



Security and Safety

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Call for Papers

Special Issue on

Security and Safety in the “Metaverse”

Guest Editors:

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- **Hong ZOU**- Fudan University, China
- **Xing ZHAO**- Fudan University, China
- **Chunhui WANG**- Zhejiang University, China
- **Yangyu FAN**- Northwestern Polytechnical University, China

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Background

The term “Metaverse” was coined in the science fiction novel “Snow Crash” in 1992. Thirty years later, it has become more popular and attracted a lot of attention especially since 2021. What is the “Metaverse”? There is not yet an unified standard definition of the “Metaverse” that is widely accepted by both academics and industry. In “Snow Crash”, the “Metaverse” is depicted as a virtual world parallel to the real world. If one wants to create such a virtual world in real life, it is necessary to build and operate this world based on various information technologies such as virtual reality, artificial intelligence, and communication networks. In short, this virtual world is a super-large-scale cyber-physical system composed of a wide range of software and hardware. The functions of cyber-physical systems are not only affected by physical or logical random failure events, but also by cyberspace attacks based on system software and hardware vulnerabilities. Therefore, cyber-physical systems face both traditional functional safety and cyber security attacks, called generalized functional safety (briefly Security and Safety) problems. Such a super-large cyber-physical system of “Metaverse” will inevitably face generalized functional safety issues.

Aims and Scope of the Special Issue

Security and Safety (S&S) is a journal focusing on the intersection of cyber security and functional safety and call for papers for this special issue on *Security and Safety in the “Metaverse”* with the aim of building a platform for global academic and industrial circles to discuss *Security and Safety in the “Metaverse”*, which includes but is not limited to the underlying and related technology and application of the “Metaverse” security and safety. Original and research articles are welcomed in all aspects including theoretical studies, practical applications and related new techniques.

This special issue includes (but is not limited to) the intersection of cyber security and functional safety in the following topics:

- The “Metaverse” Digital Infrastructure
- The “Metaverse” Management
- The “Metaverse” Applications
- Transactions in the “Metaverse”
- Digital Assets in the “Metaverse”
- Identity and Privacy in the “Metaverse”
- The “Metaverse” Digital Agents
- The “Metaverse” Cognitive Space
- The “Metaverse” Algorithms and Datasets

Submissions

Authors could submit their manuscript online directly at: <https://sands.nestor-edp.org> and chose, during submission, the special issue: **Security and Safety in the “Metaverse”**. All relevant papers will be carefully considered, peer-reviewed by a distinguished team of international experts. The instructions for authors are detailed at: <https://sands.edpsciences.org/author-information/instructions-for-authors>.

Submission deadline– 31st October, 2022

Article Processing Charges- S&S is an Open Access journal without any submission fees and APCs in 2022.

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