

Wed., 9/18/24 Tours

Thur., 9/19/24 Tutorials

Speaker Ready Room: 135

Start Time	End Time	Duration	Room 104	Room 106	Room 111	Room 113
7:00 AM	8:00 AM	1:00	Breakfast and Registration			
8:00 AM	12:00 PM	4:00	Tutorial 1: (#12) Navigating the Future: Exploring SysML V2 with SysON - A Hands-On Tutorial	Tutorial 2: (#28) Risk, Safety, and Reliability Analysis in Model Based System Engineering	Tutorial 3: (#24) Integrating System Architecture in SysML with Hardware for Rapid Prototyping and Validation and Verification	Tutorial 5: (#16) Mastering Your Systems Engineering Competencies
12:00 PM	1:00 PM	1:00	Lunch			
1:00 PM	5:00 PM	4:00	Tutorial 1: (#12) Navigating the Future: Exploring SysML V2 with SysON - A Hands-On Tutorial	Tutorial 2: (#28) Risk, Safety, and Reliability Analysis in Model Based System Engineering	Tutorial 4: (#33) Use a Framework for SE in Early-Stage R&D to Build Your Bridge that Spans the Chasm Between Research and Engineering	Tutorial 6: (#15) Requirements: A Comprehensive Overview
17:00	Depart for Welcome Reception at Gruet					

Fri., 9/20/24 Presentations

Speaker Ready Room: 135

Start Time	End Time	Duration	Room 104	Room 106	Room 111	Room 113
7:00 AM	8:00 AM	1:00	Breakfast and Registration			
8:00 AM	8:15 AM	0:15	Welcome Plenary - Introduction Room 101/103			
8:15 AM	8:45 AM	0:30	Keynote Address			
8:45 AM	9:05 AM	0:20	Break			
9:05 AM	9:55 AM	0:50	Digital Transformation Stream: (#11) Realizing the potential of SysML V2 with SysON: the Fundamental Role of Open-Source for Enabling the Digital Engineering Transformation	Technical Management Stream: (#20) Enhancing Onboarding in QA Teams: Object Detection Approach for Test Case Generation in Exploratory Testing	Systems Reliability & Resiliency Stream: (#27) Justifying Resilience	SE & Agile Stream: (#47) Systems Engineering Agility – Guide Book Foundations for Systems Engineers
9:55 AM	10:45 AM	0:50	Digital Transformation Stream: (#18) Digital Transformation Challenges: Real-World Observations and Mitigations	Technical Management Stream: (#21) Strategies and Best Practices for Managing Complex System Architectures	Systems Reliability & Resiliency Stream: (#4) Designing Affordable Resilient Systems	Cross-Domain Solutions Stream: (#38) Systems engineering and systems thinking to implement a Crisis Intervention Team in a rural town
10:45 AM	11:35 AM	0:50	Digital Transformation Stream: (#25) MBSE Digital Engineering Ecosystem	Technical Management Stream: (#9) Leading and Taking Charge of a System Engineering Human Integration Team	Systems Reliability & Resiliency Stream: (#49) Towards Reliable Embedded Systems: A Review of Hardware Reliability Challenges	Cross-Domain Solutions Stream: (#57) Addressing the Upstream Ecological Impacts of Engineering Decisions
11:35 AM	11:45 AM	0:10	Break			
11:45 AM	12:35 PM	0:50	Digital Transformation Stream: (#30) Digital Twins Platform Systems Engineering to Optimize Astronaut Physiology During Human Space Exploration	Requirements Stream: (#45) Optimization of Requirements Management for complex Systems: An Innovative Approach with Product Classes and Attribute	System of Systems Stream: (#56) System of Systems Engineering and Analysis	Cross-Domain Solutions Stream: (#36) Mission Assurance and the Enterprise Lifecycle: A Systems Thinking Approach
12:35 PM	1:35 PM	1:00	Lunch and Networking			
1:35 PM	2:25 PM	0:50	Digital Transformation Stream: (#41) Digital Engineering Tool Evaluation Criteria Template (DETECT)) Selection and SysML v2 Transition Guidance	Requirements Stream: (#23) Integration of System Data Requirements in Stuttering-Aware Speech Recognition Systems	Cyber Security Stream: (#37) Understanding INCOSE's Systems Engineering against CISA's Secure by Design (SbD) and DOE's Cyber Informed Engineering (CIE)	SE/Education Stream: (#8) Systems Engineering Innovation Through Higher Education
2:25 PM	3:15 PM	0:50	AI Opportunities & Risks Stream: (#13) Leveraging AI for Enhanced Systems Engineering	Requirements Stream: (#42) Adaptation Requirements for Department of Defense Contracts: A Systems Engineering Perspective	Cyber Security Stream: (#34) Overcoming Barriers to Smart Home IoT Security: The Impact of Manufacturer Guidance on the application of User-controlled security features	SE/Education Stream: (#39) Effective Integration of Diverse Engineering Competencies In the Development of Complex STEM (Science, Technology, Engineering, or Mathematics) Projects: Optimizing Efforts and Investments in Student-Led Research Projects

Start Time	End Time	Duration	Room 104	Room 106	Room 111	Room 113
3:15 PM	4:05 PM	0:50	AI Opportunities & Risks Stream: (#19) Detecting Defects in Sequential Inputs to Digital Twins Using Machine Learning	Requirements Stream: (#55) Space Mission Engineering using Innoslate(R) with example mission	Security Stream: (#48) Toward an Anti-Security Security Primer for Systems Engineers	Technical Management Stream: (#35) Rapid Risk Management
4:05 PM	4:25 PM	0:20	Break and Networking			
4:25 PM	5:15 PM	0:50	AI Opportunities & Risks Stream: (#52) Examining The Impact of Prompting GAI: A Comparative Analysis of Testing Strategy	Architecture/Design Stream: (#32) System Interface Clustering using Design Structured Matrix (DSM)	Operational Technology Stream: (#17) Model Based Document Generation	Technical Management Stream: (#10) Time-Delta Method for Measuring Software Development Contribution Rates
5:15 PM			Depart for Dinner			

32 talks

Sat., 9/21/24 Presentations & SEP Exam **Speaker Ready Room: 135**

Start Time	End Time	Duration	Room 104	Room 106	Room 111	Room 113
7:00 AM	8:00 AM	1:00	Breakfast			
8:00 AM	8:15 AM	0:15	Final Plenary - Introduction Room 101/103			
8:15 AM	8:45 AM	0:30	Keynote Address			
8:45 AM	9:00 AM	0:15	Break			
9:00 AM	9:50 AM	0:50	Modeling Stream: (#2) Applying Formal Methods to SysML Models to Prove Correctness and Enable Hallucination-Free LLMs	Modeling Stream: (#54) Integrating BOM Evaluation for Enhanced Validation of SysML Models	Case Study Stream: (#60) Systems engineering for scientists and aliens	SEP Exam
9:50 AM	10:40 AM	0:50	Modeling Stream: (#5) Understanding and Applying the Comprehensive System Design Language (CSDL)	Modeling Stream: (#29) Data Markings and Classification in MBSE	Case Study Stream: (#43) Incremental MBSE: Deliver MBSE Value Faster	
10:40 AM	11:30 AM	0:50	Modeling Stream: (#6) Mapping CSDL to ISO 15288 Ontology for Model Validation	Modeling Stream: (#51) Using SysML v2 to Define an MBSE Methodology	Case Study Stream: (#53) Systems Engineering for Developing Tech Standards: Lessons Learned	
11:30 AM	11:40 AM	0:10	Break			
11:40 AM	12:30 PM	0:50	Modeling Stream: (#26) Enabling MBSE through Function-Based Requirement Synchronization using SysML	Modeling Stream: (#58) Ultimate Track Hacking Platform (UTHP) - Software Bill of Material (SBOM) Life Cycle Modeling	Case Study Stream: (#50) Resident Pathogens in Systems Engineering: Case Study of Accident Analysis of Boeing 737 Max-8 Crashes	
12:30 PM	2:00 PM	1:30	Lunch and Poster Session			
2:00 PM	2:50 PM	0:50	Concluding Remarks Room 101/103			

13 talks possible, 12 scheduled