Special Track on
“Modeling and Simulation Frameworks (CSC‘15)”

The 13th International Conference on Scientific Computing (CSC’15)
July 27-30, 2015, Las Vegas, USA
http://www.world-academy-of-science.org/worldcomp15/ws/conferences/csc15

The goal of this track is to provide a forum where researchers and practitioners can present research, tools, techniques, solutions, and best practices related to the software engineering aspects of designing modeling and simulation frameworks that facilitate the development of simulation applications. In recent years, modeling and simulation frameworks have emerged as a software engineering approach to define common infrastructure to support the development of different simulation applications (solutions). Simulation frameworks promote a ‘product line’ approach to software development whereby the framework abstracts and defines common functionality associated with the end products. Typical examples include the definition of discrete-event, time advance mechanisms, class structures to support the creation or composition of hierarchical system models, integrated development environments, input/configuration languages to define scenarios of interest, and possibly data collection and even analysis features.

In this track, we seek submissions related all aspects of simulation framework design in the software engineering context. We encourage submissions from the academic, commercial, industrial, and military communities. Topics of interest include (but are not limited to):

- Design patterns
- Component-based architectures
- Discrete-event and time advance mechanisms
- Domain specific languages (DSLs)
- Integrated development environments
- Efficient data collection methods
- Simulation product line requirements definition and collection
- Object-oriented vs functional programming concepts
- Visual presentation of scenario definition and execution

Submission Guidelines:
Prospective authors are invited to submit their draft paper (5-7 pages, single space, Times Roman font size of 10 to 12) using the Easy Chair web site: https://www.easychair.org/conferences/?conf=stmsf15. All papers will be peer reviewed. If accepted, at least one of the authors must attend the conference for the paper to be included in the proceedings. The first page of the draft paper should include:

- The title of the paper
- Name, affiliation, postal address, E-mail address, and telephone number for each author
- The name of the author who will be presenting the paper (if accepted) and a maximum of 5 keywords

Authors of accepted papers will be provided instructions on how to submit their Camera-Ready papers (in MS Word or PDF format) to the conference website. Papers must conform to IEEE style guidelines.

Important Dates:
Camera Ready Paper Due May 15, 2015 Author Registration May 15, 2015

Session Chair:
Chair: Douglas D. Hodson
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