Special Issue

Leveraging Al Algorithms to Enhance Healthcare Systems

Message from the Guest Editors

This Special Issue will offer a comprehensive exploration of the transformative impact of artificial intelligence on modern medicine and healthcare delivery. It aims to bridge the gap between theoretical Al concepts and practical clinical applications. Its chapters will delve into the core Al and machine learning methodologies—from neural networks to natural language processing—that are revolutionizing medical diagnostics, predictive modeling for disease outbreaks, and the development of personalized treatment protocols. Key sections will scrutinize the role of Al in interpreting complex medical imaging, accelerating drug discovery pipelines, and optimizing hospital operational workflows for enhanced efficiency and patient outcomes. Furthermore, this Special Issue will address the critical ethical, regulatory, and data privacy challenges inherent in integrating AI into clinical practice. This issue aims to equip researchers. clinicians, data scientists, and healthcare administrators with the knowledge required to navigate and harness the power of AI, ultimately fostering a new era of datadriven, patient-centric healthcare.

Guest Editors

Dr. Antonio Pesqueira

ISCTE-University Institute of Lisbon, Lisbon, Portugal

Dr. Andreia De Bem Machado

Engineering and Knowledge Management Department, Federal University of Santa Catarina (UFSC), Florianópolis 88040-900, Brazil

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Systems
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
systems@mdpi.com

mdpi.com/journal/ systems





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Message from the Editor-in-Chief

Systems is a leading venue for the quick and global dissemination of results of cutting-edge research in various areas of systems science and systems-related fields. An increasing number of researchers are realizing the enormous potential of systems thinking in managing the many unprecedented and complex issues in all areas of need. The Systems journal provides a home of exceptional quality for the manuscripts of these researchers who often find it difficult to publish their work in conventional discipline focused journals.

Editor-in-Chief

Prof. Dr. Ben Clegg

Operations & Service Management Department, Aston Business School, Aston University, Birmingham B4 7ET, UK

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