



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

Guest Editors:

Dr. Qichun Zhang

Department of Computer
Science, University of Bradford,
Bradford BD7 1DP, UK

Dr. Zhan Shu

Electrical and Computer
Engineering Department,
University of Alberta, Edmonton,
AB T6G 2H5, Canada

Deadline for manuscript
submissions:

closed (15 October 2022)

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.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Electrical and Electronic Engineering*) CiteScore - Q2 (*Electrical and Electronic Engineering*)

Contact Us

Electronics Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://twitter.com/electronicsMDPI)