

## Special Issue

# Artificial Intelligence for Pediatric Monitoring, Diagnosis, and Treatment

### Message from the Guest Editors

The term “artificial intelligence” (AI) refers to the general ability of computing algorithms to emulate human decision-making, while machine learning (ML) is a subdivision of AI. Over recent decades, both have deeply influenced personalized diagnostics and therapeutics, drug discovery, and medical imaging. These approaches have the potential to significantly improve our understanding of diseases and of therapeutic efficacy in both children and infants. Neonatal AI applications involve neuromonitoring, prediction of respiratory conditions such as respiratory distress syndrome, chronic lung disease, sepsis, and more. Pediatric AI applications include analysis of medical imaging to improve the diagnosis of an array of conditions, and prediction of infections and chemotherapy-induced complications.

In this Special Issue, we invite submissions exploring cutting-edge research and recent advances in the field of artificial Intelligence for pediatric monitoring, diagnosis and treatment, encompassing both theoretical and experimental studies, as well as reviews and articles.

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### Guest Editors

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### Deadline for manuscript submissions

20 August 2025



## Applied Sciences

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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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### Editor-in-Chief

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