DESCRIPTION

The journal Simulation Modelling Practice and Theory provides a forum for original, high-quality papers dealing with any aspect of systems simulation and modelling.

The journal aims at being a reference and a powerful tool to all those professionally active and/or interested in the methods and applications of simulation. Submitted papers will be peer reviewed and must significantly contribute to modelling and simulation in general or use modelling and simulation in application areas.

Paper submission is solicited on:

- theoretical aspects of modelling and simulation including formal modelling, model-checking, random number generators, sensitivity analysis, variance reduction techniques, experimental design, meta-modelling, methods and algorithms for validation and verification, selection and comparison procedures etc.;

- methodology and application of modelling and simulation in any area, including computer systems, networks, real-time and embedded systems, mobile and intelligent agents, manufacturing and transportation systems, management, engineering, biomedical engineering, economics, ecology and environment, education, transaction handling, etc.;

- simulation languages and environments including those, specific to distributed computing, grid computing, high performance computers or computer networks, etc.;

- distributed and real-time simulation, simulation interoperability;

- tools for high performance computing simulation, including dedicated architectures and parallel computing.

Papers covering applications should be presented in such a way that the separate steps in the process, such as model development, computer implementation of the derived model, mathematical and scalability problems encountered and validation/verification with real data become transparent to all readers.

Theory may play an important role in a paper, but it should be presented in the context of its applicability to the work being described. For application-oriented readers it is essential that
theoretical papers should cover the following aspects: why the theory is relevant and how it can be applied, what is the novelty of the approach and what are the benefits and objectives of a new theory, method or algorithm; what experience has been obtained in applying the approach and what innovations did result.

(Variations from these prototypes, such as comprehensive surveys of active research areas, critical reviews of existing work, and book reviews, will be considered provided they make a clear contribution to the field.)

Special issues on specific topics will be published from time to time; proposals for such issues are invited.

AUDIENCE

Users of Systems Simulation, Academics, System Designers and Managers in industrial and commercial companies, software houses, simulator manufacturers and universities.

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