

DAY 1 SCHEDULE

(Bissinger Room)

9:00 AM - 10:00 AM

Check-in / Networking

10:00 AM - 10:15 AM

Welcome & Opening Remarks

Dr. Anthony Barrese

Dean, School of Systems & Enterprises
Stevens Institute of Technology

Dr. Jason Cook

US Army DEVCOM Armaments Center

10:15 AM - 11:00 AM

Keynote

Mr. R. Chris DeLuca

Director, Specialty Engineering
OUSD(R&E)/ED(SE&A)

11:00 AM - 12:15 PM

PANEL: Workforce Development

Dr. Jason Cook (moderator)

US Army DEVCOM Armaments Center

Dr. Rosa Heckle

MITRE Corporation

Dr. Zoe Szajnfarber

George Washington University

Jaime Hernández-Cordero

DoD

Rhonda Maus

DAU

12:15 PM - 1:00 PM

Lunch / Networking

1:00 PM - 4:45 PM

Track 1 and Track 2

4:50 PM - 5:15 PM

Day 1 Closing Remarks

5:15 PM - 6:30 PM

Reception (Babbio Atrium)

TRACK 1: AI4SE

(HOWE 102)

1:00 PM - 1:30 PM

The Importance of a Unified Data Fabric for AI Modeling

Mr. Ray Lukas

Mr. Jim Lockett

MITRE Corporation

1:30 PM - 2:00 PM

Semi-Automated Development of Textual Requirements: Combined Natural Language Processing and Multi-Domain Semantic Approach

Dr. Mark Austin

University of Maryland, College Park

2:00 PM - 2:30 PM

Reinforcement Learning for Autonomous and Novel Behavior in OneSAF: Potential for New TTPs, Technology Evaluation, and Requirement Definitions

Dr. Eric Kelly

Quansight

2:30 PM - 3:00 PM

AI4SE Track Discussion

3:00 PM - 3:20 PM Break

3:20 PM - 3:50 PM

Natural Language Processing and Knowledge Engineering to Extract Models From Text

Dr. Carlo Lipizzi

Stevens Institute of Technology

3:50 PM - 4:20 PM

The Design of Swarm Experiments: A Systems Engineering Approach to Swarm Research

Ms. Melissa Jablonski

US Army DEVCOM Armaments Center

4:20 PM - 4:45 PM

AI4SE Track Discussion

4:50 PM - 5:15 PM Day 1 Closing Remarks

TRACK 2: SE4AI

(HOWE 104)

1:00 PM - 1:30 PM

Bayesian Methods for T&E of Learning Based Systems

Mr. Paul Wach

Virginia Tech

1:30 PM - 2:00 PM

NeuralSat: A Constraint Solver for Deep Neural Network Verification

Dr. ThanhVu Nguyen

George Mason University

2:00 PM - 2:30 PM

Test and Evaluation of AI Systems with Explainable AI and Counterfactuals

Dr. Ali Raz

George Mason University

2:30 PM - 3:00 PM

SE4AI Track Discussion

3:20 PM - 3:50 PM

How Wrong is Wrong? Richer Characterization of AI Classification Error for Real-World Applications

Ms. Justine-Louise Manning

George Washington University

3:50 PM - 4:20 PM

CAI - Certification of Continuously Learning Artificial Intelligence

Mr. Ari Goodman

Mr. Ryan O'Shea

NAVAIR

4:20 PM - 4:45 PM

SE4AI Track Discussion

5:15 PM - 6:30 PM Reception (Babbio Atrium)

DAY 2 SCHEDULE

(Bissinger Room)

8:30 AM - 9:00 AM

Check-in / Networking

9:00 AM - 9:15 AM

Welcome & Morning Remarks

9:15 AM - 10:45 AM

PANEL: Government Visions and Needs

Dr. Ralph C. Tillinghast (moderator)
US Army DEVCOM Armaments Center

Ms. Carol Pomaes
MITRE Corporation

Dr. Raj Iyengar
US Nuclear Regulatory Commission

Mr. R. Chris DeLuca
Director, Specialty Engineering
OUSD(R&E)/ED(SE&A)

10:45 AM - 11:00 AM

Networking / Break

11:00 AM - 2:40 PM

Track 1 and Track 2

2:45 PM - 3:00 PM

Workshop Closing Remarks

TRACK 1: AI4SE & DEV

(HOWE 102)

11:00 AM - 11:30 AM

Specifying Data Requirements for AI Systems

Dr. Barclay Brown
Collins Aerospace

11:30 AM - 12:00 PM

Digital Assistance for Systems Requirement Discovery and Analysis Using Machine Learning Natural Language Processing Algorithm

Dr. Nipa Phojanamongkolkij
Mr. Braxton VanGundy
NASA Langley Research Center

12:00 PM - 12:30 PM

AI4SE & DEV Track Discussion

12:30 PM - 1:15 PM Lunch & Networking

1:15 PM - 1:45 PM

Tactical Ammunition Management Micro Services (TAMMS) - Human-Machine Teaming by Cognitive Intelligent Agents Providing Sustainment Decision Support

Mr. Steven Vaccaro
US Army DEVCOM Armaments Center

1:45 PM - 2:15 PM

Computer Vision Based Machine Learning for Deck Operations

Mr. Ari Goodman
Mr. Ryan O'Shea
NAVAIR

2:15 PM - 2:40 PM AI4SE & SE4AI Workshop Discussion

2:45 PM - 3:00 PM Workshop Closing Remarks

TRACK 2: SE4AI & V&V

(HOWE 104)

11:00 AM - 11:30 AM

Towards the Use of Deep Learning Neural Networks for System Validation Testing of Tightly Coupled Complex Systems

Dr. Lance Sherry
George Mason University

11:30 AM - 12:00 PM

Uniting Hierarchical Planning and Model-Based Systems Engineering to Automate Failure Recovery Planning

Mr. Tyler Smith
Adventium Labs

12:00 PM - 12:30 PM

SE4AI & V&V Track Discussion

1:15 PM - 1:45 PM

Enabling SE for AI with Test and Evaluation Harnesses for Learning Systems

Dr. Tyler Cody
Virginia Tech