

2001 SUMMER COMPUTER SIMULATION CONFERENCE



Come share in the maturation of the Modeling and Simulation Profession, Industry and Marketplace.

The theme for this year's conference is:

Making Simulation Work!

SCSC 2001 addresses the maturation of the industry and the rapidly growing capability to develop and use modeling and simulation in a wide range of application domains.

OBJECTIVE

This year's Summer Computer Simulation Conference (SCSC 2001) manifests the commitment of the Society for Computer Simulation (SCS) to the successful *growth of the entire simulation community*. Modeling and Simulation stand on the threshold of a new era - when the practice of simulation will be recognized as a specialized discipline; the coherent and systematic application of simulation to a wide variety of problem domains will be widely appreciated; and the business and professional practice of modeling and simulation will be broadly shared.

The SCSC 2001 will particularly address those topics which define the necessary and sufficient conditions for the *'precipitation' of the next generation of the simulation profession, ...the simulation industry, ...and the simulation marketplace*.

SCOPE

Several topical perspectives will serve to illuminate the integrative evolution of the modeling and simulation community. Facets selected for emphasis at the SCSC 2001 include the following:

Simulation Development Technology - This topical perspective encompasses the fundamental tools, techniques, and competencies which define modeling and simulation. Particular attention will be paid to standards and other such technical enablers which exhibit power and universality of application, and to those technologies which support activities which are ubiquitous to the simulation industry such as conceptual modeling, simulation implementation and qualification (VV&A), and simulation execution exercise.

Simulation Application - The application of modeling and simulation over a wide range of target domains will be addressed in order to reduce those elements of M&S practice which are universally relevant and therefore re-usable among alternative application domains. Participants may appreciate the lateral and longitudinal comparisons of simulation applications as well as the details of a variety of innovative application instances.

Simulation Industry and Business Practice - The professional and business practice of modeling and simulation will be addressed in order to identify best practices and to consider how a consistent body of professional practice may be established. This perspective includes consideration of: the establishment of professional standing for simulation practitioners; the identification of appropriate education of simulation professionals; and the establishment of a shared appreciation of the economics of modeling and simulation and of the structure and operation of M&S enterprise and markets.

PARTICIPATION

Papers and panelists from a wide range of application domains are particularly solicited. Participation by diverse simulation communities is expected to heighten awareness at the meeting of the significant similarities and differences which characterize modeling and simulation technology and practice within the industry. By sampling generously across the industry, we expect to discover those topics which are most generally important and which best admit to inter-domain collaboration.

MEETING CONTENTS

Invited Speakers will provide senior executives' views of the evolving simulation landscape. **Paper Sessions** will report practitioners' progress in addressing issues of general concern. **Panels** will provide cross-domain review of selected issues. **Workshop Sessions** will provide a structured, moderated venue for the collegial investigation of topics admitting to subsequent ACTION. **Exhibits** will afford vendors and users of simulation products and services the opportunity to demonstrate their wares and capabilities. **Tutorials** provided in conjunction with the Conference will cover broadly relevant topics from the areas of Simulation Technology, Simulation Application, and Simulation Industry and Business Practice. Additionally, a **Student Paper** competition will take place at the 2001 SCSC.

SPECIAL EVENTS

Special Events will accompany the usual technical program at the SCSC 2001. Selected from candidate topics solicited and/or volunteered from areas of particular and immediate interest within the M&S industry, these **Special Events** will augment the formal Technical Program, Tutorials, and Invited Speakers. Consisting of status briefings and working meetings, arranged with particular deference to the nominating constituency, and scheduled to complement the traditional Program; **Special Events** are being considered on topics including: 'VV&A State-of-the-art', 'Educational Curricula for the Simulation Professional', 'Certification for Simulation Professionals', 'Simulation and Testing', 'The Role of Simulation in the Medical Sciences', and 'Simulation and the World-Wide-Web', among others. If you are interested in any of these topics or wish to nominate topics of special interest from your own constituency or organization, please contact the Meeting Administrator, Charlotte Sallas CSallas@AEgisTG.com.

REQUIREMENTS & DEADLINES

ELECTRONIC SUBMISSION PROCESS—Abstracts or other proposals should be **submitted as a PDF file to the SCSC 2001 Manuscript Central site <http://scsc2001.manuscriptcentral.com/> by March 31, 2001.** Papers received after this date will be considered as long as time and program space permit. Each abstract must include the title of the proposed paper, with a short summary (400-900 words), so that it may be properly positioned in the conference. Please indicate which conference topic is most appropriate, first and second choices. **Notifications of acceptance status will be sent on or about April 15, 2001.**

Please note that your **final manuscript will need to also be electronically submitted as a PDF file to the SCSC 2001 Manuscript Central site <http://scsc2001.manuscriptcentral.com/> no later than June 1, 2001** to guarantee inclusion in the conference CD-ROM and final program schedule. Additionally, if you have changed the title, contributing authors and/or content of your abstract as originally submitted, you will want to update this information at this time for an accurate listing in the SCSC 2001 book of abstracts that will be distributed at the conference.

Authors of accepted papers are expected to attend the conference, present their work to their peers, transfer copyright, and pay a conference registration fee at the time of their camera-ready paper. **Particular application domains of interest include but are not limited to:**

- Aerospace
- Chemicals
- Commerce
- Communications
- Construction
- Economics of M&S
- Electronics
- Engineering
- Entertainment
- Environmental
- Government
- Hydraulics
- Industrial Design
- Materials
- Medical / Pharmaceutical
- Military and Para-Military
- Mining and Geologic
- Mechatronics
- Oceanographic and Atmospheric
- Optics
- Organization Design
- Petroleum
- Power
- Semiconductor
- Service Operations
- Transportation

Make the Summer
Computer Simulation
Conference your
opportunity to influence
the future of Modeling
and Simulation!



SCSC 2001 POINTS OF CONTACT

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PROVISIONAL TECHNICAL PROGRAM

SIMULATION DEVELOPMENT TECHNOLOGY

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Bob Lutz, Robert.Lutz@jhuapl.edu
Simulation System Life-Cycle Evolution
Controlling and Understanding Simulation Significance
Representation of Synthetic Environments

SIMULATION APPLICATION

Application Domains Synopsis
Simulation Based System Engineering
Military Systems Simulation: Jake Borah, jborah@aegistg.com
Modeling and Simulation in Human Factors Engineering:
Ling Rothrock, lrothroc@cs.wright.edu
Transportation, Marine, and Automotive Applications
Medical and Pharmaceutical Applications
Science and Engineering
Organizational & Enterprise Simulation: Joseph Barjis, J.Barjis@is.twi.tudelft.nl

SIMULATION INDUSTRY AND BUSINESS PRACTICES

Educating the Simulation Professional: Hessem Sarjoughian, hessem@ece.arizona.edu, Hank Okraski, okraskih@prodigy.net, Vince Amico, amico@cs.ucf.edu
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Influences of Communications & Media
Economics of Modeling and Simulation