

2023 CALL FOR PRESENTATIONS

SUSTAINING A GLOBAL FORCE IN A DIGITAL WORLD



27 NOVEMBER – 1 DECEMBER 2023

Orange County Convention Center
Orlando, Florida USA

ORGANIZED BY

National Training and Simulation Association
an affiliate of
National Defense Industrial Association

THE CALL

The innovations and technologies presented annually at I/ITSEC have great potential to support our nation's warfighters and the service men and women of our international partners. In addition to the vast show floor, which highlights the best of our industry's leading-edge technical developments, I/ITSEC provides an opportunity for the global modeling and simulation community to come together and collaborate. The conference offers many venues for attendees to engage such as technical paper presentations, special events, tutorials and professional development workshops. Through these avenues, members from government, industry, and academia can discuss our most pressing challenges and how to go about solving them.

This year's theme: "Sustaining a Global Force in a Digital World" directs our community to consider how to be a human in digital environments, and how digital technologies can support global military readiness. Advancements in digital engineering, data science, extended reality, and evaluation and assessment methods provide a means to create effective and sustainable solutions for an uncertain future. We have the chance to understand how these digital advancements can improve future designs for training systems, training engagements, and methods used to verify and validate them. We are also challenged to view sustainability from the multi-domain operational environment, and how disruptive technologies can deliver a future capability today. Overall, these technologies can help us to recruit, train, and sustain a strong military in a future of uncertain threats.

We therefore call on those from modeling & simulation, training, education, and acquisition communities to contribute to the I/ITSEC 2023 program by submitting an abstract to one of the program elements listed below. Your contributions are a vital element of this conference—we look forward to hearing your best ideas and thank you for your contributions.

ELIOT WINER, PH.D.
2023 Conference Chair

ANNE LITTLE, PH.D.
2023 Program Chair

IMPORTANT DATES

Instructions for each step will be posted at least two weeks before the process opens.

16 JAN – 5 MARCH	Abstract, Tutorial, Workshop Portal Open
7 APRIL	Authors Notified of Abstract/Tutorial Review Results
10 APRIL – 25 JUNE	Paper Submissions
10 APRIL – 25 JUNE	Tutorial/Workshop Draft Submissions
10 JULY	Clearance Forms Due
NLT 28 JULY	Authors notified of submission review results
4 AUGUST	Submission Updates in Portal for Print Program
7 AUG – 24 SEPT	All Final Presentation Submissions
27 NOV – 1 DEC	I/ITSEC 2023

THE CONFERENCE

The Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) is the world's largest modeling, simulation and training event. Held near the beginning of December in Orlando, Florida, USA, I/ITSEC consists of peer-reviewed paper presentations, tutorials, special events, professional development workshops, a commercial exhibit hall, a serious games competition, and STEM events for teachers and secondary students. I/ITSEC is organized by the National Training and Simulation Association (NTSA), which promotes international and interdisciplinary cooperation within the fields of modeling and simulation (M&S), training, education, analysis, and related disciplines at this annual meeting. The NTSA is an affiliate subsidiary of the National Defense Industrial Association (NDIA). Hence, I/ITSEC also emphasizes themes related to defense and security.

I/ITSEC is an annual forum for representatives from the military, industry and academia to connect and share knowledge. The conference draws 16,000 attendees from industry, government and academia, and features over 450 exhibits. The United States Army will serve as the lead service for I/ITSEC 2023 in partnership with all military services.

PAPERS

The I/ITSEC 2023 Conference Committee invites you to submit previously unpublished work and especially encourages original papers that align with the theme and concepts described in The Call. Prospective authors are encouraged to read through the Subcommittee descriptions (see next page) and submit abstracts for papers that discuss the core research our industry will use to prepare the global force for the digital world. All paper presentations will be offered for Continuing Education Units (CEUs).

PAPER PROCESS

The complete three-stage process for submitting papers is detailed in the I/ITSEC Author's Handbook (available for download from the Authors section of the I/ITSEC website). The initial stage in the process is the submission of an abstract.

ABSTRACTS (Stage P1). As a prospective author, your chances of having an abstract accepted are significantly greater if you send your abstract to the appropriate subcommittee, so please read the descriptions carefully. It is also vital that you submit your abstract on time. Please refer to www.iitsec.org for additional details.

PAPERS (Stage P2). If your abstract is selected for expansion into a paper, you will be assigned a bird dog, who will be your liaison to the subcommittee and the champion for your paper. Your chances of having your paper accepted are significantly greater if you work closely with your bird dog. Papers are accepted for both publication in the conference proceedings and presentation at the conference. The selection process includes a Best Paper nominee from each subcommittee that will be considered for the overall conference Best Paper. Detailed instructions for completing and submitting your paper will be available on the I/ITSEC website.

PRESENTATIONS (Stage P3). If your paper is accepted, you are required to submit a presentation for review prior to the conference. Presentations should be designed for a 20 minute time-slot, plus five minutes for questions and answers. Detailed requirements for the presentations will be available on the I/ITSEC website.

TUTORIALS

2023 CHAIR: MICHAEL J. O'CONNOR

I/ITSEC presents a comprehensive tutorials program covering a diverse set of topics essential to the simulation, training, and education communities. Each tutorial is focused on building skills and provides an opportunity to earn CEUs. Tutorials are 90 minutes in length.

The tutorial program provides learning opportunities in two focus areas:

- 1) FOUNDATIONAL** topics related to skills and knowledge required by practitioners in the I/ITSEC community. This includes topics to prepare for or maintain certification as a Certified Modeling and Simulation Professional (CMSP).
- 2) EMERGING and INOVATIVE** concepts of particular interest to I/ITSEC attendees that provide skills in new and evolving technologies.

TUTORIALS PROCESS

The complete three-stage process for submitting tutorials is detailed in the I/ITSEC Author's Handbook, available for download from the Author Information page of the I/ITSEC website (under "Get Involved").

PROPOSAL (Stage T1). As a prospective tutorial presenter, you must submit a complete tutorial proposal including an abstract, detailed outline, intended audience, any prerequisites, and targeted learning objectives. Learning objectives are critical to the Tutorial Board's selection process. The Board also assesses the degree to which proposal topics will contribute to a comprehensive tutorial curriculum encompassing the two focus areas described above.

PRESENTATIONS (Stage T2). If your abstract is selected for expansion into a complete tutorial presentation, you will be assigned an I/ITSEC bird dog who will be your liaison to the Tutorial Board and the champion for your presentation. You must submit a complete set of presentation slides to the Tutorial Board for review.

FINAL PRESENTATIONS (Stage T3). If your presentation is selected, you will receive feedback from the Tutorial Board and then have the opportunity to submit a revised and final version of your tutorial presentation.

PROFESSIONAL DEVELOPMENT WORKSHOPS

2023 CHAIR: BENJAMIN BELL, PH.D.

This conference seeks workshop proposals that offer in-depth and interactive engagement with innovative concepts, technologies and use cases exploring effective training and readiness. Workshops are half-day events. Topics should be of general interest to the I/ITSEC audience across the broad categories of training, education, human performance, and simulation, and should propose an in-depth treatment of a topic of current relevance or that is an emerging capability. Submissions from individuals and organizations outside of the traditional boundaries of the defense industry are welcomed. Proposals should describe the general topic for the workshop and a high-level outline of how the workshop would be conducted. Workshops with a thematic connection to a Tutorial are also encouraged as paired events.

We are pleased to continue to offer the "one per paper" and "two per tutorial or Professional Development Workshop" complimentary registrations at I/ITSEC. After Stage P2 and T2, authors will be notified and provided instructions for taking advantage of this benefit. This is a full registration, to include access to all Tutorials, Papers, Special Events, Professional Development Workshops, Exhibit Floor access during open hours, Meals, and Meeting Materials.

THE SUBCOMMITTEES

EDUCATION

2023 CHAIR: JENNIFER McARDLE

The Education Subcommittee seeks papers that present strategies, methods, technologies, and best practices that advance the science of learning across all phases of the learning lifecycle. Of particular interest are papers that present empirical data that document the effectiveness of military, corporate, and STEM (science, technology, engineering, math) learning initiatives. The Education Subcommittee also welcomes theoretical papers, case studies, and qualitative research efforts that can help to illuminate or explain the often-contradictory findings from empirical studies. Emerging areas of interest include: the application of learning analytics and “big data” sets to improve learning at the individual to the enterprise level, learning in hybrid human-machine systems; lifelong learning initiatives, informal learning efforts that occur outside of organizationally-sponsored courses, the integration of training and education initiatives and organizations, team and organizational learning, and applications of artificial intelligence (or machine learning) techniques to improve learning effectiveness.

EMERGING CONCEPTS & INNOVATIVE TECHNOLOGIES

2023 CHAIR: BRIAN STENSRUD

This subcommittee seeks papers that discuss emerging and innovative technologies, methodologies, or concepts associated with simulation and data analysis, training, education, and support to operations across the spectrum of government, industry, and academia. Papers should clearly explain how the topic advances the state of the art and has relevance in defense, transportation, homeland security, medical training, law enforcement, cyber security, or other areas. Examples of new and emerging topics include artificial intelligence and machine learning concepts, XR applications including the metaverse, digital twins, and data analytics. Candidate papers should thoroughly describe the challenges encountered and associated creative solutions implemented to overcome them. Submissions that simply describe applications or instantiations of known technologies are discouraged. Rather, this track emphasizes unique and emerging concepts that inspire and can provide a conceptual and scientific basis for future applications that benefit DoD training, simulation, and education.

HUMAN PERFORMANCE ANALYSIS & ENGINEERING

2023 CHAIR: JASON BEWLEY

This subcommittee seeks papers that focus on the human dimension — systematically addressing individuals and teams as an integral component within workplace systems. Papers should address the application of human performance analysis & engineering (HPAE) technologies, human performance measurement and effectiveness models, methods and tools, human-computer interaction (HCI), usability/user experience (UX), decision/performance support systems, and the impact of HPAE on organizational outcomes. Specifically, the subcommittee seeks papers that describe how particular interventions — including XR, human-machine teaming and others — leverage and extend the capabilities of an individual and/or a team, and improve learning transfer and operations. Papers supported by human performance data gathered from scientifically valid experiments are especially valued.

POLICY, STANDARDS, MANAGEMENT & ACQUISITION

2023 CHAIR: PHILIPPE PEREY

This subcommittee is seeking papers related to policy and standards issues associated with the acquisition, implementation, and maintenance of education, training, and simulation capabilities. This includes policy-related topics regarding training systems development and associated content, delivery, and sustainment. Papers are sought that provide insight into innovative approaches for managing requirements for acquiring, implementing, and sustaining these capabilities. Papers should provide qualitative and/or quantitative analysis of data to help substantiate outcomes; and where possible, characterize innovative processes or techniques to improve

return on investment. Papers may address emerging policy, standards, or the need for policy or standards with respect to education, training, simulation, data analytics and cybersecurity. Topics of particular interest for the current year include emerging concepts in policy and standards, including Other Transaction Authority (OTA) implications to the training and simulation communities, sustainability, and outcome-focused approaches to training and simulation acquisition, development, execution and evaluation. The PSMA subcommittee also has a continuing interest in papers that address innovative intellectual property solutions that support maintenance and competition across the education, training and simulation industry.

SIMULATION

2023 CHAIR: MARTIN BINK, PH.D.

This subcommittee seeks innovative papers on the applied science of modeling and simulation, simulation architectures or techniques, as well as the exploration of synthetic entities or environments and how they apply to training, mission rehearsal, analysis, experimentation or research. Papers should present and explain concepts, theories and or applications that bring innovation to the modeling and simulation enterprise. Discussions should detail the technical challenges, past lessons, unique and creative developments associated with developing, interacting with, and maintaining simulation systems. Topics of interest include evolving modeling and simulation technology, expanding interoperable simulation architectures, realistic human behavioral modeling, medical simulation, replication of cyber effects, and innovation in representing physical entities and behavioral actions within live, virtual, constructive, mixed reality and gaming environments.

TRAINING

2023 CHAIR: ALEXANDRA STEINER, PH.D.

This subcommittee seeks papers that discuss the application of innovative concepts, methods and technologies to create effective training solutions. Papers should present a clear problem description, state-of-the-art from current literature, analysis of current needs and training gaps, and practical application. Example topics include adaptive training, training system integration and interoperability, training applications of artificial intelligence or machine learning, individual and collective team training, learning science or learning engineering, innovative training strategies, and competency-based training and assessment. Descriptions of implemented solutions’ effectiveness supported by quantitative and/or qualitative data are encouraged. Emerging technologies of interest include augmented reality and virtual training environments, semi-automated training and assessment generation, mobile training, and training techniques to deal with rapidly changing or austere conditions. The subcommittee is interested in all phases of training system development including planning, analysis, design, development, deployment, and evaluation, and lifecycle maintenance.

POINTS OF CONTACT

I/ITSEC 2023 PROGRAM CHAIR

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I/ITSEC 2023 TUTORIAL CHAIR

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GENERAL CONFERENCE INFORMATION

National Training and Simulation Association

703-247-9480 | E-mail: dlangelier@NTSA.org

EXHIBITOR INFORMATION

703-247-9473 | E-mail: sburch@NTSA.org