Special Issue

Natural Language Processing Applications in Big Data

Message from the Guest Editors

Recent developments in NLP, especially the application of large language models (LLMs), demonstrate the monumental shift in the ability of natural language processing (NLP) to analyse big data. However, there is still a significant gap between the theoretical advancements of NLP and their practical real-world applications. This Special Issue targets the practical application of natural language processing (NLP) in different disciplines and delves into how NLP enhances data analysis, decision making, and productivity across various sectors (such as finance, healthcare, and marketing) by automating and improving processes. The aim of this Special Issue is to highlight the impact of NLP on data analysis across disciplines and address the critical challenges of big data, such as computational efficiency and cost, explainability, low-resource language applications, and sustainable development that meets the growing needs of industry. **Keywords**:

- natural language processing
- low-resource languages
- NLP applications
- interpretability
- large language model
- sentiment analysis

Guest Editors

Dr. Xingyi Song

Dr. Ye Jiang

Dr. Yunfei Long

Deadline for manuscript submissions

22 October 2025

MDPI

Big Data and Cognitive Computing

an Open Access Journal
by MDPI

Impact Factor 4.4
CiteScore 9.8

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)