

Special Issue

Complex System Modeling and Intelligent Control in Uncertain Environments

Message from the Guest Editor

We invite contributions on theories, algorithms, and real-world implementations that bridge complex system modeling with intelligent control under uncertainty. Submissions may cover uncertainty quantification in complex system modeling, learning-based control optimization, or interdisciplinary applications demonstrating robustness in uncertain environments. This research topic focuses on uncertainty-aware modeling and intelligent control in complex systems, leveraging methodologies such as: (1) uncertainty representation with fuzzy sets, rough sets, Dempster–Shafer theory, and/or probabilistic graphical models. (2) Machine learning for control with reinforcement learning, deep neural networks, and/or transfer learning for adaptive system behavior. (3) Fusion and decision-making with Bayesian inference, Kalman filtering, and/or Dempster evidence-based fusion rules to integrate heterogeneous data. (4) Applications in resilient power systems, autonomous vehicles, and/or biomedical engineering.

Guest Editor

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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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