Call for Proposals

Journal of Defense Modeling and Simulation: Applications, Methodology, Technology (JDMS)

Special Issue: Modeling and Simulation in Graduate Military Education (J20-7)

Guest Editors
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Introduction
Military organizations often use Modeling and Simulation (M&S) in support of planning and operations for a wide variety of purposes. Typically, one or more physical, mathematical, or logical representations are used to model real-world systems, processes, or phenomena in support of tactical, operational, or strategic decision making. These technical models are parameterized, to the detail necessary, to enable the study of a systems dynamics under a wide variety of different conditions. A primary benefit of simulation is that it enables the detailed study of complex systems without costly and time-consuming experiments. M&S leverages computational power to study and solve real-world problems inexpensively and in a time efficient manner. M&S facilitates the understanding of a system's behavior without the need for experimentation in the real world and provides several distinct advantages such as reduced costs, increased quality of developed systems, the ability to investigate and mimic system failures, improved operational documentation, and the ability to develop educational and illustrative representations of lessons learned during system operation. However, practical models are simple ideal abstractions of a real system and, as such, it has been said that “All models are wrong, but some are useful.” M&S users must recognize that the results generated by simulation are only as good as the underlying models, assumptions, conceptualizations, and constraints.

In this special issue of JDMS, we explore a variety of technical disciplines that make use of modeling and simulation within military graduate education to provide students a robust environment to explore real-world phenomena. We invite technical tutorials, literature reviews, applications, decision making scenarios, and other activities that use modeling and simulation. Potential contributions can include, but are not limited to:

- Modeling and simulation of any technical discipline
- Software engineering analysis
- Software architecture of modeling and simulation solutions and frameworks
- Failure model analysis
- Development models
- How to identify best practices in modeling and simulation
- Practical examples of modeling and simulation
- How to most effectively communicate simulation results
- Methodologies for developing efficient modeling and simulation environments
- Evaluating tradeoffs using modeling and simulation
- Applied uses of data generated through simulation

Papers submitted should not be concurrently under review at another conference, journal, or similar venue.
Instructions for Manuscript Preparation

For manuscript formatting and other guidelines, please visit the Author Guidelines for JDMS.

Note: Manuscripts must not have been previously published or be submitted for publication elsewhere. Each submitted manuscript must include title, names, authors’ affiliations, postal and e-mail addresses, and a list of keywords. For multiple author submission, please identify the corresponding author.

Due Dates

Submission of papers        Spring 2021
Expected date of publication Winter 2022

Submissions for full paper review

All manuscripts must be submitted electronically through the paper submission system to the JDMS Manuscript Submission System. In the title page, author(s) must specifically mark that the paper is intended for this special issue as follows: "Submission for the Special Issue of JDMS: Modeling and Simulation in Graduate Military Education (J20-X).

Please follow the guidelines for submission on the Manuscript Central site.

Final paper submissions

Each final submission must be prepared based on the JDMS journal requirements (see the Author Guidelines for JDMS page).

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