

Special Issue

Big Data-Driven Responsible Edge Intelligence: Privacy, Security, Robustness, and Potential

Message from the Guest Editors

With the continuing increasing volume of data, the field of big data has been confirmed as one of the most advanced areas of research, attracting growing attention from both academia and industry. To enable trust within this trustless scenario, blockchains have been found to be one of the most powerful tools. So, big data-driven decentralized edge intelligence is a necessity to improve existing architectures. This poses further privacy challenges for data collection, transmission and processing. We welcome the submission of relevant topics including, but not limited to:

- Responsible edge intelligent frameworks with big data processing abilities;
- Privacy protection of big data at the edge of network;
- Trade-off between privacy and data utility when a blockchain is deployed as the underlying architecture;
- Privacy-preserving edge intelligence;
- Privacy-preserving swarm intelligence models built upon big data;
- Security issues for big data-driven decentralized edge intelligence;
- Performance improvement of edge intelligence leveraging big data;
- Other potential of responsible edge intelligence.

Guest Editors

Dr. Youyang Qu

Commonwealth Scientific and Industrial Research Organisation (CSIRO), Canberra, ACT 2601, Australia

Dr. Jianghua Liu

School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094, China

Deadline for manuscript submissions

closed (15 April 2025)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/146150

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

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).