MONDAY, 27 NOVEMBER • 1030 – 1200 • ROOM W304A-H

CONGRESSIONAL MODELING AND SIMULATION CAUCUS

STRONG ADVOCACY FOR TRAINING AND READINESS

MODERATOR

LINDA BRENT, ED.D.
Congressional Coordinator/Strategic Planning, NTSA

PANELISTS

CONGRESSMAN BOBBY SCOTT
3rd District, Virginia

CONGRESSMAN JACK BERGMAN
1st District, Michigan

CONGRESSMAN JOHN RUTHERFORD
5th District, Florida

CONGRESSMAN ERIC SORENSEN
17th District, Illinois

NTSA and the I/ITSEC Conference 2023 are excited to host the Modeling and Simulation Congressional Caucus Special Event. All attendees and exhibitors are invited to hear first hand from our leaders in Congress who are committed to the success of our industry.

It is a great opportunity for you to interact with Congressional Members on issues of importance to you or your organization and to impress upon them the priorities of the modeling, simulation and training industry. With defense budgets and other Government budgets constantly in flux, this forum provides you a voice to advocate for the value of simulation for training in support of national security and resiliency.

CONGRESSIONAL MODELING AND SIMULATION CAUCUS MEMBERS

BOBBY SCOTT
Caucus Co-Chair
3rd District, Virginia

JOHN RUTHERFORD
Caucus Co-Chair
4th District, Florida

JACK BERGMAN
Caucus Co-Chair
1st District, Michigan

ROBERT ADERHOLT
4th District, Alabama

GUS BILIRAKIS
12th District, Florida

VERN BUCHANAN
16th District, Florida

KEN CALVERT
42nd District, California

VIRGINIA FOXX
5th District, North Carolina

BRETT GUTHRIE
2nd District, Kentucky

JENN KIGGANS
2nd District, Virginia

DOUG LAMBORN
5th District, Colorado

SCOTT PETERS
52nd District, California

BILL POSEY
8th District, Florida

C.A. DUTCH RUPPERSBERGER
2nd District, Maryland

ERIC SORENSEN
17th District, Illinois

DARREN SOTO
9th District, Florida

MIKE TURNER
10th District, Ohio

JOE WILSON
2nd District, South Carolina

ROBERT WITTMAN
1st District, Virginia

MONDAY, 27 NOVEMBER • 1600 – 1730 • ROOM W300-THEATRE

2023 I/ITSEC FELLOWS PRESENTATION

BEING ELECTED A FELLOW IS THE HIGHEST HONOR BESTOWED BY THE NTSA ON BEHALF OF THE WORLD-WIDE MS&T COMMUNITY!

2023 I/ITSEC FELLOW

JAMES WALL, PH.D.
Executive Director, Texas A&M Center for Applied Technology (Retired)

THE I/ITSEC 2023 FELLOW

With nearly four decades of indelible contributions to Modeling and Simulation (M&S), Dr. James A. (Jim) Wall is a technical leader, M&S textbook co-author, and iconic visionary whose work has fundamentally shaped simulation capabilities being delivered and used today. Dr. Wall's work has enabled the transformation of operations, training, and testing across multiple communities that safeguard our national and personal security. Prior to retirement, Dr. Jim Wall served as the Executive Director of the Texas A&M Center for Applied Technology and the inaugural Director of the Innovation Proving Ground, a component of the Bush Combat Development Complex located on the RELLIS Campus of Texas A&M University. Early on, as a researcher in the newly formed Uniformed Army Scientist Program at the Army Research Laboratory, Dr. Wall led development of the Virtual Sand Table, which was the first 3D tabletop environment used to virtually represent military systems being driven by constructive simulations.

Later, at Texas A&M, he and his team developed the Emergency Management Exercise System that has been used to train more than 20,000 emergency responders across the nation. Additionally, he was the Co-Principal Investigator for the highly successful Digital Emergency Medical System program that connects an ambulance with the receiving emergency room and transmits real-time video and physiological telemetry while on the move. His team's bio-surveillance common operational picture developed for the Department of Homeland Security's National Bio-surveillance Integration Center won the 2010 Department of Homeland Security Science & Technology Impact Award. In 2010, he served as the I/ITSEC Conference Chair, the first from an academic institution to serve in this capacity. He supported a Defense Science Board Task Force on a year-long study related to gaming, exercising, modeling, and simulation (GEMS) in 2021. Dr. Wall was commissioned as an Armor officer in the U.S. Army and retired as an Army Acquisition Corps officer with twenty-two years of service. His last Army assignment was as a Senior Computer Scientist with the Army Research Laboratory at Aberdeen Proving Grounds, Maryland. He has a Ph.D. in Computer Science (2003) from Texas A&M University and an M.S. in Systems Technology (Command, Control, and Communications; 1986) from the Naval Postgraduate School in Monterey, CA. In 2009, Dr. Wall was designated as a Regents Fellow by The Texas A&M University System Board of Regents. He was inducted into the National Center for Simulation Modeling and Simulation Hall of Fame in October of 2022.

WHAT YOU WILL LEARN FROM THE I/ITSEC 2023 FELLOW

Dr. James A. (Jim) Wall's I/ITSEC Fellows paper focuses on his 39 years of M&S experience as a staunch advocate for promoting modeling and simulation as a National Critical Technology among military, government, academic, and industry leaders and the opportunities for its use in more diverse application environments. His experience includes work across multiple U.S. Government Departments including Defense, Homeland Security, Energy, and Agriculture. His presentation will cover some of the commonalities and differences in applying M&S across the departments. His reflections relate his efforts as a developer of M&S requirements, a user, and an M&S developer and highlights observations and lessons learned along the way. Dr. Wall will highlight some emerging trends in M&S and discuss how advances in other supporting technologies such as artificial intelligence, machine learning, and cloud architectures present both opportunities and challenges that M&S practitioners will need to address to realize the full potential of new and powerful applications. Such applications will be more commonplace and serve as an enabler to a broader, more diverse user community by providing greater access and utility at more levels to support problem-solving, decision making, and training.

TUESDAY, 28 NOVEMBER • 1030 – 1200 • HYATT WINDERMERE BALLROOM

SENIOR LEADER PANEL

SUSTAINING A GLOBAL FORCE IN A DIGITAL WORLD

MODERATOR

BRIGADIER GENERAL GUY WALSH, USAF (RET.)
Executive Vice President and Chief Operating Officer, NDIA

PANELISTS

YOUNG BANG, SES
Principal Deputy, Assistant Secretary of the Army, Acquisition, Logistics and Training ASA (ALT)

LIEUTENANT GENERAL KEVIN M. IIAMS, USMC
Commanding General, Training and Education Command, USMC

CAROLINE BAXTER
Deputy Assistant Secretary of Defense for Force Education and Training, Office of the Secretary of Defense

BRIGADIER GENERAL ANDREW J. LEONE, USAF
Mobilization Assistant to the Military Deputy, Office of the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics

REAR ADMIRAL DOUGLAS VERISSIMO, USN
Commander, Naval Air Force Atlantic

BRIG GEN WALSH, USAF (RET.)

MR. BANG, SES

LTGEN IIAMS, USMC

DASD BAXTER

BRIG GEN LEONE, USAF

RADM VERISSIMO, USN

Global forces continue to be challenged by erratic budgets and complex threats. Services continue to prepare for a wide array of missions that range from disaster assistance to the return of great power competition. Additionally, nations continue to deal with the opportunities and challenges of accelerating technology and cybersecurity. Our Senior Leader Panel will address current and future environments within the context of this year's conference theme, *Sustaining a Global Force in a Digital World*. This year's panel will include senior representatives from U.S. Military Services and OSD. Following opening remarks, the audience will interact with the panel through Q&A. All attendees will also have the chance to submit questions in advance. Don't miss the opportunity to hear from national leaders on the way ahead.

TUESDAY, 28 NOVEMBER • 1400 – 1530 • W304CDGH

ARMY GENERAL OFFICER PANEL

MODERATOR

BRIGADIER GENERAL CHARLES T. LOMBARDO, USA
Director of Training, Office of the Deputy Chief of Staff, G-3/5/7

PANELISTS

MAJOR GENERAL STEPHEN G. SMITH, USA
Chief of Staff, U.S. Army Pacific

BRIGADIER GENERAL MICHAEL J. SIMMERING, USA
Armor School Commandant, U.S. Army Maneuver Center of Excellence

BRIGADIER GENERAL WILLIAM R. GLASER, USA
Director, Synthetic Training Environment (STE), U.S. Army Futures Command

COLONEL SCOTT WOODWARD, USA
Commander, USA
U.S. Army CAC-T, Fort Leavenworth

BG LOMBARDO, USA

MG SMITH, USA

BG SIMMERING, USA

BG GLASER, USA

COL WOODWARD, USA

This panel brings together Senior Army leaders to provide operational concepts for the Army's simulation, training, and instrumentation community. The panel members will provide insight and perspectives from their broad operational backgrounds to the challenges facing simulation, training, and instrumentation to meet the emerging Army operational concepts. This panel provides an opportunity for I/ITSEC participants to engage with Army leaders involved with developing the models, training, and processes to sustain the global force in a digital world.

TUESDAY, 28 NOVEMBER • 1600 – 1730 • ROOM W306AB

HOW THE MARINE CORPS IS USING THE DIGITAL WORLD TO SUPPORT TRAINING TODAY AND INTO THE FUTURE

MARINE CORPS TACTICAL SYSTEMS SUPPORT ACTIVITY'S (MCTSSA) OVERVIEW OF THEIR CONTRIBUTIONS

MODERATOR

COLONEL CRAIG CLARKSON, USMC
Commanding Officer, Marine Corps Tactical Systems Support Activity

PANELISTS

THOMAS JOHNSON
Senior Principal Engineer, Joint/ Coalition C2, Marine Corps Tactical Systems Support Activity

JENNIFER KAYS
Senior Principal Engineer, Software Engineering, Marine Corps Tactical Systems Support Activity

RICK BOBST
Warfighter Support Officer, Marine Corps Tactical Systems Support Activity

COL CLARKSON, USMC

MR. JOHNSON

MS. KAYS

MR. BOBST

Senior members of MCTSSA will provide an overview of their efforts in testing, engineering, integration, and experimentation on Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting (C5ISRT) systems in support of USMC Force Design 2030 objectives. A specific focus will be on leveraging partnerships across the Department of Defense and the defense industrial base to accelerate the incorporation of new ideas and emerging technologies into future warfighting systems.

TUESDAY, 28 NOVEMBER • 1600 – 1730 • ROOM W304CDGH

DEPARTMENT OF THE AIR FORCE GENERAL OFFICER PANEL

MODERATOR

ROWAYNE A. "WAYNE" SCHATZ, JR., SES
Director for Studies and Analysis, Office of the Secretary of the Air Force

PANELISTS

LIEUTENANT GENERAL RICHARD G. MOORE, JR., USAF
Deputy Chief of Staff for Plans and Programs, Headquarters U.S. Air Force

LIEUTENANT GENERAL BRIAN S. ROBINSON, USAF
Commander, Air Education and Training Command

MAJOR GENERAL ADRIAN L. SPAIN, USAF
Director of Training and Readiness, Deputy Chief of Staff for Operations at Headquarters U.S. Air Force

BRIGADIER GENERAL TODD R. MOORE, USSF
Deputy Commander, Space Training and Readiness Command

MR. SCHATZ, JR., SES

LT GEN MOORE, JR., USAF

LT GEN ROBINSON, USAF

MAJ GEN SPAIN, USAF

BRIG GEN MOORE, USSF

This panel brings together Air Force leaders and organizations to provide operational imperatives as they relate to the training community. Panelists will provide insight from their acquisition, research and technology, and mission readiness perspectives for employing Modeling & Simulation technology across the enterprise to meet readiness and lethality challenges. This panel provides an opportunity for I/ITSEC participants to engage with DAF leaders involved with sustaining a global force in training technology.

TUESDAY, 28 NOVEMBER • 1600 – 1730 • ROOM W304EF

JOINT & MULTI-NATIONAL CONSTRUCTIVE TRAINING EXERCISES

OVERCOMING THE TECHNICAL CHALLENGES FOR MULTI-DOMAIN OPERATIONS

MODERATOR

COLONEL SCOTT WOODWARD
Commander, USA
U.S. Army CAC-T, Fort Leavenworth

PANELISTS

MAJOR GENERAL STEPHEN G. SMITH, USA
Chief of Staff, U.S. Army Pacific

BRIGADIER GENERAL WILLIAM R. GLASER, USA
Director, Synthetic Training Environment (STE), U.S. Army Futures Command

BRIGADIER DAMIAN HILL
Director, General Joint Collective Training Branch (J7), Joint Operations Command

SAMUEL CHAMBERS
Scientist, Environment Operations Division (EOD), Deputy Directorate Joint Training, Joint Staff J-7

COL WOODWARD, USA

MG SMITH, USA

BG GLASER, USA

BG HILL

MR. CHAMBERS

The operational environment our joint and multi-national partners operate within is becoming more complex and congested requiring a persistent training environment to rapidly train and build coalitions to achieve objectives. The Army delivers theater specific warfighter exercises (WFXs) for Corps and Divisions to conduct collective training, at scale, across multiple domains while also advancing and assessing Multinational Interoperability. The annual execution of multinational warfighters lacks joint force participation and uses an industrial age planning and preparation process for each event.

Examine the challenges to support the requirements and overcome the technical difficulties to establish a persistent Mission Partnered Environment that incorporates joint and multi-national partners into future constructive exercises across all domains.

TUESDAY, 28 NOVEMBER • 1600 – 1730 • ROOM W304AB

DOD'S REAL WORLD DIGITAL TWINS

DOD SENIOR LEADER APPLICATIONS TO THE MISSION

MODERATOR

JENNIFER ARNOLD
Professional Visualization Executive, NVIDIA

PANELISTS

YOUNG BANG, SES
Principal Deputy, ASA (ALT)

LISA COSTA, SES, PH.D.
Chief Technology Innovation Officer, USSF

NELSON LERMA, PH.D.
Senior Data Science Manager, NAWCTSD

MS. ARNOLD

MR. BANG, SES

DR. COSTA, SES

DR. LERMA

Digital twin simulations have been simmering for half a century. But the past decade's advances in GPUs, AI and software platforms are heating up their adoption amid this higher-fidelity era of more immersive experiences. A digital twin is a virtual representation — a true-to-reality simulation of physics and materials — of a real-world physical asset or system, which is continuously updated.

Digital twins aren't just for inanimate objects and people. They can be a virtual representation of computer networking architecture used as a sandbox for cyberattack simulations. They can replicate a fulfillment center process to test out human-robot interactions before activating certain robot functions in live environments. Digital Twins can help maintain a healthy supply chain to ensure optimal performance, predict climate change by accurately mapping climate development as well as extreme weather, and even prepare the warfighter for the future fight. We're right at the beginning of this transition into reality, much as AI became viable and created an explosion of possibilities. The applications are as wide as the imagination.

Join these senior leaders to discuss their vision and real world application of digital twins to enable their missions.

WEDNESDAY, 29 NOVEMBER • 0830 – 1000 • ROOM W304EF

THE JOINT M&S DATA INITIATIVE

MODERATOR

GENE DAVIS
Data Standards and Acquisition Officer, AMSO

PANELISTS

SAMUEL CHAMBERS
Scientist with the Environment Operations Division (EOD), Deputy Directorate Joint Training, Joint Staff J-7

CHRIS McGROARTY
Chief Engineer, U.S. Army DEVCOM SC STTC

CHARLES SANDERS, PH.D.
Technical Advisor, AMSO

RYAN BARKER
Analyst, U.S. Army DEVCOM DAC

LORI MONGOLD
Global Force Information Management Capability Management Officer (GFIM CMO), HQDA G3/5/7

ANDREW ST. LAURENT
Deputy Division Chief, HQDA G3/5/7 DAMO-SOE

MR. DAVIS

MR. CHAMBERS

MR. McGROARTY

DR. SANDERS

MR. BARKER

MS. MONGOLD

MR. ST. LAURENT

The demand signal for rapid decision-making support has increased. Thus, access to authoritative sim-ready data supporting an agile decision cycle is a critical requirement. Collecting and reformatting force structure, threat representation, systems performance data, and geospatial data for scenario development is manpower and time intensive. This led to a collaboration between the Army (AMSO) and Joint Staff to expand the scope of ongoing data efforts in order to drive the ability to access, retrieve, use, and reuse sim-ready data. The Joint M&S Data Initiative supports the National Defense Strategy by providing the overarching vision, focus, guiding principles, essential capabilities, and goals necessary to transform not only the Army's M&S Enterprise but sync with Joint Services into a common data framework.

WEDNESDAY, 29 NOVEMBER • 0830 – 1000 • ROOM W304CDGH

THE TALX – 5G AND NEXTG

MODERATOR

JENNIFER SWANSON, SES
Deputy Assistant Secretary of the Army (Data, Engineering & Software), Office of the ASA (ALT)

PANELISTS

YOUNG BANG, SES
Principal Deputy, ASA (ALT)

PAUL E. JACOBS
Chairman and Chief Executive Officer, XCOM

CHRIS CHRISTOU
Senior Vice President, Chief Technology Officer, Booz Allen Hamilton

STEVE VOGELSANG
Vice President, Business Strategy and Networks, Nokia

MS. SWANSON, SES

MR. BANG, SES

MR. JACOBS

MR. CHRISTOU

MR. VOGELSANG

Join us for the kick off event for the NTSA Next Big Thing series of special events, where we'll dive into the rapidly evolving world of emerging technologies. The NTSA Next Big Thing series of special events are addressing this pace of change with this event kicking off the collaboration for the day. Where will 5G and NextG take us in the near future? Presenters will discuss current gaps in 5G technology for addressing next generation applications such as immersive training; what advances are expected and what will they bring; what is the vision for how next gen wireless will enhance training and operations? Many organizations can benefit by the understanding where the technologies are heading as well as how to be part of the ecosystem leveraging this technology.

This event features TED Talk style presentations, ensuring an engaging and enlightening experience. Be sure to return at the end of the day for the Next Big Thing social to connect with speakers and like-minded professionals. Shape the future of technology with us — one talk at a time. Your journey begins here.

WEDNESDAY, 29 NOVEMBER • 1030 – 1200 • ROOM W304AB

NAVY FLAG OFFICER PANEL

ENACTING CNO'S NAVPLAN

MODERATOR

REAR ADMIRAL PAUL A. SOHL, USN (RET.)
Chief Executive Officer, Florida High Tech Corridor

PANELISTS

REAR ADMIRAL MICHAEL DONNELLY, USN
Director, Air Warfare Division, OPNAV N98

REAR ADMIRAL JEFFREY CZEREWKO, USN
Commander, Naval Education and Training Command

REAR ADMIRAL RICHARD T. BROPHY, USN
Chief of Naval Air Training

RADM SOHL, USN (RET.)

RDML DONNELLY, USN

RDML CZEREWKO, USN

RDML BROPHY, USN

"The U.S. Navy will build, maintain, train, and equip a combat-credible, dominant naval force to keep the sea lanes open and free, deter conflict, and when called upon, decisively win our Nation's wars."

The above words from the CNO's NAVPLAN highlight I/ITSEC 2023's theme: *Sustaining A Global Force in a Digital World*. In this special event, senior Navy leadership will discuss the successes and challenges of training across multiple domains, to include the need for acquisition urgency based on real world pressures.

The U.S. Navy looks to ensure our Sailors can out-think and outfight any adversary while remaining the best trained and educated naval force. Deterrence is our duty and to accomplish that we must demonstrate and sustain the skill and will to win the fight. Making sure that both lethality and readiness are maintained as part of our core training goals is critical to this ability. We must do this while maintaining a responsible plan for acquiring and sustaining these capabilities.

The Sailors who serve today are the most well-trained naval force in history and are critical to the Navy's ability to meet its mission. This panel of senior Navy leaders will provide insight into how to optimize the human performance of U.S. Navy Sailors to succeed in a digital world. ADM Michael Gilday, Chief of Naval Operations reminds us, "Decisive naval power is essential in this security environment; America cannot cede the competition for influence. This is a uniquely naval mission. A combat-credible U.S. Navy—forward deployed and integrated with all elements of national power—remains the Nation's most potent, flexible, and versatile instrument of military influence. As the United States responds to the security environment through integrated deterrence, our Navy must deploy forward and campaign with a ready, capable, combat-credible fleet."

WEDNESDAY, 29 NOVEMBER • 1030 – 1200 • ROOM W305AB

DIGITAL MATERIEL MANAGEMENT

MODERATOR

BRIGADIER GENERAL JASON E. BARTOLOMEI, USAF
Program Executive Officer for Weapons and Director of the Armament Directorate, AFLCMC, AFMC

PANELISTS

LISA COSTA, SES, PH.D.
Chief Technology and Innovation Officer, USSF

CHRIS GARRETT, SLS USAF
Technical Advisor for Systems Engineering, AFLCMC/EN-EZ

LENNY DELLIGATTI
Chief Operation Officer and System Architect, Delligatti Associates

KEVIN TORRES
Mobility and Training Directorate (WL), Digital Architect, AFLCMC

KYLE HURST
Digital Transformation Lead, AFMC

BRIG GEN BARTOLOMEI, USAF

DR. COSTA, SES

MR. GARRETT, SLS USAF

MR. DELLIGATTI

MR. TORRES

Digital Materiel Management is the concept of Digital Transformation applied to the Organize, Train, and Equip mission of AFMC. Regardless of the domain, Digital Transformation is the disruptive enabler the DAF needs to maintain its competitive edge. This panel will provide insights into the digital engineering advantages and the efforts of the Air Force to unify disjointed modernization efforts, enable discovery of cross-cutting opportunities, and catapult the delivery of new capabilities to the field faster.

WEDNESDAY, 29 NOVEMBER • 1030 – 1200 • ROOM W300 – THEATRE

TRAIN WHILE YOU FIGHT: UKRAINE AS A TOUCHSTONE FOR TRAINING IN FUTURE WARS

MODERATOR

AARON PRESNALL, PH.D.
President, Jefferson Institute

PANELISTS

CAROLINE BAXTER
Deputy Assistant Secretary of Defense for Force Education and Training, Office of the Secretary of Defense

CELESTE WARD GVENTER, PH.D.
President, Defense and Security Cooperation University

MAJOR GENERAL SERHII SALKUTSAN
Ukraine, Military Representative to NATO

BRIGADIER GENERAL ROLF WAGNER (DEU RET.)
Deputy Director, George C. Marshall Center

REAR ADMIRAL PETER G. VASELY, USN
Deputy Director, Joint Training, Joint Staff J7

MAJOR GENERAL CURTIS A. BUZZARD, USA
Commander, U.S. Army Maneuver Center of Excellence and Fort Moore

DR. PRESNALL

DASD BAXTER

DR. GVENTER

MAJ GEN SALKUTSAN

B GEN WAGNER, (DEU RET.)

RADM VASELY, USN

MG BUZZARD, USA

The ongoing conflict in Ukraine demonstrates that victory in modern warfare requires us to train and educate while we fight, helping our forces to adapt to meet changing needs in complex environments. This roundtable will discuss how allies and partners can take a more dynamic approach to training and education to generate effects both inside and outside of the classroom. In the context of NATO's 75th anniversary summit in 2024, the roundtable will explore how this approach can guide education and training to enhance security cooperation in a time of strategic competition.

WEDNESDAY, 29 NOVEMBER • 1030 – 1200 • ROOM W304CDGH

THE TALX – INDUSTRY LEADERS PERSPECTIVES ON ADOPTION OF ARTIFICIAL INTELLIGENCE

MODERATOR

ELIOT WINER, PH.D.
Director, VRAC; Professor, Mechanical Engineering, Iowa State University

PANELISTS

RICHARD BOYD
Chief Executive Officer, Ultisim, Inc.

BOB PETTE
Head of Visualization, NVIDIA

WILLIAM CHAPPELL, PH.D.
Vice President, Chief Technical Officer of Strategic Missions and Technologies, Microsoft Corporation

GASTAO DE FIGUEIREDO
Senior Vice President, General Manager, Geospatial Intelligence, Blackshark.ai

DR. WINER

MR. BOYD

MR. PETTE

DR. CHAPPELL

MR. DE FIGUEIREDO

Industry leaders provide thought provoking perspectives on leading and accelerating the adoption of artificial intelligence (AI) in the modeling, simulation and training community. AI is being introduced and embraced in our solutions at an accelerated pace, from methods that control virtual entities in our simulations to generative AI outputting images, text, and even speech. Speakers will explore topics such as defining AI, how it can benefit an organization, adoption strategies, and much more. This session is being presented using TED Talk style presentations. Attend to be engaged and part of the conversation around this emerging technology.

WEDNESDAY, 29 NOVEMBER • 1330 – 1500 • ROOM W304EF

THE EVOLUTION INTO A DIGITAL BATTLEFIELD (ARMY DIGITAL TRANSFORMATION)

MODERATOR

JENNIFER SWANSON, SES
Deputy Assistant Secretary of the Army (Data, Engineering & Software), Office of the ASA (ALT)

PANELISTS

YOUNG BANG, SES
Principal Deputy, ASA (ALT)

KAREN D. H. SAUNDERS, SES
Program Executive Officer, Simulation, Training and Instrumentation (PEO STRI)

RANDALL W. HILL, JR., PH.D.
Vice Dean, Viterbi School of Engineering, Omar B. Milligan Professor in Computer Science – Games and Interactive Media; Executive Director, Institute for Creative Technologies – USC

MS. SWANSON, SES

MR. BANG, SES

MS. SAUNDERS, SES

DR. HILL, JR.

As technology advances, so does the landscape of Warfare. Preparing our Soldiers to win on the Digital Battlefield is critical to conducting successful operations across every domain. It's a journey and we continue to progress while learning to accelerate through this Digital Transformation.

Bring your insights and your questions to this special event and engage with leaders across the Army, Industry, and Academia on the evolution of digital warfare, what the Army has been able to accomplish with these technology advancements, and what we must collectively consider as we look to defeat our near-peer adversaries in potential future conflicts.

This is a collaborative effort, and we need all involved on our mission to modernize.

WEDNESDAY, 29 NOVEMBER • 1330 – 1500 • ROOM W304CDGH

THE TALX – GOVERNMENT PERSPECTIVES ON ADOPTION OF ARTIFICIAL INTELLIGENCE

MODERATOR

RAYMOND COMPTON
Fellow, LMI

PANELISTS

MAJOR GENERAL MATTHEW EASLEY, USA
Deputy Principal Information Operations Advisor, Office of the Undersecretary of Defense for Policy

CINDY BEDELL, SES
Director, Army Research Directorate, U.S. Army DEVCOM Army Research Laboratory

COLONEL RHEA PRITCHETT, USA
Program Executive Officer Special Operations Forces Digital Applications, USSOCOM

WILLIAM STREILEIN, PH.D.
Chief Technology Officer, Chief Digital and Artificial Intelligence Office (CDAO)

MR. COMPTON

MG EASLEY, USA

MS. BEDELL, SES

COL PRITCHETT, USA

DR. STREILEIN

The convergence of artificial intelligence and emerging technologies has opened unprecedented opportunities for innovation, adaptation, and strategic planning within the DoD. In this event, we will immerse ourselves in the dynamic world of policy and strategy, exploring how these cutting-edge technologies can revolutionize our approach to national security and preparedness. Esteemed experts will share their insights, fostering transformative discussions, and collaborative idea exchange, while also addressing the challenges and embracing the potential of AI. Our speakers will take you on a forward-thinking journey, showcasing how emerging technologies can maximize benefits while mitigating risks in the defense landscape, harnessing the immense potential of AI, and emerging tech for the future.

Key areas of discussion include:

- Integration and Adoption
- Ethical and Responsible Use
- Cybersecurity and Resilience
- Autonomy and Human-Machine Teaming
- Training and Simulation
- Policy and Regulatory Framework
- Research and Development

This session is being presented using TED Talk style presentations. Attend to be engaged and part of the conversation around this emerging technology.

WEDNESDAY, 29 NOVEMBER • 1530 – 1700 • ROOM W304CDGH

THE TALX – GOVERNMENT CTO/CLO FUTURE VISION

MODERATOR

ROBERT KLEINHAMPLE, CMSP
President, RCK Simulations

PANELISTS

JEREMY LANMAN, PH.D.
Chief Technology Officer, U.S. Army PEO STRI

LIEUTENANT JUNIOR GRADE CHRISTOPHER M. GREGORY, USNR
Command Technology Direcor, U.S. Navy Reserve

JIM PHARMER, PH.D.
Chief Scientist, Head, Experimental and Applied Human Performance Research and Development Division, NAWCTSD

WENDY WALSH, ED.D.
Chief Learning Officer, Air Education and Training Command

DAVID STARGEL, PH.D.
Technical Director, AFAMS

BIG NEXT '23 THING CTO/CLO TalX

MR. KLEINHAMPLE, CMSP

DR. LANMAN

LT GREGORY, USNR

DR. PHARMER

DR. WALSH

DR. STARGEL

Join us for the culminating event of the NTSA Next Big Thing series of special events, where we'll dive into the rapidly evolving world of emerging technologies. Our expert gathering of Government CTOs and CLOs from modeling, simulation and education organizations will share visionary insights on how these innovations are transforming their organizations. Discover strategies for adopting these technologies and contributing to their maturation for the benefit of our warfighters. Be in the know of where and how your organizations should posture.

This event features TED Talk style presentations, ensuring an engaging and enlightening experience. Stay for the Next Big Thing social to connect with speakers and like-minded professionals. Shape the future of technology with us — one talk at a time.

WEDNESDAY, 29 NOVEMBER • 1530 – 1700 • ROOM W300-THEATRE

CYBERSPACE – FUTURE MULTI-DOMAIN CHALLENGE PERSPECTIVES

EXAMINING INFORMATION WARFARE AND NON-KINETIC EFFECTS THROUGH CYBERSPACE AND ELECTROMAGNETIC APPROACHES

MODERATOR

COLONEL CHAD T. BATES, PH.D., USA
Cyber / Wargaming Research Professor, U.S. Army War College

PANELISTS

GENERAL KENNETH "FRANK" McKENZIE, JR., USMC (RET.)
Executive Director, University of South Florida Global & National Security Institute

LIEUTENANT GENERAL MARIA B. BARRETT, USA
Commanding General, U.S. Army Cyber Command

COL BATES, PH.D., USA

GEN McKENZIE, JR., USMC (RET.)

LTG BARRETT, USA

The DoD faces a dynamic and challenging environment with potential threats that cross multiple domains. Top senior leaders, charged with planning, employing and responding to today's challenges will continue to deal with evolving and responding to future technological challenges from potential adversaries. To some degree, digital technologies can allow for representation of recognized demands of dealing with near-peer competition now. These technologies will need to outpace potential adversaries in the future.

This special event will feature a moderated exchange with former commanding generals, a 4-star Combatant Commander and a 3-star Service Component Cyber Commander. Panelists will provide their perspectives on:

- Information Operations/Information Warfare
- Operational understanding, context, and education
- Technology development and investment decisions through digital approaches
- Force development and training readiness enhancement through use of simulations

MONDAY, 27 NOVEMBER • 1400 – 1530 • ROOM 307A

CERTIFIED MODELING AND SIMULATION PROFESSIONAL 3.0

CMSP – THE DISTINCTION OF A TRUE M&S PROFESSIONAL – LEARN MORE!

MODERATOR

IVAR OSWALT, PH.D., CMSP
Senior M&S Analyst, The MIL Corporation

PANELISTS

MAJOR JAKE KELLY, USA, CMSP
Maneuver Battle Lab (MBL)

THOMAS YANOSCHIK, CMSP
Site Manager, M&S Branch, Maneuver Battle Lab (MBL)

JEFFREY ERICKSON, CMSP
Senior Program Integrator, Trideum Corporation

CMSP
CERTIFIED MODELING AND SIMULATION PROFESSIONAL

DR. OSWALT, CMSP

MAJ KELLY, USA, CMSP

MR. YANOSCHIK, CMSP

MR. ERICKSON, CMSP

CMSP is the only encompassing M&S professional certification in the U.S. It provides differentiation, community awareness, specialized networks, and membership benefits. Its reinvention, begun in 2019, was unveiled in 2021 with CMSP 3.0. This version streamlines the processes, updates the examination, employs a Learning Management System, and is creating a vibrant community of practice!

All M&S practitioners seeking to enhance their credentials and to add a level of distinction to their qualifications — from Intern, Apprentice, Practitioner, and Master Levels — will find this Focus Event informative and valuable.

Attendees will Learn:

- The motivators behind starting CMSP, its evolution, and the current version.
- The application process, examination, and certification specifics.
- How CMSP provides value as a discrimination and mark of distinction.

The Purpose of Focus Event:

- Describe the motivation behind the creation of CMSP, its evolution, and the current version.
- Summarize the new three levels of CMSP, the use of an LMS, the new examination, and describe the improved infrastructure that includes the provision of preparation materials.
- Finally, provide tangible advice on how interested individuals can start the process to achieve their certification.

The Format of this Focus Event:

- This moderated panel session centers on three of the newest CMSP awardees and their stories of achievement. The newest CMSPs will provide a summary of their experience and answer questions from the audience.
- Also, on the panel will be a Senior Corporate Executive that has motivated his team to become CMSP certified and who works to hire the same.
- The fifth member of the panel will be a CMSP that brings to the discussion an international perspective.
- The panel will be moderated by an experienced M&S professional and CMSP holder who has moderated previous panel sessions and CMSP events.

MONDAY, 27 NOVEMBER • 1415 – 1545 • ROOM W304CDGH

BLACK SWAN – DAWN OF THE SUPER SOLDIER

MYTH VS REALITY

MODERATOR

LAUREN REINERMAN-JONES, PH.D.
Principal Analyst, Southwest Research Institute and Professor of Special Programs, DAU

PANELISTS

RICHARD "ANDY" McKINLEY, PH.D.
Non-Invasive Brain Stimulation (NIBS) Team in the Cognitive Performance Optimization Section, Applied Neuroscience Branch, USAF

IRWIN "DrCOACH" HUDSON, PH.D.
Human Systems Engineer, U.S. Army DEVCOM, STE-LTS

J.J. WALCUTT, PH.D.
Research Scientist, Enterprise-level Learning Engineer, SAIC

GEORGE MATOOK
Program Manager, U.S. Army DEVCOM SC

DR. REINERMAN-JONES

DR. McKINLEY

DR. HUDSON

DR. WALCUTT

MR. MATOOK

The idea of having a super soldier in the ranks is a tantalizing prospect for any military. Just imagine, a soldier who could withstand pain, extreme cold or the need to sleep. Although it may sound like something out of science fiction, emerging technologies capable of augmenting the human body are rapidly evolving and becoming a reality. Injectable night vision, blood engineered for the ability to breathe underwater,bionic hearing, all these are no longer science fiction. Super soldiers are fast becoming a reality as militaries across the world search for ways to beef up their troops to make them stronger, faster, and more deadly.

The idea of getting our hands on some highly coveted Marvel-Esque superpowers sounds exciting, however, there are some real-world fears and ethical questions that need to be asked. Just because we can, should we? The same technology in the hands of an insurgent or terrorist could create super terrorists capable of all kinds of destruction.

This super soldier Black Swan could truly save thousands of lives with a quick decisive win of a war; or the tech could fall into the hands of a dictator with nefarious intent. The use of Modeling and Simulation can help us better understand how to manage these new technologies. If you are in any way involved in helping our warfighters get a physical, or mental edge, then this is a must attend session! We have gathered a team of experts that have done extensive research into the area and can give us a rundown on the good, the bad and the ugly. Join us!

TUESDAY, 28 NOVEMBER • 1400 – 1530 • ROOM W304EF

FAST-TRACKING DOD'S TEST CAPABILITY DEVELOPMENT: CONNECTING THE I/ITSEC COMMUNITY

RELEVANCY OF THE I/ITSEC COMMUNITY IN THE DOD OPERATIONAL TESTING NEEDS

MODERATOR

TARA KILCULLEN
Principal, ZYGOS Consulting

PANELISTS

GEOFF WILSON
Program Manager, Science and Technology (PM S&T), Test Resource Management Center (TRMC), OSD

WHITNEY B. WINCHESTER
Assistant Program Manager Executing Agent, Directed Energy Test (DET), Executing Agent, Nuclear Environments Test (NET) Instrumentation Management Office (IMO), U.S. Army PEO STRI

TRUNG D. NGUYEN
Executing Agent, Electronic Warfare Test (EWT), Instrumentation Management Office (IMO), U.S. Army PEO STRI

TRMC REPRESENTATIVE

MS. KILCULLEN

MR. WILSON

MS. WINCHESTER

MR. NGUYEN

This event identifies how the I/ITSEC community can engage in growing opportunities for new acquisition-focused DoD test needs. PEO STRI's Instrumentation Management Office (IMO) is a key enabler in meeting the OSD's Test Resource Management Center's (TRMC) test needs. Both TRMC T&E/S&T PM and IMO test development portfolio leads will discuss how they work together to broaden venues that rapidly bring cutting-edge technology to the test community. The attendees will take away a better understanding of how they may be able to support the TRMC mission in their cross-service role in ensuring range readiness with ever-increasing test technology challenges.

TUESDAY, 28 NOVEMBER • 1400 – 1530 • ROOM W306AB

HUMAN-CENTERED SUCCESSES AND CHALLENGES IN AR/VR DEVELOPMENT AND IMPLEMENTATION

IMPROVING HUMAN INTERACTION WITH VIRTUAL REALITY IN THE REAL WORLD: THERE'S LOTS TO TALK ABOUT AND MORE TO GET DONE!

MODERATOR

WINK BENNETT, PH.D.
Readiness Product Line Lead, AFRL

PANELISTS

COMMANDER BRENNAN COX, PH.D., USN
Deputy Director, Naval Medical Research Unit Dayton

MAYOWA OLONILUA
Principal Psychologist, DSTL, UK

AARON GARDONY, PH.D.
U.S. Army DEVCOM SC

B. ADRIAN FLOWERS
Capability Lead for Perceptual and Physical Augmentation, Aptima, Inc.

WING COMMANDER RUARI HENDERSON-BEGG
Defence Operational Training Capability (Air) (DOTC(A))

ROY ARENTS
NRL, The Netherlands

DR. BENNETT

CDR COX, USN

MR. OLONILUA

DR. GARDONAY

MR. FLOWERS

WG CDR HENDERSON-BEGG

MR. ARENTS

Given the ongoing explosion of Augmented, Virtual, and Mixed Reality technologies and tools, we continue to see instances where we need to pay special attention to human-centered issues in developing and using these technologies in practical applications. Our panel focuses on continuing challenges in developing and applying these technologies for human performance and readiness. There are many opportunities, but there are also technological gaps and risks that persist. Examples include cybersickness and fatigue, environmental constraints such as outdoor implementation or applications in secure spaces, precision in activity tracking for individuals and larger teams in a variety of real-world contexts and situation, haptics, and how best to get realistic interaction and feedback with the environment at hand (sorry, no pun intended). The audience will have the opportunity to connect with a group of multi-national innovators who are driving research and applications with these technologies and who are also working to address some of the gaps we see today. Event participants will also have a chance to hear about panel member's ongoing research and developments, their successes and the things that are continuing challenges for their work. Audience members will also come away with a much better understanding where a number of communities are in their state of the art and what they are doing to improve human interaction, learning, and immersion in these environments.

BEST FROM AROUND THE GLOBE

Best from Around the Globe features the Best Paper awardees of MODSIM World and IT²EC. Each of the winners was selected by a committee and criteria specific to the particular global conference focus and theme. Come hear the award winners offer their outstanding presentations from these prestigious international conferences.

MODSIM WORLD 2023 BEST PAPER

USING MACHINE LEARNING FOR DEFECT CHARACTERIZATION

Victoria Gerardi, Operations Research Analyst, U.S. Army DEVCOM-Armaments Center
Antonio Aguirre, U.S. Army DEVCOM-Armaments Center

This paper presents a methodology that is under development to analyze large X-ray image datasets for anomaly and/or defect detection using machine learning techniques. The characterization of anomalies and/or defects can be identified through the performance accuracy of either image classification (supervised learning - convolutional neural networks) or anomaly detection (unsupervised learning - autoencoders) models. Each learning technique has unique hyperparameters and design architectures to aid in creating a robust model to predict against X-ray images of varying orientations, brightness and contrast. This method would be a strong complement to the traditional suite of energetic material/component characterization tests, particularly for melt-pour explosives, performance-related design intent, safety, and/or performance-related defect detection. For safety or performance-related defect detection, the methodology enables baselining defects as a feedback loop in the development of new subscale tests and physics-based models to better understand and predict energetic failure modes, a capability under development at DEVCOM Armament Center called Energetic Defect Characterization (EDC).

IT²EC 2023 BEST PAPER

VR FOR PUBLIC SAFETY RESPONSE TRAINING

Major Koen Ceulemans, Innovation Manager Land Component (TBC) Technology Advisor
1LT Jeroen Nelis, Innovation Manager Belgian Federal Police (Limburg) – Subject Matter Expert XR Belgian Defence

In 2009 a Belgian ship was highjacked by Somalian pirates. In a joint effort to resolve the situation, the special forces of both the Belgian Federal Police and the Belgian Defence trained together to enter the ship. To accomplish the mission, they made a real-life replica of the ship using wood and carton based on the blueprints of the ship. However, building this replica took a lot of time; Time that could otherwise be spent training. This is why, in 2022 the Belgian military and police officially joined forces to build a proof-of-concept VR-training simulator that would make it possible to more quickly react to these kinds of situations. The aim of the simulator was to bring the interactions of the operators with the virtual environment as close to real life as possible. This collaboration between the police and military is called XR-labs. The main goal of the lab is to share knowledge and insights in the Belgian military and security sector in the field of eXtended Reality. During the construction of the proof-of-concept training simulator, a strategy is also being developed on how to adopt this kind of technology in the future organization-wide. Where we first thought about just buying off the shelf solutions, we are now shifting towards a solution of co-development, where we would build a system together with the industry. Since the technology is still evolving very rapidly at the moment, buying a state-of-the-art system right now would be outdated in a matter of years and probably even months. Also, the nature of the confidential information could raise concerns when buying a "black box" system off the shelf. For example, we are looking into making 3D-scans of the critical infrastructure like nuclear sites, airports, courthouses, embassies, etc. This will make it possible to more quickly respond to and train for emergency situations, but could also be very dangerous if the information falls into the wrong hands. Besides that, the gathered information about the performance of the operators (e.g., TTPs) is also sensitive in nature. A last issue when buying a system off the shelf is that current simulators are generally made for one specific use case. For example, there are simulators for small arms training, sniper training, decision-making, First Aid, etc. In the real world, we would have a modular simulator - a sandbox environment - that makes it possible to combine the different disciplines in a trianing scenario, as it would be in the real world.

WEDNESDAY, 29 NOVEMBER • 0830 – 1000 • ROOM W304AB

FLEET TRAINING OFFICERS PANEL

MODERATOR

CHRISTOPHER BOYLE
LVC Training Technology Director, US Fleet Forces Command N72

PANELISTS

CAPTAIN MICHAEL LANGBEHN, USN
Deputy, Naval Air Warfare Development Command

CAPTAIN BRIAN MILLER, USN
Director, Maritime Operations, Carrier Strike Group FOUR

CAPTAIN SEAN ANDERSON, USN
Commanding Officer, Tactical Training Group Atlantic

CAPTAIN PETER SHOEMAKER, USN
Commodore, Strike Fighter Wing Atlantic

MR. BOYLE

CAPT LANGBEHN, USN

CAPT MILLER, USN

CAPT ANDERSON, USN

CAPT SHOEMAKER, USN

"LVC training continues to be a game-changer in training our combat leaders in the Fleet. From the Fleet Commander, to the pilot in the cockpit, to the First Class Petty Officer on the radar scope, LVC allows us to train together in one environment at unprecedented levels of integration and complexity." CNO, NAVPLAN

In this special event, you will hear from Fleet Training Officers about current training they provide in the here and now. We have assembled a select group of senior Navy leaders responsible for providing the most challenging training events for deploying battle groups, ships and aircraft, and their staffs and crew who will discuss the successes and challenges they face providing meaningful training across multiple domains with current systems and capabilities.

WEDNESDAY, 29 NOVEMBER • 1030 – 1200 • ROOM W304EF

SENIOR NCO PERSPECTIVE: OPERATIONAL READINESS LEVERAGING SIMULATIONS FOR TRAINING & MISSION REHEARSAL

MODERATOR

COMMAND SERGEANT MAJOR (R) WALTER A. TAGALICUD, USA
Synthetic Training Environment Cross Functional Team Highly Qualified Expert

PANELISTS

SERGEANT MAJOR TOM A. DOW JR., USA
Senior Enlisted Advisor, U.S. Army PEO STRI

COMMAND SERGEANT MAJOR BRYAN OTERO, USA
U.S. Army Combat Capabilities Development Command (DEVCOM)

SERGEANT MAJOR CHRIS KOHUNSKY, USA
Senior Enlisted Advistor, U.S. Army CAC-T, Fort Leavenworth

COMMAND SERGEANT MAJOR ERICK E. OCHS, USA
U.S. Army Training Center & Fort Jackson

SERGEANT MAJOR WILLIAM POULIOT, USA
Assistant Secretary of the Army (Acquisition, Logistics and Technology) ASA (ALT)

CSM (R) TAGALICUD, USA

SGM DOW, JR., USA

CSM OTERO, USA

SGM KOHUNSKY, USA

CSM OCHS, USA

SGM POULIOT, USA

The feedback from combat-tested senior NCOs has always been valuable to the training and development of the latest generation of Army Soldiers. These seasoned leaders know today's youngest warfighters grew up surrounded by constantly changing and advancing technology, resulting in them being more accepting of digital simulation for training and mission rehearsal. Despite their ability to adapt to technology, these young warfighters must still embrace the idea that synthetic training only augments and does not replace live training evolutions. Additionally, simulation and mission rehearsal technology is not limited to only weapons and platforms, but also covers the entire spectrum of military operations including communications, logistics, tactical data links, and battlefield medicine. Each of these critical elements must be included in any type of synthetic training environment in order to achieve both individual and unit operational readiness.

WEDNESDAY, 29 NOVEMBER • 1330 – 1500 • ROOM W305AB

JOINT MEDICAL TRAINING – LEADERSHIP PERSPECTIVE ON CURRENT AND FUTURE CAPABILITIES

JOINT MEDICAL TRAINING LEADERSHIP PANEL

MODERATOR

MATTHEW HACKETT, PH.D.
Science and Technology Manager, U.S. Army DEVCOM SC STTC

PANELISTS

CAPTAIN JOSEPH LOPREIATO, M.D., USN (RET.)
Professor of Pediatrics, Medicine and Nursing, Assistant Dean for Simulation Education, Uniformed Services University of the Health Sciences

COLONEL MARIA M. MOLINA, M.D., USA
Acting Director, J-7 Education & Training Directorate, DHA

COLONEL KATHLEEN SAMSEY, M.D., USA
Director, Directorate of Simulation, U.S. Army Medical Center of Excellence

COLONEL BRIAN K. WHITE, USAF
Comprehensive Medical Readiness Program Chair, Air Force Medical Readiness Agency

LIEUTENANT COLONEL SAMANTHA KELPIS, USAF
MEDIC-X Team Lead, Air Force Medical Readiness Agency

DR. HACKETT

DR. LOPREIATO

COL MOLINA, USA

COL SAMSEY, USA

COL WHITE, USAF

LT COL KELPIS, USAF

The military healthcare community must continuously respond to shifts in the operational environment. In recent conflicts, evacuation of casualties occurred rapidly due to air and ground superiority. With future conflicts, in particular Large Scale Combat Operations (LSCO), evacuation may be denied for significant periods of time. Furthermore, LSCO is likely to result in larger numbers of casualties, complicating the task of clearing the battlefield. Beyond battlefield medicine, the military health system must be ready to provide care to servicemembers for nearly all specialties and sub-specialties. The combination of difficult battlefield medicine conditions with broad requirements for medical treatment facility care presents significant challenges. Within this panel, representatives from the Joint healthcare community will present the direction of military healthcare training. This will include representatives associated with battlefield medicine, training within medical treatment facilities, and graduate medical education.

WEDNESDAY, 29 NOVEMBER • 1600 – 1730 • ROOM W304EF

DIGITAL TRANSFORMATION & MODEL BASED SYSTEMS ENGINEERING (MBSE)

MARINE CORPS DIGITAL TRANSFORMATION OF TRAINING, ANALYTICS, AND EXPERIMENTATION

MODERATOR

LUIS E. VELAZQUEZ
Chief Technology Officer (CTO), MARCORSYSCOM

PANELISTS

JOHN YOUNG, PH.D.
Technical Director, Operations Analysis Directorate (OAD), Headquarters Marine Corps, Combat Development and Integration (CD&I)

LIEUTENANT COLONEL SCOTTY BLACK, USMC
Ph.D. Candidate, Naval Postgraduate School

LIEUTENANT COLONEL WYNNDEE M. YOUNG, USMC
Program Manager, Wargaming Capability, MARCORSYSCOM

JOE LOMANGINO
Air Ground Simulation Integration Analyst, TECOM

TYSON C. KACKLEY
Program Manager, Wargame Capability Engineer Analyst, MARCORSYSCOM

MR. VELAZQUEZ

DR. YOUNG

LTCOL BLACK, USMC

LTCOL YOUNG. USMC

MR. LOMANGINO

MR. KACKLEY

There are multiple pillars within the Marine Corps community that leverage MBSE. It is imperative that a cohesive strategy accounts for existing efforts, methods, means, and tools to achieve a successful Digital Transformation. Tools are designed and purpose-built to meet end state objectives regardless of the community undergoing Digital Transformation.

This moderated panel will introduce you to the Marine Corps leaders that conduct and pave the way ahead for the future of Digital Transformation. The panel members are the decision-makers from across the spectrum to include capabilities development, requirements sponsorship, program management, and Technical Authority execution. This panel will provide valuable insight into their scope of work on the correlated efforts to bring complicated computer MBSE tools, computing, models, visualization, and the creation of a specialized skilled labor force necessary to support the full range of Digital Transformation possibilities while discussing the common approaches that link them all.

WEDNESDAY, 29 NOVEMBER • 1600 – 1730 • ROOM W306AB

ARMY SCIENCE BOARD FY23 STUDY FINDINGS AND RECOMMENDATIONS

TESTING, VALIDATING AND PROTECTING ARMY USE OF AI/ML MODELS

MODERATOR

THOMAS P. RUSSELL, PH.D.
CEO and President, Defense Science and Technology Consultants, LLC

PANELISTS

DAVID JIMENEZ
Vice President for Research, Development, Test and Evaluation, Jacobs Technologies

GARY W. BLOHM
President, G Blohm Consulting, LLC

MARC ZISSMAN, PH.D.
Associate Head, Cyber Security and Information Sciences Division, MIT Lincoln Laboratory

NANCY KREIDLER
Cybersecurity Leader, Government and Public Services Advisory, Cyber & Strategic Risk Practice, Deloitte

FRED B. SCHNEIDER, PH.D.
Samuel B. Eckert Professor of Computer Science, Cornell University

DR. RUSSELL

MR. JIMENEZ

MR. BLOHM

DR. ZISSMAN

MS. KREIDLER

DR. SCHNEIDER

Machine Learning models are vulnerable to a variety of attacks above and beyond the range of conventional cyber and human social-engineering hacks, such as data poisoning or AI Trojans inserted during the training phase. AI/ML systems are also brittle and easy to confuse in the inference phase: in a military context, parked aircraft with a certain sticker applied to the fuselage might be miscategorized by an aided target recognition system as not-aircraft, or a tank camouflaged with enough foliage might be considered a moving tree. This study assessed the current state of counter-AI and counter-counter-AI programs and research, in DOD, in the Intelligence Community, in industry and academia, and provides recommendations for the Army to improve how it tests and evaluates, validates, and protects existing and future AI/ML models and the data supply chain, and to improve detection, reaction, and restoration of AI/ML-enabled systems after an attack – AI assurance.

THURSDAY, 30 NOVEMBER • 0830 – 1000 • ROOM W300 – THEATRE

REVOLUTIONIZING TRAINING WITH GENERATIVE AI

MODERATOR

DANIEL SERFATY
Chairman and Chief Executive Officer, Aptima, Inc.

PANELISTS

YAIR SHAPIRA, PH.D.
Founder & Chief Executive Officer, Ed-with-AI

ANDY VAN SCHAACK, PH.D.
Associate Professor of the Practice, Vanderbilt University

SVITLANA VOLKOVA, PH.D.
Chief AI Scientist, Aptima, Inc.

KEITH BRAWNER, PH.D.
Program Manager, Institute for Creative Technologies UARC, U.S. Army DEVCOM SC STTC

MR. SERFATY

DR. SHAPIRA

DR. VAN SCHAACK

DR. VOLKOVA

DR. BRAWNER

Generative AI, such as ChatGPT, has burst onto the scene as the latest application of generative natural language processing, taking the public by storm and demonstrating its impressively (and eerily) human-like conversational skills. Millions are now using it and other AI generative models, experimenting with and exploring their possibilities, asking questions, and giving various writing assignments and other tasks.

With these AI models becoming more robust and mature, how might they be put to use productively and safely in training, education, and simulation? Beyond how they might support their human counterparts as highly personalized assistants, could they fundamentally change the way we learn, train, and work in today's digital world?

Although these natural language models can create responses that appear accurate and thoughtful, they lack true human-like understanding or insight. And as they become more sophisticated and human-like, they might engender a false sense of trust or an exaggerated mistrust, overreliance, or miscalibrated confidence by their human users. What processes or guardrails will we need to ensure productive human-AI teaming that will provide accuracy, data integrity, and explainability?

This panel of leading thinkers from defense and industry will address and explore with the audience the current and potential applications of generative AI in training, simulation, and education in both military and civilian domains.

THURSDAY, 30 NOVEMBER • 1030 – 1200 • ROOM W304AB

DEPARTMENT OF THE AIR FORCE MAJCOM

PERSPECTIVES FROM THE USER

MODERATOR

COLONEL TIMOTHY E. BEERS, USAF
Commander, AFAMS

PANELISTS

COLONEL NICHOLAS R. YATES, USAF
Chief, Operational Training Infrastructure Division, HAF/A3TI

COLONEL BENJAMIN L. CARROLL, USAF
Chief, Aircrew Tactics and Training Division, Headquarters Air Mobility Command

LIEUTENANT COLONEL SHANE GARNER, USAF
Chief, Test & Training Division, ACC A589/A5T

COLONEL COREY J. KLOPSTEIN, USSF
Warfigther Enterprise Acquisition Delta

JAY R. FISHER
Chief, AFSOC/A3 Training Systems Branch

COL BEERS, USAF

COL YATES, USAF

COL CARROLL, USAF

LT COL GARNER, USAF

COL KLOPSTEIN, USSF

MR. FISHER

This panel brings together training command leaders to provide insights into the needs of the user. These DAF leaders will provide insight from mission readiness perspectives needed to meet operational imperatives across current systems and capabilities. The panel also provides an opportunity for I/ITSEC participants to engage with the DAF leaders to discuss challenges and future capability / technology needs to the increase Airmen and Guardian readiness through training.

THURSDAY, 30 NOVEMBER • 1030 – 1200 • ROOM W300 – THEATRE

MEDICAL IGNITE: THE LATEST INNOVATIONS IN MEDICAL SIMULATION ACROSS INDUSTRY, ACADEMIA, AND GOVERNMENT

MODERATORS

MATTHEW HACKETT, PH.D.
Science and Technology Manager,
U.S. Army DEVCOM SC STTC

MARK MAZZEO
Science and Technology Manager,
U.S. Army DEVCOM SC

SPEAKERS

GERD BRUDER
University of Central Florida
Institute for Simulation and Training
Topic: Virtual Experience Research Accelerator

ALYSSA TANAKA
Soar Technology, LLC
Topic: Artificial Intelligence in the Medical Training Domain

RYAN RIBEIRA
SimX
Topic: Virtual Reality for Military Medical Training

ED SADLER
Simetri
Topic: Care Under Fire using Video Pass-Through HMDs

ROBERT LEVINE
ArchieMD
Topic: Extreme Cold Medicine

RAHUL RAHUL
Rensselaer Polytechnic Institute
Topic: Functional Near Infrared Spectroscopy for Performance Assessment

ROBERT SWEET
University of Washington
Topic: 3D Printing Soft Tissue Simulants

THOMAS "BRETT" TALBOT
University of Southern California
Institute for Creative Technologies
Topic: Digital Humans in Medical Training

MAJ MARTIN SMALLIDGE
Medical Capability Development Integration Directorate
Topic: Dental Capability – Training and Simulation Considerations

JACK NORFLEET
U.S. Army DEVCOM SC
Topic: Automated Assessment Capabilities to Unburden Instructors

BETH PETTITT
U.S. Army DEVCOM SC
Topic: Army Simulation of the Future

Healthcare simulation and training is a vast field, providing technological solutions for providers ranging from first-responders to surgeons. In both the civilian and military healthcare communities, simulation has rapidly grown to become a foundational tool for initial and continuing education. Healthcare simulation is advancing quickly with novel technologies, including mixed reality, machine learning, artificial intelligence, computer vision, physiological monitoring, and more. This session will be structured as an IGNITE event. IGNITE events are comprised of short, 5 minute sessions highlighting exciting topics or trends in a field. This event will focus on novel technologies or concepts that are emerging in heatlhcare simulation and training. Both civilian and military medicine will be represented to facilitate the greatest exchange of information and broadest reach. Attendees can expect to experience and learn about dynamic new ideas, exciting trends, and unique perspectives within the area of healthcare training.

THURSDAY, 30 NOVEMBER • 0830 – 1000 • ROOM W306AB

WARGAMING TO WARFIGHTING – TRAINING FOR THE RIGHT FIGHT ACROSS THE LEARNING CONTINUUM

MODERATOR

LIEUTENANT COLONEL WYNNDEE M. YOUNG, USMC
Program Manager, Wargaming Capability, MARCORSYSCOM

PANELISTS

COLONEL TIM BARRICK, USMC (RET.)
Wargaming Director, Marine Corps University

LIEUTENANT COLONEL JESSE ATTIG, USMC
Modeling & Simulation Officer, Marine Air Ground Task Force Training Command, USMC

PAUL TAMARIBUCHI
Director, Pacific Warfighting Center, USINDOPACOM J73

YARON "RON" KETER
JLVC Modernization Project Lead, NSWC – Corona

COLONEL GEORGE C. SCHREFFLER, III, USMC
Director, MCWL Wargame Division, USMC

LTCOL YOUNG, USMC

COL BARRICK, USMC (RET.)

LTCOL ATTIG, USMC

MR. TAMARIBUCHI

MR. KETER

COL SCHREFFLER, III, USMC

The panel will emphasize the critical significance of establishing consistency across all learning domains and levels, encompassing experimentation, professional education, wargaming, formal schoolhouse training, home-station training, and service-level exercises. To achieve this, there is a pressing need for a unified "narrative arc" that threads through these diverse learning avenues. This narrative arc should cover key elements such as the operational environment, threat capabilities and tactics, emerging weapons systems and concepts, and doctrine. The ultimate aim is to accelerate the transition from learning to training, to execution.

SERIOUS GAMES SHOWCASE AND CHALLENGE

EXPERIENCE BEST-IN-CLASS SERIOUS GAMES IN BOOTH 3181!

SGS&C DIRECTOR

JENN McNAMARA
Vice President, Strategic Partners and Products, BreakAway Games

SGS&C INDUSTRY LEAD

ADELLE ADAMS
Senior Business Development Manager, RINA Consulting Defence Ltd.

SGS&C GOVERNMENT LEAD

BENJAMIN LITTLE
Systems Engineer, U.S. Army PEO STRI

MS. McNAMARA

MS. ADAMS

MR. LITTLE

The Serious Games Showcase and Challenge (SGS&C) invites you to Booth 3181 to play this year's finalist games, immerse yourself in exciting PC, XR, and mobile learning experiences, meet the developers, and cast your vote for the People's Choice Award.

Visit the booth anytime the Exhibit Hall is open (check times in the official program) to play the serious games, network with their developers, and meet members of our organizing committee!

Visit the SGS&C to learn how games can address your serious learning needs and experience the games firsthand!
Founded in 2006, the SGS&C aims to bring awareness of the impact that games have on learning, and to provide quality exemplars. Within a casual and interactive setting, the SGS&C provides a showcase of best-in-class learning games submitted by businesses, students, and government organizations while offering the developers recognition of their achievements as finalists and award winners.

Play the games and cast your vote for the People's Choice Award by 1800 Wednesday, 29 November.
The People's Choice Award is based on votes from attendees like you. Your I/ITSEC badge includes your ballot. Be sure to visit the booth to play the games and vote!

Hear the SGS&C awards announced live on Thursday, 30 November.
Join us at 1300 in the Innovation Showcase (Booth 2588) for the Awards Ceremony for the announcement of the winners of the:

- Best General Audience Serious Game
- Best Government Audience Serious Game
- Best Student-developed Serious Game
- Best XR Serious Game
- Best Serious Game Innovation Award
- Students' Choice Award
- People's Choice Award

We thank our generous sponsors: ARA Virtual Heroes Division, Engineering & Computer Simulations, Ternion Corporation, VMASC, National Training & Simulation Association, Hatalom Corporation, HP, Box.com, and RINA Consulting Defence Ltd.

MONDAY, 27 NOVEMBER • 1230 – 1400 • ROOM W307B

BREAKING INTO GOVCON FROM A DCAA PERSPECTIVE

DEMYSTIFYING FEDERAL GOVERNMENT CONTRACT REQUIREMENTS

MODERATOR

KATELYN RIGLE
Operations Small Business Outreach Coordinator, Defense Contract Audit Agency

Join Defense Contract Audit Agency as we break down the impact of the 2019 GAO "Contract Financing" report and the subsequent Office of the Under Secretary of the Defense for Acquisition and Sustainment Defense Pricing and Contracting finance study, which cited government compliant accounting systems, Cost Accounting Standards, and FAR Cost Principles as barriers to entry for small businesses looking to enter the Defense Industrial Base. During this presentation, DCAA will look at the types of contract awards and the requirements for each, as well as the common misconceptions of FAR, CAS, and TINA.

ABOUT DCAA

Defense Contract Audit Agency (DCAA) provides audit and financial advisory services to the Department of Defense (DOD) and other federal entities responsible for acquisition and contract administration. DCAA's role in the financial oversight of government contracts is critical to ensure DOD gets the best value for every dollar spent on defense contracting. DCAA operates under the authority, direction, and control of the Under Secretary of Defense (Comptroller)/Chief Financial Officer. Its work benefits our men and women in uniform and the American taxpayer. The Agency's primary function is to conduct contract audits and related financial advisory services. Contract audits are independent, professional reviews of financial representations made by defense contractors, and DCAA helps determine whether contract costs are allowable, allocable, and reasonable.

MONDAY, 27 NOVEMBER • 1430 – 1600 • ROOM W305AB

HUMAN READINESS LEVELS

ENGINEERING SYSTEMS FOR HUMANS

MODERATOR

KARA L. ORVIS, PH.D.
Executive Vice President, Science & Technology, Aptima, Inc.

PANELISTS

NEIL GANEY, PH.D.
Fellow for Human Systems Engineering and Integration, Northrop Grumman

SYLVAIN BRUNI
Principal Engineer, Aptima, Inc.

LAYLA AKILAN
Senior Systems Cognitive Engineer, Mile Two, LLC

JESSICA BAWEJA, PH.D.
Social Scientist, Pacific Northwest National Laboratory

DR. ORVIS

DR. GANEY

MR. BRUNI

MS. AKILAN

DR. BAWEJA

To create and maintain an advantage with peer and near peer advisories, it is critical that our warfighters are equipped with systems that are designed to consider their physical, behavioral, and cognitive needs. I/ITSEC provides an excellent opportunity for groups such as the government Human Systems COI and industry to reach out to the larger DoD community and discuss human systems issues as they relate to training, modeling, and simulation. Research shows that attention to human systems design is critical for the prevention of human error, which accounts for most accidents and incidents across a wide range of systems. Unfortunately, human performance research is not routinely transitioned to defense acquisition programs. Also, with no specifications required for human systems integration in acquisition programs, Requests for Proposals (RFPs) seldom include evaluation criteria for it, and it is ignored by program managers. Human systems design issues must be considered early during system design to reduce subsequent operations and maintenance costs, minimize accidents and incidents that negatively impact safety and costs, and improve the effectiveness of the combined human-system for achieving mission outcomes. This panel of experts will discuss the importance of recent human systems documentation and guidance, specifically the Human Readiness Levels (HRL) as they relate to modeling, simulation, education, and training solutions, all of which include the human. The panel will educate the attendees on what the HRLs are, how program managers can and should build those requirements into RFPs, and challenges associated with implementing the guidance.

WEDNESDAY, 29 NOVEMBER • 0830 – 1000 • ROOM W305AB

SIMULATION STANDARDS: DELIVERING MULTI-NATIONAL INTEROPERABILITY

STANDARDS FOSTER INTEROPERABILITY, #GOSTANDARDS

MODERATOR

WIM HUISKAMP
Chief Scientist, Modelling, Simulation and Gaming, TNO Defence Research

PANELISTS

PATRICK T. ROWE
Executive Director, Simulation Interoperability Standards Organization (SISO)

LIONEL KHIMECHE
Head of the M&S Department, DGA (Direction Générale de l'Armement)

SEBASTIAN LOZE
Simulations Industry Manager, Epic Games

SCOTT SIMMONS
Chief Standards Officer, OGC

NATO OTAN
Modelling and Simulation Group
Neuilly-sur-Seine | France
S&T organization

SISO Simulation Interoperability Standards Organization
"Simulation Interoperability & Reuse through Standards"

KHRONOS GROUP

Open Geospatial Consortium

MR. HUISKAMP

MR. ROWE

MR. KHIMECHE

MR. LOZE

MR. SIMMONS

Standards provide interoperability and reduce time and cost to deliver effective solutions. This is especially true in areas like training or concept development where a mix of existing and/or newly developed components often need to be integrated in a short timeframe.

M&S standardization leads from NATO Modelling and Simulation Group (NMSG), the Simulation Interoperability Standards Organization (SISO) and other key organizations will describe their standardization processes and ongoing efforts.

You will gain renewed appreciation for the value of standards and more in-depth understanding of how they are developed, adopted, supported, and maintained. If you attended the NMSG-SISO session last year, plan to join again this year to get an update of NATO and SISO standards program information.

WEDNESDAY, 29 NOVEMBER • 1300–1700 • ROOM W110A

NTSA CAREER FAIR AT I/ITSEC

Job opportunities are on the rise for the defense industry – leading the way for developing cutting-edge solutions. The career fair welcomes you to be part of the fast-growing Simulation and Training community.

Meet with industry and government organizations with opportunities for new graduates and transitioning professionals on Wednesday, 29 November from 1300 – 1700 at the OCCC in Room W110A for the I/ITSEC Career Fair. See the Career Fair website at IITSEC.org/CareerFair for registration information.

This event provides:
- an opportunity to learn more about open jobs available from government and industry partners
- networking for businesses with subcontracting needs
- a space to learn about the government's perspective and process
- an environment to grow your network

I/ITSEC attendees do not need to register to attend the Career Fair. Participating organizations will be added to the website as they are confirmed; please visit IITSEC.org/CareerFair for the most up-to-date information. If you have any questions while onsite, please visit the Career Fair on Wednesday, 29 November in room W110A.

PARTICIPATING ORGANIZATIONS ARE LISTED ONLINE AT
IITSEC.org/CareerFair and onsite at the Discovery Den Info Desk in Booth 3281.

THURSDAY, 30 NOVEMBER • 1030 – 1200 • ROOM W306AB

COGNITIVE AUGMENTATION FOR MILITARY APPLICATIONS

A PRIMER ON THE NATO INDUSTRY ADVISORY GROUP SG-278 REPORT

MODERATOR

SYLVAIN BRUNI, PH.D.
Principal Engineer, Aptima, Inc.

PANELISTS

COMMANDER (SG) PAUL GROESTAD, NORWEGIAN NAVY
Deputy Branch Head, Cognitive Warfare Concept Lead, Concept Development Branch, Allied Command Transformation NATO

PAOLO PROIETTI
NATO Study (NIAG & STO) Coordinator, Technology & Innovation, Leonardo

VALARIE YERDON, PH.D.
Senior HSI Analyst, THOR

JOHAN DE HEER, PH.D.
Director of Research Programs – CTO Office (Thales Netherland)
Segment Manager on Brain-Computer Interfaces - Key Technology Domain Systems (Thales Group)
Director of the Human Behavior Analytics Lab – Thales Research & Technology (Hengelo), Thales

SALVATORE CARMINE GIUGLIANO
System Analyst Engineer, MBDA

DR. BRUNI

CDR GROESTAD

MR. PROIETTI

DR. YERDON

DR. DE HEER

MR. GIUGLIANO

What if an authoritarian leader of a nuclear nation could improve their cognitive abilities by 100x using implants? Can multimodal deepfakes turn a population against its government in five days? Will children be cognitively inoculated against misinformation before the end of this decade? These are but a few questions the NATO Industry Advisory Group (NIAG) imagined as part of Study Group 278 on Cognitive Augmentation for Military Applications at the 2040 horizon.

The commoditization of generative AI and the vast breadth of emerging cognitive technologies, combined, will yield new opportunities and threats for NATO nations. Understanding this landscape is critical for government stakeholders and industry decision-makers as they seek to leverage such prospects and anticipate/mitigate the related threats.

In this special event, servicemembers and industry representatives will get a primer on the SG-278 report, focused on four components for cognitive augmentation: training and readiness, neurotech, emerging tech, and ethical, legal, and societal implications (ELSI). Attendees will learn:

- How to navigate the landscape of cognitive augmentation for military applications
- Critical NATO use cases and concepts of use for leveraging cognitive augmentation for blue forces while countering cognitive augmentation of red forces
- Early insights and recommendations for NATO and industry towards roadmapping cognitive augmentation towards 2040

WEDNESDAY, 29 NOVEMBER • 0830 – 1000 • ROOM W306AB

PM TRASYS – RANGE TRAINING SYSTEMS – ACQUISITION UPDATE

MODERATOR

JOHN TAYLOR
Deputy Program Manager, PM TRASYS, MARCORSYSCOM

PANELISTS

LIEUTENANT COLONEL RORY HERMANN, USMC
Product Manager (PdM) Range Training Systems (RTS), PM TRASYS, MARCORSYSCOM

LIEUTENANT COLONEL MARCIAL GARCIA, USMC
Product Manager (PdM) TS4, PM TRASYS, MARCORSYSCOM

NORIKO O'BRIEN
Contracting Officer, MARCORSYSCOM

JAMES FRALEY
Range and Training Programs Division (RTPD), TECOM

This event provides a brief overview of the acquisition projects managed at/by PM TRASYS in Orlando, Florida, PdM Range Training Systems and the services efforts that provide supporting activities. The PdMs will provide an update to projects and offer information regarding upcoming procurement activities. TECOM, RTPD representation will provide an update and introduce emerging training requirements in development for consideration as new acquisition projects.

WEDNESDAY, 29 NOVEMBER • 1030 – 1200 • ROOM W306AB

PM TRASYS – SYNTHETIC TRAINING SYSTEMS – ACQUISITION UPDATE

MODERATOR

JOHN TAYLOR
Deputy Program Manager, PM TRASYS, MARCORSYSCOM

PANELISTS

ELIZABETH TYGART
Product Manager (PdM), Synthetic Training Systems (STS), PM TRASYS, MARCORSYSCOM

LIEUTENANT COLONEL MARCIAL GARCIA, USMC
Product Manager (PdM), TS4, PM TRASYS, MARCORSYSCOM

NORIKO O'BRIEN
Contracting Officer, MARCORSYSCOM

JOE LOMANGINO
Range and Training Programs Division (RTPD), TECOM

This event provides a brief overview of the acquisition projects managed at/by PM TRASYS in Orlando, Florida, PdM Synthetic Training Systems and the services efforts that provide supporting activities. The PdMs will provide an update to projects and offer information regarding upcoming procurement activities. TECOM, RTPD, representation will provide an update and introduce emerging training requirements in development for consideration as new acquisition projects.

WEDNESDAY, 29 NOVEMBER • 1530 – 1700 • ROOM W304AB

AIR FORCE ACQUISITION UPDATE

CO-MODERATORS

COLONEL CHARLES "MATT" RYAN, USAF
Senior Materiel Leader for the Simulators Division, Air Force Program Executive Officer (PEO) for Agile Combat Support (ACS)

LEA T. KIRKWOOD, SES
Air Force Program Executive Officer (PEO) for Agile Combat Support (ACS)

This Special Event will provide the latest information from the U.S. Air Force regarding the acquisition initiatives, focus areas, and upcoming training systems acquisition actions. It will feature remarks from Ms. Lea Kirkwood, the Air Force Program Executive Officer (PEO) for Agile Combat Support (ACS). Ms. Kirkwood will share her perspective on the current state of the Air Force acquisition process along with ongoing initiatives that apply to the I/ITSEC community. Colonel Charles "Matt" Ryan, the Senior Materiel Leader for the Simulators Division, will follow the PEO's presentation. Col Ryan and his team will provide updates on Air Force simulator business processes and opportunities.

THURSDAY, 30 NOVEMBER • 0830 – 1100 • ROOM W304EF

ARMY ACQUISITION UPDATE (TSIS UPDATES)

MODERATOR

KAREN D. H. SAUNDERS, SES
Program Executive Officer, Simulation, Training and Instrumentation (PEO STRI)

PANELISTS

COLONEL THOMAS MONAGHAN, USA
Project Manager Training Devices, U.S. Army PEO STRI

JEANNIE WINCHESTER
Project Manager Cyber, Test and Training, U.S. Army PEO STRI

SCOTT PULFORD
Deputy Project Manager Synthetic Environment, U.S. Army PEO STRI

MICHAEL WILLOUGHBY
Project Lead TADSS Support Operations, U.S. Army PEO STRI

DALE WHITTAKER
Project Lead International Programs, U.S. Army PEO STRI

MIKE HARRIS
Executive Director/Senior Contracting Official, Army Contracting Command – Orlando (ACC-O)

JUDE TOMASELLO
Program Manager for Medical Simulation and Training, Defense Health Agency

The U.S. Army Program Executive Office Simulation, Training and Instrumentation (PEO STRI), Training & Simulation Industry Symposium (TSIS) updates at I/ITSEC will provide the latest information regarding current and future PEO STRI business opportunities. This is an update from the June 2023 TSIS and will include presentations from PEO STRI's Project Managers and Project Leads, as well as the Army Contracting Command – Orlando and Program Manager Medical Simulation and Training, Defense Health Agency.

THURSDAY, 30 NOVEMBER • 0830 – 1000 • ROOM W305AB

NAVY TRAINING SYSTEMS PROGRAM MANAGERS – PROGRAM BRIEF

MODERATOR

MIKE MERRITT
Acquisition Director, NAWCTSD

PANELISTS

CAPTAIN KEVIN T. MCGEE, USN
Program Manager, Naval Aviation Training Systems and Ranges Program (PMA-205)

CAPTAIN TIM JAMES, USN
Commanding Officer, NAWCTSD

BOB KERNO
Program Manager, Surface Training Systems Program Office (PMS-339)

ARNOLD MALLORY
Training Department Head, Naval Information Warfare Systems Command

Each year at I/ITSEC, a panel of Training Systems Program Managers consisting of Navy Captains and senior civilian leaders representing the Navy's training acquisition organizations convenes to discuss the year's highlights and share their strategic vision. I/ITSEC participants are welcome and encouraged to attend to hear about the state of the Navy's Training Systems.

THURSDAY, 30 NOVEMBER • 1030 – 1200 • ROOM W305AB

NAVY TRAINING PROGRAMS VISION – PROGRAM BRIEF

MODERATOR

MIKE MERRITT
Acquisition Director, NAWCTSD

PANELISTS

CAPTAIN JOHN SCHIAFFINO, USN
Training Systems Program Manager, F-35 Joint Program Office

DAVID KEMP
Director, Ready Relevant Learning (PEO MLB)

ERIC FOX
Program Manager, Navy Continuous Training Environment
Naval Surface Warfare Center, Corona

In this panel session, Navy Captains and senior civilian leaders will discuss program highlights and strategic visions of pillar programs and capabilities pertinent to the Navy Training mission. I/ITSEC participants attending this session will learn more about key Navy weapons platforms, sailors, and the training environment programs.

INTERNATIONAL PAVILION — ROOM W205ABC

International attendees can meet and connect with counterparts from around the world. Limited private meeting space is available on a first-come, first-served basis to our international participants and may be scheduled at the International Pavilion's Welcome Desk. Additional information about the many international activities throughout I/ITSEC is readily available in the International Pavilion.

International registrants should register at the dedicated international check-in station positioned near the main registration desk in the lower level of West Concourse. International conference attendees' meeting bags will be available for pick-up at the main registration desk this year.

INTERNATIONAL PAVILION HOURS OF OPERATION

Monday, 27 November	0800 – 1800
Tuesday, 28 November	1200 – 1800
Wednesday, 29 November	0800 – 1500
Thursday, 30 November	0800 – 1500

INTERNATIONAL PAVILIONS

Canada	1969

AS OF 22 OCTOBER 2023

SPECIAL EVENTS

FOCUS EVENT

TUESDAY, 28 NOVEMBER • 1400 – 1530 • W305AB

Best from Around Globe

COMMUNITY OF INTEREST

WEDNESDAY, 29 NOVEMBER • 0830 – 1000 • W305AB
THE NETHERLANDS

Simulation Standards: Delivering Multi-National Interoperability

TUTORIALS

MONDAY, 27 NOVEMBER

23T27 • 1030 – 1200 • W307A • UNITED KINGDOM
TUT 10: INTERSECTION OF LEARNING ENGINEERING AND DATA

Managing Learning Resources Through Use of Metadata Standards

23T34 • 1030 – 1200 • W306AB • NORWAY AND UKRAINE
TUT 3: THE EXPERIENCE MATTERS

How to Build at War Time Resilient Online Learning System

23T36 • 1030 – 1200 • W307C • SWEDEN
TUT 4: DISTRIBUTED SIMULATION PROTOCOLS

Introduction to HLA 4

PAPERS

TUESDAY, 28 NOVEMBER

23377 • 1400 – 1430 • W308B • CANADA
ECIT 2: 5G NETWORKS AND REAL-TIME COMMAND AND CONTROL

Digital Twin Approach for 3D Visualization and Optimization of 5G Non-Terrestrial Network

23291 • 1500 – 1530 • W308A • BULGARIA
ECIT 1: AI AND LANGUAGE PROCESSING IN COMPLEX SYSTEMS

Refugee Flow Management and Resilience Implications

23179 • 1600 – 1630 • W300 – THEATRE
BEST PAPER NOMINEE SESSION 2

Contextualizing Cyberspace Electromagnetic Activities (CEMA) in Multi-Domain Operations (MDO) Through Playbooks

23357 • 1630 – 1700 • W307A • BRAZIL
SIM 2: CONVERGING REALITIES THROUGH AI AND VISUALIZATION

Real-Time Surface-to-Air Missile Engagement Zone Prediction Using Simulation and Machine Learning

23426 • 1700 – 1730 • W307A • CANADA
SIM 2: CONVERGING REALITIES THROUGH AI AND VISUALIZATION

Immersive AI Assistance During eVTOL Multi-Agent ATC Traffic Routing

23138 • 1700 – 1730 • W308B • UNITED KINGDOM
ECIT 4: EMERGING TECHNOLOGIES IN XR AND 5G

Simulation Model Abstraction Issues for Digital Twins; Separated at Birth?

WEDNESDAY, 29 NOVEMBER

23203 • 0830 – 0900 • W307D • SINGAPORE
TR 2: STRUCTURED CHAOS

Mixed Reality Bloodstain Pattern Analysis Simulation Training System

23411 • 0930 – 1000 • W308C • CANADA
HPAE 1: ON TARGET: INTEGRATING TECHNOLOGIES

Pilot Performance Assessment Using a Hybrid Expert System and Machine Learning for An Automatic Objective Assessment in Flight Simulation

23372 • 1030 – 1100 • W308B • THE NETHERLANDS
ECIT 6: DEVELOPMENTS IN VIRTUALIZED SIMULATION AND WARGAME PLANNING

Virtualized Simulation for Military Concept Development and Experimentation: The Cerebro Battle Lab, a Case Study

23271 • 1100 – 1130 • W307D • THE NETHERLANDS
TR 3: DISTRIBUTED TRAINING: ANYTIME, ANYWHERE

Simulating the Whole Picture with Distributed Mixed LVC

23195 • 1100 – 1130 • W307C • SWITZERLAND
PSMA 2: STANDARDS ARE GREAT! LET'S USE THEM

Standard Protocol Stack Improves Short-Range Wireless Communication in Live Simulation

23454 • 1130 – 1200 • W307C • BRAZIL
PSMA 2: STANDARDS ARE GREAT! LET'S USE THEM

The NISP Standard (NATO Interoperability Standards and Profiles) and Data Governance

23248 • 1130 – 1200 • W307D • USA / AUSTRALIA
TR 3: DISTRIBUTED TRAINING: ANYTIME, ANYWHERE

Can Synthetic Coaching Using an Immersive Training Device Effectively Train Student Pilots? A Field Study

23180 • 1430 – 1500 • W307A • THE NETHERLANDS
SIM 5: SIMULATING STRESSY SITUATIONS

Creation of a Human-in-the-Loop Simulator Environment for Fifth Generation Stressor Research

23207 • 1600 – 1630 • W308B • ISRAEL
ECIT 10: ADAPTING TRAINING TECHNOLOGIES FOR TEAMING OPERATIONS
Automatic Creation of High Fidelity Open Terrain Digital Twins for Off-Road Autonomous Vehicles Training and Validation

23226 • 1600 – 1630 • W308A • SOUTH KOREA
ECIT 09: AI AND INTELLIGENT DECISION SUPPORT TECHNOLOGIES
On Developing the Intelligent Decision Supporting Technologies for Ground Operations

23398 • 1630 – 1700 • W307B • TURKEY
SIM 8: LEGO MODELING
Iterative and Incremental Validation of Simulation Conceptual Models

THURSDAY, 30 NOVEMBER

23412 • 0900 – 0930 • W308B • CANADA
ECIT 12: ACCELERATING TRAINING WITH AI AND NEUROSCIENCE IN SIMULATION DEVICES
Using AI and Neuroscience in Immersive 3D Flight Simulation Device to Accelerate Pilot Training

23256 • 0900 – 0930 • W307A • ITALY
SIM 9: SIMULATING COMPLEX THREATS IN COMPLEX ENVIRONMENTS
ELMO (Electromagnetic Layer for Multi-domain Operations) Developing and Testing Activities

23166 • 0900 – 0930 • W307D • UNITED KINGDOM
TR 6: TOYS TO TASK
On Approach to Reality: The Impact of a Simulated Air Traffic Control Environment (SATCE) on Workload and Situational Awareness in Military Aviators

23299 • 0930 – 1000 • W307B • BRAZIL
ED 5: PERFORMANCE IMPROVEMENT
From Classroom to Field: Topological and Tactical Terrain Analysis Inside a Learning Environment

23457 • 0930 – 1000 • W307A • CANADA
SIM 9: SIMULATING COMPLEX THREATS IN COMPLEX ENVIRONMENTS
Numerical Study of Ammonium Nitrate/Fuel Oil Detonations for Large Scale Pattern of Life Simulations

23184 • 1030 – 1100 • W307D • THE NETHERLANDS
TR 7: DATA...MAKE IT MATTER
Data-Driven and Personalized Training as a Service Infrastructure & Techologies

23206 • 1100 – 1130 • W308A • UNITED KINGDOM
ECIT 13: COMMUNICATION IN AI-DRIVEN TEAMS AND LARGE LANGUAGE MODELS
Large Language Models Have Transformed Our World – Can They Help to Build It?

23257 • 1330 – 1400 • W307A • ITALY
SIM 11: COMPLEX FUTURE OPERATIONAL ENVIRONMENTS
Modeling & Simulation in Support of a Comprehensive CBRN Layer Development

23284 • 1400 – 1430 • W307A • CANADA
SIM 11: COMPLEX FUTURE OPERATIONAL ENVIRONMENTS
Comparison of Visualization Technologies to Support RCAF Training Modernization

23413 • 1430 – 1500 • W308B • BELGIUM
ECIT 16: LEARNING AND VISUALIZATION IN VIRTUAL REALITY
Creating Robust Evolvable MSaaS Services: An Integrated Model-Driven Engineering Approach

23408 • 1430 – 1500 • W308A • THE NETHERLANDS
ECIT 15: GEOSPATIAL DATA ANALYSIS AND TERRAIN GENERATION
Model Mining in Sensor Data for Rapid Terrain Analysis

EXHIBIT HALL

CYBER PAVILION — BOOTH 2870

NTSA's I/ITSEC CYBER PAVILION is the conference home in our physical domain on the exhibit hall floor for all government, industry, academia, and international partners engaged in cyber domain activities. This is the place to meet with others working to represent non-kinetic effects in their models & simulations, particularly as those pertain to information operations or information warfare. The Pavilion features panel events and presentations spanning policy, operations, capability acquisition, and workforce development topics. The events highlight needs of the government, capabilities of industry, efforts and research of academia, and collaboration with international partners. And it includes a panel on Information Warfare and an associated I/ITSEC Special Event on Information Warfare Challenge Perspectives outside of the Exhibit Hall.

Be at the Pavilion to

- **LEARN:** Hear from Government and Industry leaders about policy, programs and projects
- **COMMUNICATE:** Discover opportunities for collaboration in fields such as Electromagnetic Warfare, Cyber Operations, and Information Warfare
- **PROVIDE:** Demonstrate current capabilites, ongoing work in the pursuit of solutions to meet needs
- **DEVELOP:** Make contacts to carry beyond I/ITSEC

The Pavilion is our platform to communicate and cooperate on finding approaches to operate in the dynamic environment of cyberspace. Attendees from the U.S. Government, Department of Defense, Partner Nations, commercial organizations, and Academia should come to collaborate at the CYBER PAVILION.

NOTABLE ATTENDEES • NETWORKING CONTACTS ALL AT THE CYBER PAVILION:

OUTLOOK – COMMENTS FROM DEFENSE LEADERS, CURRENT AND FORMER OPERATIONAL FLAG OFFICERS

- Operationalizing for 2023, an I/ITSEC SPECIAL EVENT:
  Cyberspace: Future Multi-Domain Challenge Perspectives

OPPORTUNITIES – DISCUSSION ON NEEDS FROM PROGRAMS/PROJECTS, GOVERNMENT ACQUISITION

- Facilitated Panel – DoD PMs/PEOs & Capability Managers

OFFERINGS – INDUSTRY, GOVERNMENT & ACADEMIA – SOLUTIONS

- Facilitated Panel – Cyber Pavilion Sponsors from Industry
- Facilitated Panel – Information Warfare
- Research Updates – Government, Academia

CYBER PAVILION SPONSORS:

BAE SYSTEMS
COLSA
COMMAND POST TECHNOLOGIES
CYBER RANGES
INTEGRATION INNOVATION, INC. (I3)
LOCKHEED MARTIN
TRIDEUM
ULTIMATE KNOWLEDGE

INNOVATION SHOWCASE

EXHIBIT HALL – WEST HALL B • BOOTH 2588

Presentations within the Innovation Showcase are led by cutting-edge exhibiting companies and government agencies that are knowledgeable on the various subject matter within the M&S Industry. Be sure to stop by one of the 30-minute sessions to hear what is new and exciting in M&S! Check the onsite schedule for any changes or updates to the Innovation Showcase schedule.

The most up-to-date information will be available on the mobile app, website, and onsite during I/ITSEC.

AS OF 2 NOVEMBER 2023

MONDAY, 27 NOVEMBER		
1400	Guardiaris d.o.o	Future Integrated Indoor Solider Training
1500	HTC VIVE	Deploying Secure Immersive Training Solutions with VR/XR
1540	Varjo Technologies	The Future of Simulation: Unveiling Next Generation Training Solutions
1620	Blackshark.ai	Creating Real-Time 3D Synthetic Training Environments and Terrain Generation with AI Using Current Satellite Data
1700	BAE Systems	Advancing Mission Outcomes: Advanced Digital Analysis & Prototyping Testbed
TUESDAY, 28 NOVEMBER		
1230	Allen and Company	Reducing Modeling Time with Reality Capture: Understanding Scan to Mesh
1310	Trek10	Train Anywhere
1350	Bohemia Interactive Simulations	Next Gen AI for the Virtual Battlespace
1430	Metris Global	Why an Advanced, Agile Approach to Human Performance is Necessary to Keep Pace with Modernization Mandates
1510	Ingalls Information Security	Visualizing Cybersecurity Data in Multiple Dimensions for Cyber Operations
1550	Pitch Technologies	Large Scale Exercises Using Standard-Based Distributed Simulation
1630	Vrgineers, Inc.	Optimal Virtual and Mixed Reality Resolution in Pilot Training
1710	CYBER RANGES Corp	Next-Generation Cyber-Physical Ranging to Build Cyber Warriors' Professional Development and to Validate Mission Preparedness Also at the Edge of Kinetics
1750	IntelliBoard	Turning Insight into Action – Using Data to Monitor the Learner Journey and Enhance Engagement
WEDNESDAY, 29 NOVEMBER		
0930	HTX Labs	EMPACT: XR Empowerment- Warfighter Created, Warfighter Owned Training
1010	Quantum3D/HAVELSAN	Quantum3D Mixed Reality Evtol Simulator
1050	Hadean Supercomputing Ltd.	Training Tomorrow's Warriors: Towards Generative AI in LVC Military Simulations
1130	Geeks and Nerds Corporation	Modular Open-Air Sensor Capability Evaluation and Testing Infrastructure (SCETI)
1210	Lone Star Analysis	Modeling and Simulation or: How I Stopped Worrying and Learned to Love Generative AI, Clustering, and Risk Analysis
1300	Radiation Emergency Services	Radiation Disaster Emergency Preparedness and Response Training and Simulation
1340	Talon Simulations	From Concept to Deployment: Fast Track Development of a Mixed Reality Amphibious Vehicle Simulator
1420	Ingalls Information Security	Enabling Agile Authorization for Mixed Reality Training Applications & Devices
1500	Quantum3D/HAVELSAN	Quantum3D UAV/Drone Simulator
1540	Splunk	Optimizing RMF Compliance: A Splunk Approach
1620	ARA Virtual Heroes Division	Blending Unreal Engine MetaHuman with BioGears Human Physiology
THURSDAY, 30 NOVEMBER		
0930	Holo-Light GmbH	Scaling XR in the Enterprise- How to Take Away the “But”
1010	ForgeFX Simulations	Transforming Training Simulations: The AI Revolution in Quality and Efficiency
1050	Obsidian Solutions Group	Serious Games and Wearables for CBRNE
1130	Unreal Engine/Epic Games	An Update about Simulation Pipelines from Large Open World to Precise Behaviors
1210	Avalon Holographics	The HoloFront: Enhancing Military Operations through Holographic Visualization
1300	Serious Games Showcase and Challenge Award Ceremony	

DOWNLOAD MOBILE APP

EXHIBITORS

AS OF 31 OCTOBER 2023

NTSA Sustaining Member • NTSA Regular Member • NTSA Associate Member

2 Circle Consulting	3000
302 Interactive	3301
3D Media	3161
3D perception	1370
4C Strategies	2660
4GD Limited	3519
A Square Games and Simulation LLC	3402
AccessVR	3111
Ace Computers	3219
Acme Worldwide Enterprises, Inc.	1871
Ad hoc Research	657
Adaptive Immersion Technologies	425
Aditerna	2848
Adobe	3600
ADS, Inc.	2666
Advanced IT Concepts, LLC	2370
ASTi	1560
Advanced Technology International	663
Aechelon Technology	1601
Aerotronics LLC	2680
AgileView, Inc.	3363
Air Force Research Laboratory	3371
AIQ Synertial Ltd.	427
Air Force Agency for Modeling and Simulation	1533
Akima	MR-1388
All Points Logistics	3304
Allen & Company, Inc.	3036, MR-887
Amazon Web Services, Inc.	3311
Amentum	3461
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