Special Issue

Model-Based Systems Engineering in Complex Systems

Message from the Guest Editor

Complex engineered systems include goal-oriented large-scale systems such as aircraft, automobiles, power grids, communication networks, and manufacturing plants. They are designed and built to perform specific functions or achieve specific goals. Designing, analysing, and managing complex engineered systems present unique challenges due to their size, complexity, and interactions between components. Systems engineering principles are amongst various tools and techniques, such as modelling and simulation, that are commonly used to address these challenges and ensure the successful operation of complex engineered systems. Model-based systems engineering (MBSE) is a methodology that uses descriptive modelling to support the design, analysis, and management of complex systems. It offers numerous benefits, including improved system understanding, the early detection of design issues, and enhanced collaboration among stakeholders. This Special Issue aims to present systematic approaches to adopting MBSE in the development of complex systems.

Guest Editor

Dr. Mahmoud Efatmaneshnik
Master of Systems Engineering Program, University of South Australia, Adelaide, SA 5000, Australia

Deadline for manuscript submissions

closed (30 October 2024)

Systems

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.1

mdpi.com/si/201763

Systems
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
systems@mdpi.com

mdpi.com/journal/systems

Systems

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.1

mdpi.com/journal/systems

About the Journal

Message from the Editor-in-Chief

Systems is a leading venue for the quick and global dissemination of results of cutting-edge research in various areas of systems science and systems-related fields. An increasing number of researchers are realizing the enormous potential of systems thinking in managing the many unprecedented and complex issues in all areas of need. The *Systems* journal provides a home of exceptional quality for the manuscripts of these researchers who often find it difficult to publish their work in conventional discipline focused journals.

Editor-in-Chief

Prof. Dr. Ben Clegg
Operations & Service Management Department, Aston Business School, Aston University, Birmingham B4 7ET, UK

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SSCI (Web of Science), Ei Compendex, dblp, and other databases.

Journal Rank:

JCR - Q1 (Social Sciences, Interdisciplinary) / CiteScore - Q2 (Modeling and Simulation)