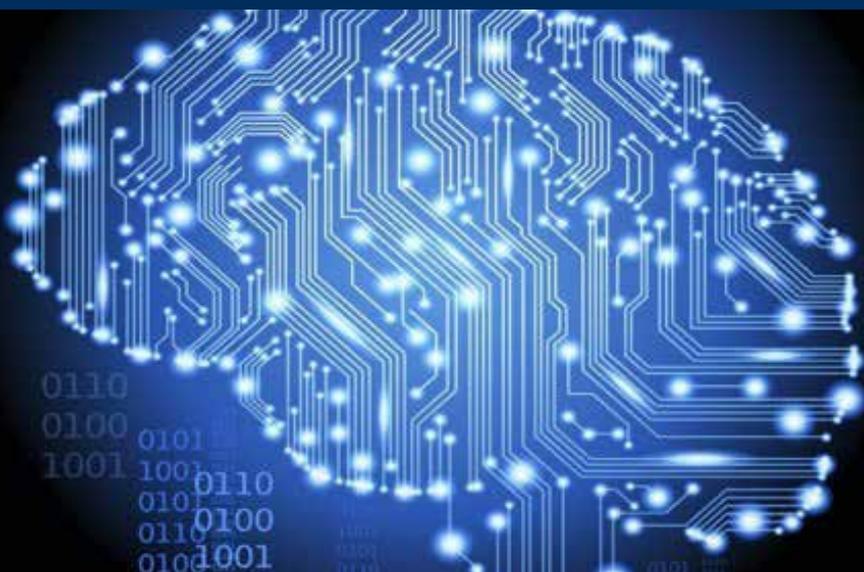


STEM @ I/ITSEC



Committed To...

- Our Students
- Our Teachers
- Our Industry Professionals

Our Future!

About STEM @ I/ITSEC

The National Training and Simulation Association (NTSA) is focused on filling our workforce pipeline with prospects who are better prepared, more confident and highly engaged to take on careers in the Science, Technology, Engineering & Math (STEM) fields, particularly those in our industry. As such, NTSA recognizes the critical importance of engaging students early in hands-on STEM activities while supporting educators who are our front line in shaping and building our future workforce.

Using the Interservice/Industry Training, Simulation and Education Conference (I/ITSEC), the world's largest modeling, simulation, and training conference, as a platform, NTSA's goal is to leverage industry professionals in inspiring students and preparing teachers to help secure our industry and our nation's future.

STEM @ I/ITSEC is made possible by corporate and individual contributions of resources, principally time and money. If you would like to get involved, contribute to securing our collective future or if you know of an exemplary STEM program that should be recognized and considered a best practice, please contact us.

Future Leaders Pavilion

Future Leaders Pavilion (FLP) provides a venue for high school students to demonstrate their M&S expertise in original projects developed and presented at the I/ITSEC conference. The caliber of these student projects are so high that some have won national competitions previous to I/ITSEC. Since 2002, over 175 students from around the United States as far away as India, the Netherlands, and the United Kingdom have participated in FLP.

“Too often we give children answers to remember rather than problems to solve.”

Roger Lewin

STEM Pavilion Exhibits

Annually, several educational non-profit organizations are nominated for invitation to exhibit either their community based STEM innovations or to demonstrate Project Based Learning (PBL) initiatives at I/ITSEC. Their involvement provides insight to conference participants interested in supporting or implementing PBL concepts in their own communities. PBL is a hands-on approach that engages students in active exploration of real-world challenges. Though questioning, inquiry, critical thinking and experimentation, students absorb new knowledge and educational content in a problem-solving, relevant-based context. This year, 25 national and regional organizations including FIRST Robotics, Project Lead the Way, Sea Perch, Orlando Science Center, and many others will share their work in engaging learners of all ages.

Student Tours

Each year, more than 700 high school students from throughout the Central Florida region participate in the unique learning experience found only at I/ITSEC. Escorted through the I/ITSEC Exhibit Hall, they experience first-hand real-world Training, Simulation, and Education solutions. Interacting with industry professionals, seeing static displays of current and future technologies, and participating in special demonstrations helps bridge the gap between their classroom theory and the application of STEM subjects.

Serious Games Showcase & Challenge

A Serious Game is used to teach. The Serious Games Showcase & Challenge (SGS&C) is the premier venue for recognition of excellence in the field of



Serious Games development. The SGS&C was created to stimulate creativity and generate institutional interest in the use of game technology and game-based approaches for training and education. It includes the Students' Choice award which places pertinent games within leading school districts for middle and high school students to play and review; the award recognizes the best serious



game as selected by the students. Finalist games are showcased during I/ITSEC. Our partnership with

school districts via the Students' Choice award enables: students to learn content through a new modality while discovering new outlets for game development talents; teachers to be exposed to, and begin to understand how to augment or assess curricula using Serious Games; administrators to test drive distribution of new teaching tools and assess existing capabilities; and developers to get feedback on what resonates in the K-12 education market.

America's Teachers

America's Teachers @ I/ITSEC (AT@I) reaches across the United States, inviting teams of STEM teachers and school administrators to experience I/ITSEC. AT@I's objectives are to stimulate interest of teachers and administrators in the M&S industry, improve their understanding of current and future technologies and help

build simulation capability within their school districts. While at the conference, teachers learn how to bring M&S into their classroom and administrators better understand resources and curriculum changes needed within their school system. Together, the team leaves I/ITSEC better prepared to advocate for and promote real-world industry opportunities across their school system, to students, parents, other teachers and education decision makers.

Project Based Learning Teacher Training

Research indicates it is essential to engage a learner's interest in technical STEM career path by establishing a link between the theoretical knowledge and its application to solve real life problems early on in the learning experience. Project Based Learning (PBL) and inquiry & design instructional methods are attracting interest among STEM educators nationwide because they successfully integrate inquiry with engineering design to effectively develop the workforce of tomorrow with the needed 21st century skill-sets (problem solving, perseverance, creativity, etc.). Teacher training at I/ITSEC, provided by a collaborative team of expert PBL STEM instructors, engages teachers in their own hands-on learning by letting them try new lesson ideas for their classrooms, engaging them in dialogue with both PBL and industry professionals and providing a set of relevant and accessible resources for their use throughout the year.

“I hear and I forget; I see and I remember; I do and I understand.”

Confucius

Professional Development Opportunities

Continuing Education Units (CEUs)



CEU credits reinforce your commitment to remain current in the evolving technologies relating to simulation and training, and helps to demonstrate your up-to-date industry knowledge. The University of Central Florida administers the I/ITSEC CEU process and certification for all tutorials, all conference papers presentations, and all Friday professional development workshops. CEU credits are available at no cost to all paid conference attendees. In order to receive CEU credit, participants will be asked to sign-in upon arrival to ensure the correct number of CEUs are granted to the individual.

Friday Workshops

Friday Workshops are a great way to wrap up the I/ITSEC conference experience. These FREE professional development seminars are held on the last day of I/ITSEC, following paper presentations. Although similar to the 90-minute long tutorials held on Monday, these longer 4-hour and 8-hour sessions cover various scholarly, governmental, and professional topics in an in-depth and interactive manner. Friday Workshops offer an

opportunity to stay current in the industry by acquiring new knowledge on timely topics as well as a convenient and cost effective way to earn CEUs. Subject-matter experts lead each workshop, and participants are generally encouraged to partake in interactive discussions and/or demonstrations.

Lewis Post Graduate Scholarships

Since 1990, I/ITSEC has awarded academic scholarships. Renamed in 2012, the "RADM Fred Lewis Postgraduate I/ITSEC Scholarships" or Lewis Scholarships, these awards are provided to stimulate student interest and university participation in preparing individuals for leadership in the Modeling & Simulation, Training and Education communities. I/ITSEC currently awards a \$5,000 scholarship at a Masters level and a \$10,000 scholarship at a Doctoral level.



For More Information, Contact:

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