Special Issue

Big Data Integration and Artificial Intelligence in Medical Systems

Message from the Guest Editors

This Special Issue aims to highlight the most recent advances in medical system intelligence through the integration of heterogeneous medical data and state-ofthe-art computational methods. We particularly encourage submissions that address the challenges in multi-modal data fusion, machine learning models for disease detection and decision support, real-time monitoring solutions, and interpretable Al in clinical settings. Articles that present applications of deep learning, federated learning, generative models, and privacy-aware computation to medical tasks—especially those with validated impact on the healthcare deliveryare highly welcomed. We also encourage the use and creation of open-access datasets and reproducible benchmarks that advance collaborative research in Alenabled medical systems. The ultimate objective is to deepen our understanding of current capabilities and future opportunities in building intelligent, interoperable, and trustworthy healthcare solutions.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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