Advanced and distributed simulation systems play an increasingly important role for a wide set of disciplines. The research in this field covers both traditional aspects related to the construction of high performance simulation environments, as well as more recent trends related to the interoperability of simulation packages, virtual environments, symbiotic simulation and semantic composability of simulation models. Significant results in this field typically require a twofold research effort on the side of both methodological innovations and design/development techniques.

This special issue will highlight innovative results on the Principles of Advanced and Distributed Simulation. Submissions for the special issue should focus on aspects spanning from theory to practice in relation to the construction of advanced and distributed simulation systems. Specific topics of interest include, but are not limited to:

- Construction of simulation engines using advanced computer science technology.
- Techniques for constructing scalable simulations.
- Advanced modeling techniques that allow solution of previously difficult or impossible problem domains.
- Simulation visualization techniques.
- Algorithms and methods for parallel or distributed simulation, including synchronization, scheduling, memory management, and load balancing.
- Applications of large-scale or distributed simulation methods.
- Distributed interactive simulation and distributed virtual environments.
- Tools and techniques for interoperability of simulations, and emulations of real systems.
- Mechanisms for efficient design of experiments.

Instructions for Manuscript Preparation

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

Submissions for Full Paper Review

All manuscripts must be submitted electronically through the paper submission system to the SIMULATION Manuscript Submission System. Please note in your online cover letter the special issue for which your submission is intended.

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, an extended paper, and a list of keywords. For multiple author submission, please identify the corresponding author.

Due Dates

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Final Paper Submissions

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

Guest Editors: