering growth, efficiency, and innovation. By prioritizing resilience and effective decision-making in early systems, we can minimize risks, vulnerabilities, and threats. States must adopt balanced regulations to avoid overregulation. This is a delicate balance for researchers and those involved in governing these new technologies. The Metaverse, generative AI, and immersive technologies are particularly sensitive due to their impact on our perception of reality and ability to discern facts. Visions of Skynet and Terminators reflect public concerns about automation, digitalization, and perceived loss of control.

We thank you for reading the Romanian Journal of Information Technology and Automatic Control and hope you do enjoy this special issue.

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