

Special Issue

Modeling and Control of Discrete Event Systems

Message from the Guest Editors

This Special Issue aims to spotlight novel theoretical developments and practical methodologies that enhance cybersecurity and AI-driven applications in modeling and that control discrete event systems. We welcome contributions on advanced techniques for attack detection and mitigation, observation-based property verification methods under adversarial conditions, and strategies for intelligent decision-making. By bringing together academia and industry, this Special Issue seeks to foster interdisciplinary collaboration and drive innovation in building more resilient, adaptive, and efficient event-driven systems. Sub-topics include, but are not limited to, the following:

- Petri net modeling and analysis;
- Automata modeling and analysis;
- Attack detection and mitigation strategies;
- Formal verification and supervisory control for security;
- AI-driven approaches for dynamic optimization and control;
- Applications in cyber-physical systems;
- Integration of AI algorithms and security protocols in real-world systems.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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