Special Issue

Next-Generation Security Schemes and Models for IoT-Enabled Smart Environments

Message from the Guest Editors

This Special Issue focuses on next-generation security models tailored for IoT-enabled smart environments, including smart cities, smart homes, healthcare systems, and industrial automation. These systems introduce unique challenges due to their scale, heterogeneity, mobility, and resource constraints. We invite high-quality, original research that proposes innovative, real-time, and resilient security solutions for IoT-based systems. Topics of interest include (but are not limited to) the following:

- Adaptive access control mechanisms;
- Lightweight cryptographic techniques;
- Zero-trust security models;
- AI- and ML-based threat detection;
- Privacy-preserving architectures;
- Security in edge/fog computing environments.

We aim to further the formulation of integrated, context-sensitive security methods that can effectively tackle the intricate and dynamic threat landscape in intelligent environments. This Special Issue will bridge the gap between isolated security components and holistic, next-generation frameworks.

Guest Editors

Dr. Maurizio Giacobbe

Dr. Max Talanov

Dr. Giuseppe Tricomi

Deadline for manuscript submissions

30 June 2026

Big Data and Cognitive Computing

an Open Access Journal by MDPI

Impact Factor 4.4
CiteScore 9.8

mdpi.com/si/250223

Big Data and Cognitive Computing
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
bdcc@mdpi.com

mdpi.com/journal/BDCC

Big Data and Cognitive Computing

an Open Access Journal by MDPI

Impact Factor 4.4
CiteScore 9.8

mdpi.com/journal/BDCC

MDPI

About the Journal

Message from the Editor-in-Chief

Big Data and Cognitive Computing (BDCC) is a scholarly online journal which provides a platform for big data theories with emerging technologies on smart clouds and exploring supercomputers with new cognitive applications. It is a peer-reviewed, open access journal that publishes high quality original articles, reviews and short communications. The primary aims of this journal are to encourage contributions of high quality scientific papers relating to data management and analytics in industry, such as manufacturing, healthcare, education, media and business, data mining, and cognitive science. There is no restriction on the maximum length of the papers.

Editor-in-Chief

Prof. Dr. Min Chen
School of Computer Science and Engineering, South China University of Technology, Guangzhou 510641, China

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), dblp, Inspec, Ei Compendex, and other databases.

Journal Rank:

JCR - Q1 (Computer Science, Theory and Methods) / CiteScore - Q1 (Computer Science Applications)