



an Open Access Journal by MDPI

Knowledge Representation Formalisms for AI Applications

Guest Editors:

Dr. Gianvincenzo Alfano

Department of Informatics, Modeling, Electronics and System Engineering (DIMES), University of Calabria, Rende, Italy

Dr. Alejandro Javier García

Department of Computer Science & Engineering, Institute for Computer Science and Engineering, Universidad Nacional del Sur, Bahía Blanca, Argentina

Dr. Francesco Parisi

Department of Informatics, Modeling, Electronics and System Engineering (DIMES), University of Calabria, 87036 Rende, Italy

Deadline for manuscript submissions: closed (31 December 2023)



mdpi.com/si/148739

Message from the Guest Editors

Dear Colleagues,

In the complex challenge of designing intelligent systems in the Big Data era, an adequate representation of knowledge, sometimes considering uncertainty and incompleteness, and an easy-to-understand approach to automated reasoning are required. These are notable aspects of formal representation systems, suitable for making decisions through software agents trained in solving real problems of different natures such as explainability and interpretability of results, hybrid KR&R-Machine Learning, query answering, cybersecurity, the semantic web, and multi-agent systems. The growing demand for the explainability of AI systems operating in the aforementioned domains is also confirmed by the increasing demand that humans can clearly understand the decisions provided by these systems.

The overall aim of this Special Issue is to collect state-ofthe-art research findings on the latest developments, upto-date issues, and challenges in the field of knowledge representation formalisms in support of AI domains. Proposed submissions should make significant methodological or application contributions. This Special Issue should be of interest to the AI community.







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Min Chen

School of Computer Science and Engineering, South China University of Technology, Guangzhou 510641, China

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.

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 (Management Information Systems)

Contact Us

Big Data and Cognitive Computing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/BDCC bdcc@mdpi.com X@BDCC_MDPI