

Special Issue

Artificial Intelligence in Modeling and Simulation

Message from the Guest Editors

Modeling and simulation (M&S), through continuous, discrete-event, agent-based, among other approaches, aims to describe different aspects of a real system. It avoids actual experimentation, which can be costly, time-consuming, or even impossible, as in the case of inaccessible systems, systems with uncontrollable factors, or systems which are still being designed. This Special Issue aims to investigate the relationship between AI and M&S from perspectives such as: 1) the use of AI techniques, such as machine learning and computational intelligence algorithms, in applications of M&S to different systems; 2) the use of AI for implementing and optimizing simulation models, with special focus on verification and validation; 3) AI-driven creation of metamodels from agent-based and other computationally costly models; and 4) how simulation models or model-generated synthetic data drive machine learning. We invite researchers to submit papers on the topic, from all viewpoints, including theoretical issues, algorithms, and systems, as well as academic and industrial applications in all areas of knowledge.

Guest Editors

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Deadline for manuscript submissions

closed (31 March 2024)



Algorithms

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Algorithms

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About the Journal

Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

Editor-in-Chief

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