Special Issue

Computational Perspectives on Artificial Intelligence Drive in Medical Decision-Making

Message from the Guest Editors

We invite authors to submit contributions on the following themes:

- AI-driven clinical decision support systems;
- Machine learning models for medical diagnosis and prognosis;
- Explainable AI (XAI) in healthcare decision-making;
- Deep learning applications in medical imaging and radiology;
- Data-driven predictive modelling for patient outcomes;
- Natural language processing in medical records and diagnostics;
- Bias, fairness, and ethics in AI-driven medical decisions;
- Federated learning and privacy-preserving AI in healthcare;
- Integration of AI with electronic health records (EHR);
- AI and patient-centred healthcare;
- AI ethical and operational challenges;
- AI-based antibiotic stewardship;
- AI healthcare management;
- Digital and virtual twins in healthcare.

The potential of AI tools for improving clinical operations, enhancing patient care, leveraging cost efficiencies, and facilitating rapid response mechanisms within the healthcare system is substantial. A non-exhaustive list of application-based areas of interest for this Special Issue includes computer science, biomedical sciences, engineering, business and economics, finance, and economic and social sciences.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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