

## Special Issue

# Machine Learning and Data Analytics for Communication Networks in the 5G Era

### Message from the Guest Editors

The next generation (5G) of communication networks will target unprecedented performance, in terms of network capacity, Quality of Service, network availability, user-experience, etc. In this context, the cloud computing and Network Function Virtualization (NFV) paradigms, together with the support of optical networking, play key roles, which are expected to enable 5G networking. Advanced mathematical tools, such as those in the field of Machine Learning (ML) and Big Data Analytics, also represent an extremely important opportunity to help telecom operators with the design, operation and maintenance of their networks, especially if considering the continuous increase in network complexity. As a matter of fact, thanks to the possibility of efficiently leveraging large amounts of data, ML tools are expected to improve 5G networks through automation and self-optimization.

---

### Guest Editors

Dr. Francesco Musumeci

Dr. José Alberto Hernández

Dr. Ignacio de Miguel

---

### Deadline for manuscript submissions

closed (30 June 2019)



## Big Data and Cognitive Computing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.4  
CiteScore 9.8



[mdpi.com/si/19335](https://mdpi.com/si/19335)

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

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



## 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)