



Advances in Stochastic System Modeling, Control, Optimization, and Their Applications

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Message from the Guest Editors

Dear Colleagues,

Control system design is the core component for the automation of many industrial processes. Data-based stochastic system analysis is an important statistical approach to reflect the properties of the stochastic systems where the dynamics of the systems are reflected by the dynamical dataset. Using the collected data, system modeling can be achieved considering random variables. Therefore, stochastic system research is generalized from the point of view of data, which enriches the potential practical applications of stochastic systems in the near future.

The main aim of this Special Issue is to seek high-quality submissions that highlight recent advances in stochastic system theory and the related applications. The topics of interest include but are not limited to:

- Stochastic system modeling, simulation, and analysis;
- Stochastic nonlinear system control and stabilization;
- Stochastic distribution control and optimization;
- Nonlinear filtering and non-Gaussian filtering;
- Stochastic system condition monitoring, fault diagnosis, and tolerant control;
- Data-driven stochastic system design and analysis;
- Applications of stochastic system design.





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Message from the Editor-in-Chief

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