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## Call for Papers

Special Issue on “Artificial Intelligence-Driven Decision  
Making in Health and Medicine”

Guest Editors

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Artificial Intelligence (AI) refers to an interdisciplinary area which embraces computer science, robotics, engineering, mathematics, and statistics, and is largely based on the ability of a machine to learn from experience, to simulate the human intelligence, to adapt to new scenarios, and to perform human-like activities.

AI has revolutionized and disrupted many areas and sectors, and it is playing an ever-growing critical role in business, science, and society. It is well recognized by experts that AI will be outperforming humans on most cognitive tasks within this century, as well disrupt more than any previous technological revolution.

The expression “AI-Driven Decision Making” refers to any AI technology, method, or algorithm that can support the decision-making process in a domain. AI technologies and models can compete and sometimes surpass human clinician performance in a variety of tasks and support the decision-making process in multiple medical domains.

The *International Transactions in Operational Research* (ITOR) will publish a special issue to promote the development of AI-Driven Decision Making in Health and Medicine. Topics of interest include (but are not limited to): pattern recognition in medical images, telemedicine, natural language processing for clinical documentation, cancer screening, precision medicine, robot surgeries, virtual nursing assistant, genomic analysis, personalized treatment protocols, and operations of medical institutions.

This special issue will especially focus on relevant AI applications to healthcare and medicine. It aims at shedding light on the use of AI techniques and models to search and analyse medical data, to discover insights, to uncover hidden patterns, and to help with the decision-making process, the patient-doctor interaction, the health outcome, the medical diagnosis, and the overall patient experience.

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The special issue is open to submissions from any researcher or practitioner working in these fields and we strongly encourage contributions from the entire scientific and industrial community. The deadline for submissions is July 31, 2023. Each paper will be peer-reviewed according to the editorial policy of the *International Transactions in Operational Research*, published by the *International Federation of Operational Research Societies* (IFORS). Papers should be original, unpublished, and not currently under consideration for publication elsewhere. Contributions should be prepared according to the instructions to authors that can be found on the journal homepage. Authors should upload their contributions using the submission site <http://mc.manuscriptcentral.com/itor>, indicating in their cover letter that the paper is intended for this special issue. Other inquiries should be sent directly to Davide La Torre ([davide.latorre@skema.edu](mailto:davide.latorre@skema.edu)).