

# AI4SE & SE4AI 2023 Agenda

VIRTUAL WORKSHOP

\*Agenda Times in ET



**October 11,  
2023**

DAY 1

8:00 PM - 8:10 PM	<b>INCOSE Welcome</b> <i>Tom McDermott, Systems Engineering Research Center, Stevens Institute of Technology</i>
8:10 PM - 8:40 PM	<b>Optimizing Systems Engineering Workflows through Novel Application of Large Language Models in Generative Design</b> <i>Edward Serzo, Ryan Pykor, Nolan Peterson, System Strategy, Inc.</i>
8:40 PM - 9:10 PM	<b>Generative Artificial Intelligence: The Future of Model-Based Systems Engineering</b> <i>Thomas Heckwolf, Patrick Buckle, Integration Innovation, Inc. (i3)</i>
9:10 PM - 9:40 PM	<b>Demonstration of How to Use AI-Based Tools for Systems Engineers</b> <i>Christopher Helmerich, Jared Fuchs, Ian Slamen, Celedon Solutions</i>
9:40 PM - 10:10 PM	<b>Balancing the Risk-Opportunity Dilemma in the Design of Autonomous Robotic Systems using an Integrated Data-Driven and Model-Based Approach</b> <i>John S. Baras, Erfan Noorani, Sai Sandeep Damera, Praveen Kumar, University of Maryland</i>
10:10 PM - 10:40 PM	<b>Closed Systems Engineering for Artificial Intelligent Systems</b> <i>Niloofer Shadab, Tyler Cody, Alejandro Salado, Peter Beling, Virginia Tech</i>
10:40 PM - 11:10 PM	<b>Hiring Trained Animals: Generative AI Patterns and Practices for Systems Engineering</b> <i>Dr. Barclay Brown, Collins Aerospace</i>
11:10 PM - 11:40 PM	<b>An MBSE Led ML Based Approach to Electric Vehicle Design, Development and Virtual Validation</b> <i>Aniruddha Mukhopadhyay, Tushar Sambharam, Ankit Adhiya, et. al, Ansys, Inc.</i>
11:40 PM - 12:00 AM	<b>Day-1 Wrap-up &amp; Open Discussions</b>

**October 12,  
2023**

DAY 2

8:00 AM - 8:10 AM	<b>INCOSE Welcome</b> <i>Ramakrishnan Raman, Honeywell Aerospace</i>
8:10 AM - 8:40 AM	<b>Cost-Aware Bayesian Agents for Human-AI Teaming</b> <i>Zhenghui Sha, Siyu Chen, University of Texas at Austin</i>
8:40 AM - 9:10 AM	<b>SE in the Era of Human-Machine Teaming Roadmap for AI and SE</b> <i>Tom McDermott, Systems Engineering Research Center</i>
9:10 AM - 9:40 AM	<b>Streamlining Requirement Management with AI</b> <i>Michael Jordan, Steven Dam, Lilleigh Stevie, Amir Abrari, SPEC Innovations</i>
9:40 AM - 10:10 AM	<b>Application of Machine Learning in Collision Risk Safety Analysis</b> <i>John Shortle, Shahab Aref, Jie Xu, et. al, George Mason University</i>
10:10 AM - 10:40 AM	<b>Systems Engineering applied to AI in context of Cyber-physical systems</b> <i>Robin Yeman, Carnegie Mellon SEI</i>
10:40 AM - 11:10 AM	<b>Insights from Multidisciplinary Research on Assessment of AI Systems</b> <i>Bryan Mesmer, Kristin Weger, Vineetha Menon et. al, University of Alabama in Huntsville (UAH)</i>
11:10 AM - 11:40 AM	<b>Developing Artificial Intelligence in Lunar Operations</b> <i>Ronald H. Freeman, Space Operations and Support Technical Committee AIAA</i>
11:40 AM - 12:00 PM	<b>Day-2 Wrap-up &amp; Open Discussions</b>