Special Issue

5G Security: Challenges, Opportunities, and the Road Ahead

Message from the Guest Editors

For this Special Issue we encourage high-quality research contributions—both theoretical and experimental—and timely survey papers that pinpoint future research directions in this field. Topics of interest include, but are not limited to, the following:

- Security protocols in 5G/6G architectures;
- Privacy issues in 5G/6G architectures;
- Security aspects in cloud/edge/fog computing;
- Security aspects in multi-access edge computing (MEC);
- Security aspects in the Internet of Things and/or cyber-physical systems;
- Security management in modern virtualized networks (NFV, SDN, network slicing);
- Machine learning/artificial intelligence for 5G/6G network security;
- Intrusion detection systems in 5G/6G networks;
- Traffic analysis applied to 5G/6G networks;
- Analytics and big data for network security;
- Optimization techniques to improve 5G/6G network security;
- Resilience strategies to improve 5G/6G network security;
- Security aspects in 5G/6G vehicular communications;
- Security aspects in 5G-oriented hardware (e.g., FPGA);
- Security aspects in smart environments and industrial systems.

Guest Editors

Dr. Mario Di Mauro

Department of Information and Electrical Engineering and Applied Mathematics (DIEM), University of Salerno, 84084 Fisciano, Italy

Dr. Francesco Pascale

Accenture S.P.A., Via Sciangai 53, Roma, Italy

Dr. Marco Tambasco

Ericsson Telecomunicazioni S.p.A., Via Filettine 89, 84016 Pagani, SA, Italy

Deadline for manuscript submissions

closed (10 April 2025)



Future Internet

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 8.3



mdpi.com/si/116539

Future Internet Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 futureinternet@mdpi.com

mdpi.com/journal/ futureinternet





Future Internet

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 8.3



futureinternet



About the Journal

Message from the Editor-in-Chief

Future Internet is a fast-growing journal devoted to rapid publications of the latest results in the general areas of computer networking/communications and information systems, with a focus on the Internet of Things, big data and augmented intelligence, smart systems (in terms of technologies, architectures, and applications), network virtualization, edge/fog computing, and cybersecurity. Both theoretical and experimental papers are welcome. Every year, *Future Internet* also features Special Issues dedicated to specific topics within the journal's scope.

Editor-in-Chief

Prof. Dr. Gianluigi Ferrari Department of Engineering and Architecture, University of Parma, Parco Area delle Scienze, 181/A, 43124 Parma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Ei Compendex, dblp, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Computer Science, Information Systems) / CiteScore - Q1 (Computer Networks and Communications)