Special Issue

Machine Learning in Chronic Diseases

Message from the Guest Editors

Chronic diseases, such as diabetes, cardiovascular disease, cancer, and dementia, are on the rise, posing a significant global health burden. These conditions are increasingly prevalent, complex, and costly to manage, straining healthcare systems worldwide.

Machine learning (ML) and artificial intelligence (AI) offer promising solutions to these challenges. In primary care, ML can revolutionize disease prevention and detection, enabling personalized health monitoring and efficient resource allocation. In secondary care, ML can enhance diagnostic accuracy, optimize treatment plans, predict patient outcomes, and support complex clinical decision-making. However, realizing the full potential of ML in healthcare is challenging.

This Special Issue invites researchers to contribute innovative studies that explore the application of ML in various aspects of chronic disease management. We welcome submissions that address the following:
Early detection and risk stratification;
Patient monitoring and personalized care;
System-wide optimization and resource allocation;
Ethical considerations and fairness in ML applications;
Integration of ML into real-world healthcare workflows.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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