



## Algorithms for Topic Modeling

Guest Editor:

**Dr. Aneesha Bakharia**

Institute for Teaching and  
Learning Innovation, University of  
Queensland, Lucia 4072,  
Australia

Deadline for manuscript  
submissions:

**closed (15 September 2022)**

### Message from the Guest Editor

The idea of using non-negative matrix factorization (NMF) for topic modeling was first introduced by Lee and Seung (1999) and popularized by Blei et al. (2003) with the publication of the latent Dirichlet allocation (LDA) algorithm. NMF produces a matrix decomposition where the resulting matrices contain positive values and map topics to documents and words. LDA is a probabilistic graphical model that represents a topic as a mixture of documents and words. There are many different algorithmic approaches to topic modeling, and researchers continue to seek advances in algorithm design, implementation and evaluation.

The field of topic modeling is constantly evolving, and there are opportunities for new research directions. Recently, there has been interest in using deep neural networks for topic modeling. These approaches have shown promise for improved topic coherence, but have scalability and deployment issues due to computational requirements. *Algorithms* (ISSN 1999-4893; CODEN: ALGOCH) is a leading open-access journal and seeks high-quality journal articles that explore recent advances in algorithms and deep neural approaches to topic modeling.





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 Compindex, 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)