



The 2nd EAI International Conference on Future Intelligent Vehicular Technologies
OCTOBER 17–19, 2017 | ISLAMABAD, PAKISTAN

Call for Papers

Special Session: Modeling & Simulation and High Performance Scientific Computing

Outline:

Introduction: Modeling and Simulation, or M & S as it is commonly referred, is becoming one of the academic programs of choice for students in all disciplines. M & S is a discipline with its own body of knowledge, theory, and research methodology. At the core of the discipline is the fundamental notion that models are approximations for the real - world. To engage M & S, students must first create a model approximating an event. The model is then followed by simulation, which allows for the repeated observation of the model. After one or many simulations of the model, a third step takes place and that is analysis. Analysis aids in the ability to draw conclusions, verify and validate the research, and make recommendations based on various iterations or simulations of the model. These basic precepts coupled with visualization, the ability to represent data as a way to interface with the model, make M & S a problem - based discipline that allows for repeated testing of a hypothesis. M & S also serves as a tool or application that expands the ability to analyze and communicate new research or findings. The area of High Performance Scientific Computing is closely linked with M & S for treating large complex systems.

Topics:

Topics include but are not limited to:

- Agent-based modelling & Simulation
- Parallel and distributed simulations
- GPU/multi-core/many-core based frameworks
- Verification and validation of M&S
- Multi-agent systems
- System Dynamic Problems
- Cellular Automaton Based Simulations
- Agent in games and virtual environments
- Soft Computing Applied to Modeling and Simulation
- Discrete Event Simulation Models
- Queuing Theory
- Applications of Scientific Computing
- Finite Formulation Approaches
- Numerical Approaches for Continuous Simulations
- Monte Carlo Simulations
- Soft Computing Applied to M&S

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Important Dates: Full Paper Submission deadline: **1 June 2017**
Notification deadline: **31 July 2017**
Camera-ready deadline: **31 August 2017**



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