



## **2013 NTSA Modeling & Simulation Awards**

### ***for Outstanding Achievement in Modeling & Simulation***

Each year, the NTSA M&S Awards are presented to individuals or teams for outstanding achievements in the development or application of models and simulations. Awards may be given for outstanding achievement in the specific M&S functional areas of Training, Analysis, and Acquisition, and for outstanding achievement in support of the overall M&S effort (Cross-Function). Individual Lifetime Achievement awards may also be presented.

NTSA is pleased to announce the following winners of the 2013 Governor's Awards and the 2013 NTSA M&S Awards for Outstanding Achievement in Modeling & Simulation.

### **2013 Governor's Award for Lifetime Achievement in Training & Simulation**

#### **Dr. James T. Blake U.S. Army PEO STRI**

Dr. James T. Blake, a distinguished soldier, leader, technologist and mentor, is recognized for a lifetime of sustained exemplary service to our nation, military services, academia and especially the modeling and simulation industry, and for a remarkable career spanning over forty years. In 1968, Dr. Blake enlisted as a U.S. Army infantry private, became an Army officer and pilot, and had a distinguished tenure, culminating service in 1995 as the Army's Senior Uniformed Scientist. Jim then held several technical and executive positions in industry before joining academia as a Senior Research Scientist at Texas A&M University. Following that, he became the first Program Manager for the Institute of Creative Technologies. In his current role as the Army's Program Executive Officer for Simulation, Training and Instrumentation (which he has held since 2005), he provides leadership for a multi-billion dollar enterprise with more than 1,200 personnel, sustaining over 335,000 training systems at over 600 locations worldwide. It is with utmost respect and admiration we present the 2013 National Training and Simulation Association Lifetime Achievement Award to Dr. James T. Blake.

## **2013 Governor's Award for Outstanding Achievement in Modeling & Simulation**

### **TeachLivE**

#### **University of Central Florida**

TeachLivE, developed at the University of Central Florida, is a virtual-reality classroom environment that enables teachers to learn and improve their teaching skills through practice and rehearsal. The system combines a rendering engine, hardware and software libraries, innovative network and user interaction technologies, and an integrated after-action review system. TeachLivE helps to address the critical national need for well-prepared, effective classroom teachers. It is now in use at 32 universities across the U.S., and more than 6,000 teachers have used the system. Its use in a wide range of additional applications is currently being investigated.

## **2013 NTSA Modeling & Simulation Awards**

### **Acquisition**

#### **Space Superiority Systems Architectures Team**

##### **Air Force Space Command**

The Space Superiority Systems Architectures Team rapidly delivered analysis for a Deputy Secretary of Defense-directed space control study, producing a plan that secured a \$1 billion development program. In addition, the team led several major space situational awareness studies, including a utility assessment of the Precision Tracking Space System that saved \$500M. The team also led a cross-functional study which analyzed 30 industry & government lab concepts; completed an Analysis of Alternatives for the replacement of the Space Based Space Surveillance (SBSS) satellite; and drove improvements at the Joint Space Operations Center through COCOM exercises.

### **Cross-Function**

#### **PM STS Joint Fires Product Line (JFPL) Fires Team**

##### **Product Manager for Special Operations Forces Training Systems (PM STS)**

The PM STS Joint Fires Product Line (JFPL) Fires Team exhibited innovation, creativity, and diligence by migrating a Government-owned software architecture across Army and USSOCOM simulation training systems. The modular/scalable software architecture developed for SOF JTAC (Joint Terminal Attack Control) trainers was migrated into the Army's CFFT (Call for Fire Trainer) III upgrade effort, and provided improved performance, commonality of systems, and interoperability. In addition, the innovative

integration of the Havok 3D gaming engine into the CFFT family of systems design delivers a complex and multi-dimensional virtual training capability with physics-based elements, visual acuity, and immersive authenticity unmatched in the Joint Fires community. The JFPL Fires Team's work saved the Government \$2.5M in 2013, and provides potential out-year cost avoidance/savings estimated at \$50M.

## **Training**

### **Corrosion: The Silent Menace**

**Department of Defense, The Orlando Science Center, NASA, The University of Akron, Bruno White Entertainment, Game Services Group, and Ninjaneer Studios**

Corrosion: The Silent Menace is a cutting-edge interactive exhibit that opened in 2013 at the Orlando Science Center, with the goal of educating middle school students about corrosion, and encouraging them to pursue careers in science and engineering. A major STEM initiative of the Department of Defense, the exhibit exemplifies innovation, integrating science education and entertainment into an engaging, multi-media, interactive exhibit. The exhibit represents a successful partnership between government entities (DoD and NASA), informal science education (the Orlando Science Center), academia (The University of Akron), and small businesses (Bruno White Entertainment, Game Services Group, and Ninjaneer Studios). The exhibit has been very successful, and several inquiries have been made to replicate the exhibit in other cities across the U.S.

### **Smile Train Programs Team Smile Train & BioDigital Inc.**

Smile Train's Virtual Surgery Simulator, a convergence of medicine, technology and philanthropy, represents a great advance in surgical training. The Simulator is the first open-access, web-based, interactive surgical teaching tool designed to train surgeons in developing countries to repair cleft lip/palate, the most common facial abnormality, which affects 170,000+ children every year. Developed by Smile Train, BioDigital Inc., and leading reconstructive surgeons, the Virtual Surgery Simulator incorporates 3D models of facial anatomy, live surgical footage, interactive animated 3D surgical procedures, labels, voiceover and testing features. To date the Simulator has been accessed by users in 43 countries.