

AI4SE & SE4AI Research and Application Workshop Agenda **(DRAFT)**

September 27, 2023 (Day 1)

9:00	Welcome from GWU Dean, School of Engineering and Applied Science, Dr. John Lach Welcome from Army DEVCOM AC & Keynote Introduction by Dr. Jason Cook	
9:20	Keynote: Ms. Jennifer Swanson	
10:05	Army DEVCOM AC Perspectives - Dr. Myron Hohil	
10:25	Morning Break	
10:45	Panel 1 - Certification of Learning-Based Systems, <i>Zoe Szajnfarber</i> , Moderator: P. Theragene, E. Summers, C. Krueger	Panel 2 - Application of LLMs to SE, <i>Myron Hohil</i> , Moderator: C. Lipizzi, A. Abrari, J. Crissman
11:45	LUNCH	
	TRACK 1 - Trustworthy AI, <i>Val Sitterle</i> , moderator	TRACK 2 – AI4SE, <i>Peter Beling</i> , moderator
12:45	P. Denno, Establishing a Measurement Science for Joint Work with Models	M. Jones, AI-Assisted Generation of SysML Models to Accelerate Agile Digital Engineering
1:15	R. Crombie, Application of Systems Theoretic Process Analysis (STPA) to the Mission Assurance of AI-Enabled Systems	Nipa Phojanamongkolkij, Requirement Discovery Using Embedded Knowledge Graph with ChatGPT
1:45	Track Change Break	
1:50	B. Werner, Application of the Traditional Materiel Release Process to the DoD Ethical Principles of Artificial Intelligence, and Roadmap	A. Demagall, LLM Based SysML Virtual Assistant
2:20	J. Gregory, Using Artificial Intelligence to Accelerate Deployment of Learning-Based Systems	M. Ong, Melding Minds and Machines: Harnessing AI Capabilities to Further Model-Based Guided Engineering
2:50	Afternoon Break	
3:20	P. Horton, Conformal Prediction for Testing and Evaluation of Intelligent/ML Systems	D. Dunbar, A Constructed System of Analysis to Enable Automation and Reasoning in Multi-Model Analysis
3:50	A. Shearn, Evaluating the Explainability and Interpretability of AI systems	P. Wach, Large Language Model Enabled Generation of Systems Engineering Artifacts
4:20	Keynote: Dr. Kim Sablon	
5:05	Day 1 Closing / Agenda Review Day 2 (Dr. Peter Beling / Mr. Al Stanbury)	

AI4SE & SE4AI Research and Application Workshop Agenda **(DRAFT)**

September 28, 2023 (Day 2)

9:00	Welcome from SERC & Keynote Introduction by Dr. Dinesh Verma	
9:15	Keynote: Mr. Michael Harasimowicz	
10:05	SERC Perspectives - Mr. Tom McDermott / Dr. Ali Raz	
10:25	Morning Break	
10:45	Keynote Panel on "Comparing Ethical and Safety Frameworks for Promoting Trust in AI System" led by Mr. Andy Lacher and introduced by Dr. Zoe Szajnfarter	
11:45	LUNCH	
	TRACK 3 - Human/AI Teaming, <i>Ralph Tillinghast, moderator</i>	TRACK 4 – SE4AI, <i>Jason Cook, moderator</i>
12:45	G. Boy, Is the machine a partner or a Tool? A major issue of Human-AI Teaming	B. Brown, Hiring Trained Animals: Generative AI Patterns and Practices for Systems Engineering
1:15	A. Singh, What is Human in the Loop, Really?	J Gadewadikar, Systems' Perspectives for AI Acceleration in Large Enterprises and Government Agencies
1:45	Track Change Break	
1:50	S. Conrad, Managing the continuity of Human biases in AI SE applications	F. Reeder, Test and Evaluation (T&E) of Complex AI-Enabled Systems (AIES)
2:20	Z. Szajnfarter, Opportunities and Risks of Incorporating LLMs in the Systems Engineering and Design Workflow: A Case Study of Robotic System Design Process	C. Pomales, Systems Engineering Processes to Test AI Right (SEPTAR)
2:50	Afternoon Break	
3:20	L. Sherry, The Need to Update Design and Certification Performance Standards for Operator Intervention of Autonomous Systems	R. Holmes, A Systems Engineering Perspective on Safety of AI-based systems
3:50	R. Threlkeld, Mission Engineering in Healthcare and What We Can Apply to the Military	C. Turner, Simulating the Tradespace with Synthetic Data
4:20	Closing Remarks	