Artificial Intelligence in Health

Artificial intelligence for diagnosing brain diseases

SPECIAL ISSUE
CALL
FOR
PAPERS

Submission deadline:
December 31, 2024

AIMS & SCOPE

Artificial intelligence (AI) is a state-of-the-art computational tool employed to analyze big data in biomedicine. Recently, it has gained popularity in neuroscience due to its ability to recognize hidden patterns and nonlinear relations in large amounts of nonstationary and ambiguous neuroimaging data. AI-based methods are of particular importance in the medical diagnosis of neurological diseases, where machine learning is a powerful tool for the early detection of biomarkers of various neurological disorders. In the latter case, the methods and approaches of explainable artificial intelligence (XAI), which is extremely important for modern digital medicine, are beginning to play a significant role. The role of AI is a very big in modern digital medicine and the discussion of these issues is very important both in the medical environment and among engineers and programmers.

This Special Issue aims to attract high-quality research studies and reviews from scholars, professors, researchers and engineers that advance the application of state-of-the-art artificial intelligence concepts in brain disease diagnostic systems. Potential topics will include, but are not limited to:

- Explainable AI (XAI) and deep learning in neuroscience;
- Neuroimaging data processing;
- Brain images analysis and diagnostics;
- Neurological signals processing;
- AI-based methods for the diagnostics and analysis of brain functional networks;
- AI-based intelligence systems for rehabilitation;
- Data analytics and mining for neurological disease diagnostics.
- AI-based medical expert systems in neurophysiology

KEYWORDS

► Artificial intelligence
► Mmachine learning
► Neurological diseases

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Guest Editor

Professor Alexander Hramov
Baltic Center for Artificial Intelligence and Neurotechnology, Immanuel Kant Baltic Federal University, Kaliningrad, Russia
Interests: Nonlinear Dynamics; Neuroscience; Wavelets; Intelligent Systems; Synchronization