

# Special Issue

## Scalable and Distributed Cloud Continuum Orchestration for Next-Generation IoT Applications: Latest Advances and Prospects

### Message from the Guest Editors

This Special Issue is soliciting novel conceptual, theoretical, and experimental contributions to this set of currently unresolved challenges in the area of the cloud continuum, the IoT, and AI. The topics of interest include, but are not limited to:

- Resource allocation and scheduling in the cloud continuum;
- Virtual network embedding in the cloud continuum;
- Scalability issues in the cloud continuum;
- Novel architectures in the cloud continuum;
- AI for QoS management in cloud continuum.
- task offloading in the cloud continuum;
- Energy sustainability in the cloud continuum;
- Digital twins in the cloud continuum;
- Network/resource monitoring in the cloud continuum;
- Computation and network infrastructure resilience and reliability;
- Virtualization solutions for distributed application deployment in the cloud continuum;
- Security issues in the cloud continuum;
- Architectures for digital forensics;
- Data analytics, traffic analysis, and classification in the cloud continuum;
- Testbeds and experimental facilities report.



## Future Internet

an Open Access Journal  
by MDPI

Impact Factor 3.6  
CiteScore 8.3



[mdpi.com/si/199635](http://mdpi.com/si/199635)

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

[mdpi.com/journal/  
futureinternet](http://mdpi.com/journal/futureinternet)

### Guest Editors

Dr. Dimitrios Dechouniotis

Department of Electrical and Computer Engineering, National Technical University of Athens, 15780 Athens, Greece

Dr. Ioannis Dimolitsas

School of Electrical and Computer Engineering, National Technical University of Athens, 15780 Athens, Greece

---

### Deadline for manuscript submissions

closed (31 January 2025)





# Future Internet

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 8.3



[mdpi.com/journal/  
futureinternet](http://mdpi.com/journal/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)

