Special Issue

Discrete Event Dynamic Systems and Applications

Message from the Guest Editors

In recent years, cyber–physical systems have been widely used in the fields of intelligent manufacturing, power systems, logistics management, healthcare systems, robotics and computer communication networks. At a certain technical abstraction level, these systems have the characteristics of networked discrete event dynamic systems (DEDSs). Under the formal framework, studying cyber–physical systems from the perspective of networked DEDSs is the key means to solve their technical application problems. Such systems are usually constructed and operated in a distributed mode with communication networks. The use of communication networks enhances the capability and intelligence of DEDS information processing; on the other hand, it increases the risk of the system facing external cyber attacks. This Special Issue aims to collect the latest advances in modeling (such as automata, timed automata, probabilistic automata, Petri nets, Markov models, Queues, max-plus algebras), security analysis, control and optimization, performance evaluation, and applications of DEDSs. Interested authors are welcome to share their academic results and practical experiences in the field.

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Deadline for manuscript submissions

31 December 2025

About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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