

CYBER PHYSICAL SYSTEMS + AI/ML					
MR G.02 (Gr Floor)					
Date	Session	Time	Sub Track	Paper No.	Title
Day 1:11the Spetmeber 2025	Session 1	8:30-8:40	CPS	Welcome Address by Mr Rajkumar Sadanandam & Dr Vijendran Venkoparao (Track Chairs)	
		8:40-9:00		159359	Ai/ml-Driven Predictive Maintenance Framework for forecasting remaining usefu life of coke drum
		9:00-9:20		159797	Ai-Driven Aircraft Parts Lifecycle Costing: Synergizing Should Cost and Service Cost Optimization
		9:20-9:40		161216	Health Monitoring of Broaching Tool Using Statistical Feature Extraction and K-Star Machine Learning Algorithm
		9:40-10:00		160551	Intelligent Fault Diagnosis of Rolling Element Bearing Under Varied Operating Conditions by Using Synthetic Fault Signatures From a Multi-Body Dynamics Simulation Model
		10:00-10:20		159791	Ai-Driven Adaptive Digital Twin for Real-Time Decision-Making in Smart Manufacturing Systems
		10:20-10:30		Session Summary	
	Common Plenary Sessions & Lunch				
	Session 2	2:00-2:20	CPS	Invited Talk by Mr Pradeep Salapakkam, Articul8	
		2:20-2:40		160308	Quantum Bayesian Networks for Reliability Analysis of Unmanned Systems
		2:40-3:00		161199	Quantum Circuit Design for Failure Risk Analysis: An Application to Power Systems in Autonomous Ships
		3:00-3:20		160718	Hybrid Anomaly Detection in Cyber-Physical Systems: Integrating Unsupervised Learning With Explainable Ai
		3:20-3:40		159320	Harnessing Deep Reinforcement Learning and Digital Twins: Tcs Intelligent Power Plant's Approach to Thermal Power Plant Process Efficiency Optimization
		3:40-4:00		159791	Ai-Driven Adaptive Digital Twin for Real-Time Decision-Making in Smart Manufacturing Systems
	Coffee Break				

	Session 3	4:40-5:00	CPS	161210	Transforming Indian Steel Manufacturing: Mcdm-Based Evaluation of Cyber-Physical Systems for Cost Efficiency, Resilience and Sustainability
		5:00-5:20		161340	From Concept to Reality: Navigating Algorithm Deployment in Digital Twin-Enhanced Cyber-Physical Bess
		5:20-5:40		161724	A Comparative Study of Pre-Trained Deep Learning Models With and Without Pre-Processing for Multi-Class Classification of Thermal Breast Images in Early Cancer Detection
		5:40-6:00		160183	Fault Diagnosis of a Cantilever Beam Using Machine Learning Techniques
		6:00-6:20		160690	Deep Learning-Based Automatic Machining Feature Recognition From Cad Model
		6.20-6.30		Session Summary	
Day 2:12the September 2025	Session 1	8:40-9:00	CPS	161738	Application of Machine Learning in Aerospace Structure Engineering and Its Future Directions
		9:00-9:20		161450	A Novel Framework for Developing Physics Informed Graph Neural Network Based Surrogate Models for Predicting Mesh Based Computational Fluid Dynamics
		9:20-9:40		161384	Integration of Cybersecurity Into Model-Based Systems Engineering (Mbse) for Avionics Systems
		9:40-10:00		161454	Impact of Molecular Footprint on Machine Learning Model for Optimising the Polymer Blend Formulation
		10:00-10:20		160531	Application of Unsupervised Clustering Techniques on Somatic Embryos for Automated Se Fluidics System
		10.20-10.40		172142	Securing Physical Systems for Industry 4.0