



## Algorithms for Communication Networks (2nd Edition)

Guest Editors:

**Prof. Dr. Andras Farago**

Department of Computer  
Science, Erik Jonsson School of  
Engineering and Computer  
Science, The University of Texas  
at Dallas, P.O. Box 830688, MS-  
EC31, Richardson, TX 75083-0688,  
USA

**Dr. Héctor Migallón**

Department of Computer  
Engineering, Miguel Hernández  
University, Av. de la Universidad  
s/n, Ed. Alcludia, 03202 Elche,  
Spain

Deadline for manuscript  
submissions:

**closed (15 November 2023)**

### Message from the Guest Editors

This Special Issue is devoted to algorithms and protocols that support the operation or design of large networks and/or that are motivated by networking issues.

- Routing algorithms for various types of networks;
- Algorithms/protocols for congestion control;
- Medium access control (MAC) protocols;
- Algorithms for network design and dimensioning;
- Designing, operating, and maintaining virtual substructures, such as network slices and virtual subnetworks;
- Modeling very large networks via novel mathematical methods;
- Approaches for cross-layer design;
- Optimization methods for network-inspired tasks;
- Graph models and graph algorithms motivated by networking problems;
- Models for the systematic analysis and design of the network architecture.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Frank Werner**

Faculty of Mathematics, Otto-  
von-Guericke-University, P.O. Box  
4120, D-39016 Magdeburg,  
Germany

## Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

## 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](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Computer Science, Theory and Methods) / CiteScore - Q1 (Numerical Analysis)

## Contact Us

---

*Algorithms* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/algorithms](http://mdpi.com/journal/algorithms)  
[algorithms@mdpi.com](mailto:algorithms@mdpi.com)  
[X@Algorithms\\_MDPI](https://twitter.com/Algorithms_MDPI)