

5th International Conference on Digital Futures and Transformative Technologies (ICoDT2)

Schedule 17th December, 2025
Technical Session_I: (Classroom-3) 1st Floor

Session Chair: Dr. Muhammad Iqbal

Paper ID	Title	Presenter	Time Duration
1	SPLAM-Based Destination Optimization in Unmapped Environments Using LiDAR for Autonomous Logistics	Muhammad Shahzad Khan (NUST)	12:45 - 12:55
5	Investigation of Road Surface in Simulated Environmental Road using LiDAR	Shehar yaar (NUST)	12:55 - 1:05
16	Silhouette-Based Human Gait Recognition Using a 3D Convolutional Neural Network	Asif mehmood (NUTECH)	1:05 - 1:15
77	A Critical Analysis of Heavy Payload Multi-Rotor Drone Designs	Muhammad Umair Rao (Air University)	1:15 - 1:25

Lunch Break (1:30-2:20)

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**Schedule 17th December, 2025
Technical Session II: (Classroom-3) 1st Floor**

Session Chair: Dr. Uzma Habib

Paper ID	Title	Presenter	Time Duration
131	TK-Patch: Universal Top-K Adversarial Patches for Cross-Model Person Evasion	Saad Imran (College of Aeronautical Engineering Risalpur)	03:30-03:40
24	Federated Learning-Driven Cyber-Physical Security Framework for AI-Powered Smart Grids in Renewable-Integrated Urban Infrastructures	Sheryar Qamar Paracha (The Islamia University)	03:40-03:50
27	Dynamic MPPT Strategy for PV Systems via NARX Neural Network Prediction and Robust Super-Twisting Sliding Mode Control	OMAR ZEB (SEECs NUST)	03:50-04:00
111	Development of a Smart Hybrid Heating System with Intelligent Energy Management	Noor ul Huda (NUST)	04:00-04:10
46	Phishing Detection and Legitimate Communication Differentiation to Enhance Cybersecurity Across Financial, Healthcare and Government Sectors	Hafiz Jawaad (NUST)	04:10-04:20 (Fee Pending)

Tea/Coffee Break (04:45-05:00)

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**Schedule 18th December, 2025
Technical Session III: (Classroom-3) 1st Floor**

Session Chair: Dr. Muhammad Qasim

Paper ID	Title	Presenter	Time Duration
26	Intelligent Control with Artificial Neural Network and Double-Integral SMC for Nonlinear Pathophysiological Model	Didar Murad (SINES NUST)	10:00-10:10
65	A climatic responsive modeling for passive transformation of a non-residential building towards a net-zero energy building NZEB	Abdullah (NUST)	10:10-10:20
35	VR-Induced Balance Monitoring via Tibialis EMG and Ground Reaction Forces Using Machine Learning	Anas Ijaz (Air University)	10:20-10:30
30	Biomedical Control Strategies for Inflammation in SARS-CoV-2-Induced Complement Activation	Didar Murad, Iftikhar Ahmed Rana (SEECS, NUST)	10:30-10:40
110	AquaVision: YOLOv12-Based Instance Segmentation for Underwater Plastic Waste Detection and Quantification	Zohaib Shah (NUST)	10:40-10:50 (Fee Pending)
90	XAI-Enhanced Physics-Informed Neural Networks for State Estimation of Li-ion Batteries	Sheroz Shahid Tabassum (NUST)	10:50-11:00

Tea/Coffee Break (11:00-11:15)

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**Schedule 18th December, 2025
Technical Session IV: (Classroom-3) 1st Floor**

Session Chair: Dr. Shehzad Younas

Paper ID	Title	Presenter	Time Duration
11	Finite Element Insights into Implant Material Performance when Femur Twists	Daniyal Durrani (NUST)	12:30-12:40
178	Manufacturing And Structural Evaluation of Precision Gears Using Non-Conventional Machining Process	Daniyal Durrani (NUST)	12:40-12:50
81	CNN-Based Surrogate Model for Rapid Prediction of Flow Fields in Early-Stage Urban Design and Planning	Gulzar Ali (NUST)	12:50-01:00
187	Digital Twin Framework for Real-Time Monitoring and Simulation of Industrial Assets	Mohid Ashraf (Air University)	01:00-01:10
160	LLMs with Tools: Empirical Evaluation of the Thought-Action-Observation Paradigm	Muhammad Usman (NUST)	01:10-01:20 (Fee Pending)
168	Enabling Low-Latency Real-Time Gaming through Edge Computing and Wireless Optimization Trends, Challenges, and Future Directions	Hamna Mughal (COMSATS)	01:20-01:30

Lunch Break (1:30-2:30)

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**Schedule 18th December, 2025
Technical Session V: (Classroom-3) 1st Floor**

Session Chair: Dr. Muhammad Shehzad

Paper ID	Title	Presenter	Time Duration
74	Revolutionizing Strategic Decision-Making the Transformative Impact of AI-Enhanced ERP Systems	Dilbar Hussain (Iqra University)	02:30-02:40
139	Enhancing Smart City Software Requirements Prioritization through effective implementation of ML, DL and NLP techniques	Abdul Basit (NUST)	02:40-2:50
135	Voice Recognition Redefined: MFCC and CNN for High-Precision Speaker Identification	Hafiz Arslan Ramzan (NUST)	02:50-03:00 (Fee Pending)
174	Design and Implementation of an Autonomous UAV System for Integrated Safety Auditing and Fire Suppression Using a Solid Carbon Dioxide Payload	Jeetash Goswami (NUST-PNEC)	02:50-03:00
123	Smartphone Based Pothole Detection System Using YOLOv8 For Real-Time Day and Night Road condition Monitoring	Zeeshan Qureshi (Ulsan University)	03:10-03:20

Closing Ceremony