ARTIFICIAL INTELLIGENCE IN MEDICINE

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DESCRIPTION

Artificial Intelligence in Medicine publishes original articles from a wide variety of interdisciplinary perspectives concerning the theory and practice of artificial intelligence (AI) in medicine, medically-oriented human biology, and health care.

Artificial intelligence in medicine may be characterized as the scientific discipline pertaining to research studies, projects, and applications that aim at supporting decision-based medical tasks through knowledge- and/or data-intensive computer-based solutions that ultimately support and improve the performance of a human care provider.

Artificial Intelligence in Medicine considers for publication manuscripts that have both:
• Potential high impact in some medical or healthcare domain;
• Strong novelty of method and theory related to AI and computer science techniques.

Artificial Intelligence in Medicine papers must refer to real-world medical domains, considered and discussed at the proper depth, from both the technical and the medical points of view. The inclusion of a clinical assessment of the usefulness and potential impact of the submitted work is strongly recommended.

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Following the information explosion brought by the diffusion of Internet, social networks, cloud computing, and big-data platforms, Artificial Intelligence in Medicine has broadened its perspective. Particular attention is given to novel research work pertaining to:

AI-based clinical decision making; Medical knowledge engineering; Knowledge-based and agent-based systems; Computational intelligence in bio- and clinical medicine; Intelligent and process-aware information systems in healthcare and medicine; Natural language processing in medicine;
Data analytics and mining for biomedical decision support; New computational platforms and models for biomedicine; Intelligent exploitation of heterogeneous data sources aimed at supporting decision-based and data-intensive clinical tasks; Intelligent devices and instruments; Automated reasoning and meta-reasoning in medicine; Machine learning in medicine, medically-oriented human biology, and healthcare; AI and data science in medicine, medically-oriented human biology, and healthcare; AI-based modeling and management of healthcare pathways and clinical guidelines; Models and systems for AI-based population health; AI in medical and healthcare education; Methodological, philosophical, ethical, and social issues of AI in healthcare, medically-oriented human biology, and medicine.

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