

ROBOTICS & AUTOMATION					
MR 1.04					
Date	Session	Time	Sub Track	Paper No.	Title
Day 1: 11 September 2025	Session 1	8:30-8:40	R&A	Welcome Address by Mr Ram Venkatesan (Track Chair)	
		8:40-9:00		159372	Intelligent Adaptive Control Strategies for Trajectory Tracking of Quadrotors Using Neural Networks
		9:00-9:20		160743	An Llm-Powered Pipeline for Automated Extraction, Analysis, and Validation of Requirements in Systems Engineering
		9:20-9:40		161705	Deep Learning-Based Classification of Breast Abnormalities Using Thermal Imaging and Resnet- 50: A Non-Invasive Diagnostic Approach
		9:40-10:00		159818	Robotics Process Automation (Rpa), Artificial Intelligence / Machine Learning Initiatives in Pil - Gas Measurement
		10:00-10:30		Keynote Address Mr.Sridhar Venkatesawaran, Director, Caterpillar Technology & Services	
	Common Plenary Sessions & Lunch				
	Session 2	2:00-2:20	R&A	160781	Deep Reinforcement Learning Driven Trajectory Tracking : Smarter Navigation for Omnidirectional Robots
		2:20-2:40		159206	Protow Robot: A Portable, Efficient, and Autonomous Solution for Towing Challenges
		2:40-3:00		160678	Advancing Quadplane Uav Designs: A Comparative Study of Structural and Aerodynamic Properties
		3:00-3:20		161204	Autonomous Navigation of 4wis4wid Agricultural Field Mobile Robot Using Deep Reinforcement Learning
		3:20-3:40		159221	Understanding the Effect of Design Parameters on Maximum Acceleration in Planar Cable-Driven Parallel Robots
		3:40-4:00		159239	Development of a Cyclorotor-Based Amphibious Remotely Operated Vehicle for Dual-Environment Applications
	Coffee Break				

	Session 3	4:30-4:50	R&A	159352	Design Optimization and Computational Modelling of Soft Pneumatic Bending Actuators Using Finite Element Method
		4:50-5:10		159919	Design, Simulation, and Fabrication of a Compliant Prosthetic Hand
		5:10-5:30		159921	Design and Modelling of Torsiosquid: A Squid-Inspired Underwater Bot
		5:30-5:50		160983	Speed Control and Modeling of Biomimetic Ipmc Underwater Propulsors Using Fractional-Order Design Approach
		5:50-6:10		161398	Shape-Modulating 3d-Printed Omnidirectional Soft Pneumatic Composite Tube Actuator: Clover Leaf Model With Eccentric Holes
		6:10-6:30		159641	Model-Based Reinforcement Learning With Adaptive Horizon for Trajectory Tracking of Lower Limb Exoskeleton

Day 2:12th September 2025	Session 1	8:30-8:40	R&A	159580	Coupled Rendezvous and Docking Maneuver of Satellite Using Visual-Haptic Guided Motion Planning
		8:40-9:00		161095	Affordable Collaborative Robot Technology for Human-Robot Collaboration Applications
		9:00-9:20		159769	Shape Memory Alloy-Based Smart Lumbar System: A Lightweight and Cost-Effective Solution for Aircraft Seating Ergonomics
		9:20-9:40		159513	Control Analysis of a Master-Slave Robotic System for Cardiac Catheterization
		9:40-10:00		162721	Energy-Efficient Controllers for Quadcopters: A Comparative Study of Pid, Lqr, and Mpc
		10:00-10:20		161472	Enhancing Autonomy and Adaptive Control of Industrial Robots in Dynamic Environments Using Reinforcement Learning
		Common Plenary Sessions & Lunch			