

Special Thematic Issue for “*Recent Patents in Computer Science*”

Big Data Analysis for Multi-Criteria Decision Making

Guest Editors: Dr. Akshi Kumar & Prof. MPS Bhatia

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Aim and Scope:

The recent upsurge of social web has given access to the cross-platform, cross-lingual, multi-modal user-generated big data. The pervasive use of mobile devices and sensing tools further create touch points generating a goldmine of massive data which can be analyzed and transformed to collate data pieces into value-added information. This big data now drives critical enterprise decisions defining the latest data-driven decision-making approach. Undoubtedly, big data analytics provides real-time insights, which need to be actioned upon quickly to support decision, gain better value and mitigate risk.

Decision making is the act of choosing between two or more courses of action. In every field, be it business, computing, engineering, medicine, or law, we face situations where it is required to choose the best among various alternatives available. However, there is not always a ‘correct’ decision among the available choices. There may be a better choice that has not been considered, or the right information may not have been available at the time. Thus, the decision depends on multiple criteria and it is imperative to analyze these criteria/criteria for accurate decision making. Multi-criteria decision making has significantly evolved beyond the conventional and formal methodologies, and now entails cognitive and informal processes. Informed decisions can be deduced from the complex problems with a structured way having multiple criteria. Thus, critical decisions that can maximize business impact require a precise combination of people, process and analysis tools. Pertinent research studies report prominent decision making applications such as, recommender systems, smart home applications, process automation, smart manufacturing, supply chain management, scalable intelligent system and web mining, amongst others.

The volume, variety and velocity of the data add to the challenges in multi-criteria decision making. Moreover, the incompleteness, fuzziness and uncertainty in user-generated social data makes decision making intricate and as a solution calls for advanced multi-disciplinary research and development from the fields of soft computing, data mining, artificial intelligence and computer vision. The purpose of this special issue is to comprehend theories, models and applications of big data analysis for multi-criteria decision making using machine learning, deep learning, fuzzy systems, swarm-intelligence and other applied areas of artificial intelligence. We encourage novel decision making techniques for multi-criteria problems with real-time applications using big data analytics.

Suggested Topics of Interest include, but not limited to:

- Multi-Criteria decision making
- Decision making and soft computing techniques
- Impact of decision making in enterprise management
- Optimization using decision making
- Decision making with fuzzy logic

- Decision support systems
- Multi-criteria problems in big data
- Decision making in health services
- Decision making in text, speech, visual recognition
- Decision making with deep learning
- Prediction using decision making
- Decision making and recommender systems
- Decision making and IOT for smart home applications

Submission Instructions:

Original, high-quality, visionary contributions that are not yet published or that are not currently under review by other journals or peer-reviewed conferences are sought. Papers will be peer-reviewed by independent reviewers and selected based on originality, scientific quality and relevance to this special issue. The journal editors will make final decisions about the acceptance of the papers.

A guide for authors and other relevant information for submission of manuscripts are available on the Instructions for Authors page (<https://benthamscience.com/journals/recent-patentsoncomputer-science/author-guidelines/>). Please submit your manuscripts via email to any of the one of guest editors and via JMS Control Panel.

Important Dates:

- Manuscript Submission Deadline: 20th August, 2019
- Peer Review Due: 30th September, 2019
- Revision Due: 20th October, 2019
- Announcement of Acceptance by Guest Editor: 5th November, 2019
- Final Manuscript Due: 30th November, 2019

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There is *no publication fee* for publication in the special issue.

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Scopus ,EI/Compendex , ChemWeb, Google Scholar, Genamics JournalSeek, PubsHub, J-Gate, CNKI Scholar, Suweco CZ, TOC Premier , EBSCO, Ulrich's Periodicals Directory, JournalTOCs.

Potential Contributors:

The potential contributors include researchers in academic institutions across the globe and researchers/engineers in global companies who are conducting research in related areas. We intent to attract more industrial contributors as the theme matches the growing enthusiasm among companies trying to make accurate decisions and predictions on how their business is operating. Contributions will be invited from researchers of organizations/companies that leverage the power of big data for competitive advantage within the volatile marketplace.

Guest Editor Biographies:



AKSHI KUMAR is an Assistant Professor in the Department of Computer Science & Engineering at Delhi Technological University (formerly Delhi College of Engineering). She has been with the university for the past 10 years. She has received her Ph.D. in Computer Engineering from Faculty of Technology, University of Delhi in 2011. She has presented several papers in international conferences and published work in peer-reviewed and science cited journals. Dr. Kumar has also authored a book ‘Web Technology: Theory and Practice’ published by CRC Press, Taylor and Francis Group. Her research interests are in the area of intelligent systems, web technology, soft computing and social media analytics.



MPS BHATIA is a Professor in the Department of Computer Science at Netaji Subhas University of Technology, Delhi. He has been working with the University for more than 25 years. He is the Head of Training and Placement at the university. With an expansive teaching and research profile, Prof. Bhatia has guided many masters & doctorate students. He has presented several papers in international conferences and published work in peer-reviewed and science cited journals. His research interests include but not limited to Data Mining, Cyber Analytics, Soft Computing, Social Media Analytics and Software Engineering.