

MERCon 2026 - Session Details	
Track	Description
T1	Biomedical Engineering and Instrumentation
T2	Chemical and Process Engineering
T3	Communication and Signal Processing
T4	Construction Engineering and Risk Management
T5	Data Science and Artificial Intelligence
T6	Electronics, Control, and Instrumentation
T7	Engineering Mathematics and Statistics
T8	Geotechnical Engineering
T9	Hydraulics and Environmental Engineering
T10	Image Processing and Computer Vision
T11	Materials Science and Engineering
T12	Mechanical Engineering Systems
T13	Micro/Nano Electro Mechanical Systems, Mechatronics, and Micro-Mechatronics
T14	Mining and Earth Resources Engineering
T15	Natural Language Processing
T16	Power Systems, Electrical Machines and High Voltage Engineering
T17	Robotics and Intelligent Systems
T18	Software Engineering and Cloud Computing
T19	Structural Engineering and Building Materials
T20	Supply Chain, Logistics, and Mobility Engineering
T21	Sustainable Energy & Environment
T22	Technology Management
T23	Textile and Apparel Engineering
T24	Transportation Engineering

MERCon 2026 - Conference Schedule

13th August 2026 (Day1)	
1	13th August 2026 (Day1)

Venue	V1 - Civil Eng Bldg Structural Engineering PG Room	Venue	V2 - Civil Eng Bldg Transportation Engineering PG Room	Venue	V3 - Civil Eng Bldg Construction Management PG Room	Venue	V4 - Civil Eng Bldg Environmental Engineering PG Room	Venue	V5 - TBA	Venue	V6 - TBA
Time	Session	Time	Session	Time	Session	Time	Session	Time	Session	Time	Session
0745 - 0830 h	Onsite Registration & Opening Ceremony										
0830 - 0945 h	T12-A	0830 - 0945 h	T3-A	0830 - 0945 h	T20-A	0830 - 0945 h	T17-A	0830 - 0945 h	T5-A	0830 - 0945 h	T15-A
0945 - 1000 h	Tea										
1000 - 1100 h	T12-B	1000 - 1100 h	T3-B	1000 - 1100 h	T20-B	1000 - 1100 h	T17-B	1000 - 1100 h	T5-B	1000 - 1100 h	T15-B
1100 - 1200 h	Keynote Speech by Prof. Kasun Hewage (Venue: Civil Engineering Auditorium)										
1200 - 1300 h	Lunch										
1300 - 1400 h	T13	1300 - 1400 h	T22-A	1300 - 1400 h	T1-A	1300 - 1400 h	T16-A	1300 - 1400 h	T10-A	1300 - 1400 h	T18-A
1400 - 1430 h	Tea										
1430 - 1600 h	T2	1430 - 1600 h	T22-B	1430 - 1600 h	T1-B	1430 - 1600 h	T16-B	1430 - 1600 h	T10-B	1430 - 1600 h	T18-B
14th August 2026 (Day2)											
Venue	V1 - Civil Eng Bldg Structural Engineering PG Room	Venue	V2 - Civil Eng Bldg Transportation Engineering PG Room	Venue	V3 - Civil Eng Bldg Construction Management PG Room	Venue	V4 - Civil Eng Bldg Environmental Engineering PG Room	Venue	V5 - TBA	Venue	V6 - TBA
Time	Session	Time	Session	Time	Session	Time	Session	Time	Session	Time	Session
0745 - 0830 h	Onsite Registration										
0830 - 0945 h	T19-A	0830 - 0945 h	T24-A	0830 - 0945 h	T9-A	0830 - 0945 h	T8 / T14	0830 - 0945 h	T11-A	0830 - 0945 h	T21-A
0945 - 1000 h	Tea										
1000 - 1100 h	T19-B	1000 - 1100 h	T24-B	1000 - 1100 h	T9-B / T4	1000 - 1130 h	T6	1000 - 1100 h	T11-B / T23	1000 - 1100 h	T21-B
1130 - 1230 h	Keynote Speech by Associate Prof. Guohong Tian (Venue: Civil Engineering Auditorium)										
1230 - 1330 h	Lunch										
1330 - 1730 h	Awards Ceremuony and Keynote Speech by Prof. Mahinda Vilathgamuwa (Venue: Civil Engineering Auditorium)										

MERCon 2026 - Workshop Schedule									
13th August 2026 (Day1)									
Venue Time	W1 -Faculty of Grad.	Venue Time	W2 - Dept. of Electronics	Venue Time	W3 - Classroom 01 New	Venue Time	W4 - Level 3.5 Dept. of	Venue Time	W5 - Computer Lab Dept.
1300 - 1630 h	TBA	1300 - 1530 h	TBA	1300 - 1730 h	TBA	1300 - 1600 h	TBA	1300 - 1630 h	TBA

MERCon 2026 - Poster Sessions	
13th August 2026 (Day1)	
Morning 0830 - 1100 h	
T10	Image Processing and Computer Vision
T16	Power Systems, Electrical Machines and High Voltage Engineering
T18	Software Engineering and Cloud Computing
Afternoon 1300 - 1530 h	
T5	Data Science and Artificial Intelligence
T7	Engineering Mathematics and Statistics
T15	Natural Language Processing
T17	Robotics and Intelligent Systems

V1 - Civil Eng Bldg Structural Engineering PG Room

Date	13-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		18
T12-A	0830 - 0845 h	1571280045	Passive Mechanical Retention of Capillary Tubes for Machine-Vision Compatible High-Speed Packed Cell Volume Test Centrifugation Rotor	Mechanical Engineering Systems	
	0845 - 0900 h	1571288810	Metrological Comparison of Blue Laser Structured Light and Consumer LiDAR for FDM-Printed Components: Effect of Filament Color and Surface Texture on Geometric Deviation	Mechanical Engineering Systems	
	0900 - 0915 h	1571282431	Optimization of Cutting Parameters in Machining High Speed Steel Alloys Using Finite Element Analysis Software	Mechanical Engineering Systems	
	0915 - 0930 h	1571287716	Designing a Framework for the Fabrication of an Unmanned Aerial Vehicle Wing for Surveillance Applications Using Glass Fibre Composites	Mechanical Engineering Systems	
	0930 - 0945 h	1571280149	Comparative Analysis of Human and Large Language Model Generated Product Ideas Under Practical Constraints	Mechanical Engineering Systems	
	0945 - 1000 h		Tea		
T12-B	1000 - 1015 h	1571289913	Structural Design of Small-Scale Wind Turbine Blades	Mechanical Engineering Systems	
	1015 - 1030 h	1571290082	Sustainability Assessment of Packaging Alternatives for Cosmetic Products	Mechanical Engineering Systems	
	1030 - 1045 h	1571280208	A Parametric Compact Thermal Modeling Framework for Rapid Design Space Exploration of Radial Multistage Thermoelectric Coolers	Mechanical Engineering Systems	
	1045 - 1100 h	1571290217	Development of a Vibration-Based System to Detect Internal Combustion Engine Faults	Mechanical Engineering Systems	
	1100 - 1200 h		Keynote		
	1200 - 1300 h		Lunch		
T13	1300 - 1315 h	1571289745	Design and Simulation of a Dual-Tunable MEMS Diffraction Grating with Decoupled Pitch and Blaze Angle Control	Micro/Nano Electro Mechanical Systems, Mechatronics, and Micro-Mechatronics	
	1315 - 1330 h	1571290044	Energy-Aware Performance Evaluation of Nonlinear Mechatronic Systems Under Matched-Tracking Conditions	Micro/Nano Electro Mechanical Systems, Mechatronics, and Micro-Mechatronics	
	1330 - 1345 h	1571280073	Design & Development of Vision-Based Human-Following Robot with Rocker-Bogie Mobility	Micro/Nano Electro Mechanical Systems, Mechatronics, and Micro-Mechatronics	
	1345 - 1400 h	1571289103	Five-Parameter Kinematic Calibration for Low-Cost Rotational 3D Scanners via Meta-Heuristic Optimization	Micro/Nano Electro Mechanical Systems, Mechatronics, and Micro-Mechatronics	
	1400 - 1430 h		Tea		
T2	1430 - 1445 h	1571290128	Vacuum Drying of Carrot: Evaluation of Different Pre-Treatments and Post-Drying Quality Parameters	Chemical and Process Engineering	
	1445 - 1500 h	1571290028	Upcycling of Sulfur-Rich Industrial Flue Gas Residues from Furnace Oil-Fired Regenerative Furnaces	Chemical and Process Engineering	
	1500 - 1515 h	1571290348	Performance Improvement of Acrylonitrile Butadiene Styrene (ABS) Forward Osmosis Membranes via Incorporation of Cellulose Extracted from Eichhornia Crassipes	Chemical and Process Engineering	
	1515 - 1530 h	1571290371	Upcycling of Acrylonitrile Butadiene Styrene (ABS) Waste into Forward Osmosis (FO) Membranes: Characterization and Suitability Assessment	Chemical and Process Engineering	
	1530 - 1545 h	1571290243	Simulation-Based Comparative Performance Analysis of Conventional and Inverted Batch Distillation Columns for Essential Oil Fractionation: Case Study of Cinnamon Leaf Oil	Chemical and Process Engineering	
	1545 - 1600 h				

V2 - Civil Eng Bldg Transportation Engineering PG Room

Date	13-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		15
T3-A	0830 - 0845 h	1571290300	Analog RF Cochleas in Space and Time: From 1-D Circuits to Multi-Dimensional Filter Banks	Communication and Signal Processing	
	0845 - 0900 h	1571289828	1-Bit Reconfigurable Intelligent Surface Design and Indoor Beam-Steering Validation at 2.4 GHz	Communication and Signal Processing	
	0900 - 0915 h	1571288318	Edge-Native Graph Transformer Networks for Real-Time RIS Beamforming on Low-Cost Hardware	Communication and Signal Processing	
	0915 - 0930 h	1571286850	Low Radar Cross Section Target Detection and Classification for Pulse Radar Systems Using RPCA and Deep Learning	Communication and Signal Processing	
	0930 - 0945 h	1571280316	Radar and Acoustic Sensor Fusion Using a Transformer Encoder for Robust Drone Detection and Classification	Communication and Signal Processing	
	0945 - 1000 h		Tea		
T3-B	1000 - 1015 h	1571280084	FPGA-Based Controller for Varactor-Tuned Intelligent Reflecting Surface Unit Cells	Communication and Signal Processing	
	1015 - 1030 h	1571287234	Developing a Precise Location Tracking Algorithm Using Ultra WideBand Technology	Communication and Signal Processing	
	1030 - 1045 h	1571282769	Enhancing Fault Detection in 5G Self-Organizing Networks Using Autoencoder and Hybrid Learning Approaches	Communication and Signal Processing	
	1045 - 1100 h				
	1100 - 1200 h		Keynote		
	1200 - 1300 h		Lunch		
T22-A	1300 - 1315 h	1571290036	Enhancing Efficiency in Event Planning Through Agile Project Management: A Study in Event Planning Companies in Sri Lanka	Technology Management	
	1315 - 1330 h	1571280228	Augmented Reality Applications in Fashion Retail: Exploring Generation Z Consumers' Perspectives	Technology Management	
	1330 - 1345 h	1571288788	Developing a Phase-Based Biomechanical Framework for Analyzing the Forward Defense Shot in Cricket	Technology Management	
	1345 - 1400 h	1571290077	CareLink: An AI-Driven Integrated Healthcare-HR Platform for Coordinated Management of Learning Disorders and Workplace Support	Technology Management	
	1400 - 1430 h		Tea		
T22-A	1430 - 1445 h	1571287576	Digital Solution for Bridging Validated Agri-SMEs and Early-Stage Agri-Entrepreneurs with Investors	Technology Management	
	1445 - 1500 h	1571279986	Determinants of Artificial Intelligence Adoption Intention in Small and Medium-Sized Enterprises (SME): Empirical Evidence from Sri Lanka	Technology Management	
	1500 - 1515 h	1571280130	Predicting Customer's E-Retention in Digital Banking: Integrating Subconscious Biometrics with Conscious Perceptions	Technology Management	
	1515 - 1530 h				
	1530 - 1545 h				
	1545 - 1600 h				

V3 - Civil Eng Bldg Construction Management PG Room

Date	13-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		19
T20-A	0830 - 0845 h	1571289932	Institutional Pressures Within Circular Business Models' Scaling Up: Case Studies Across Multi-Tiers in Apparel Supply Chain	Supply Chain, Logistics, and Mobility Engineering	
	0845 - 0900 h	1571280114	AHP-TOPSIS Decision-Support Model for Foreign Freight Forwarding Agent Selection: A Sri Lankan Case Study	Supply Chain, Logistics, and Mobility Engineering	
	0900 - 0915 h	1571288732	Warehouse Management Optimization Using a Multi-Objective Slotting Approach for Sustainable Operations	Supply Chain, Logistics, and Mobility Engineering	
	0915 - 0930 h	1571288958	Designing with Nature: Biomimicry-Inspired Packaging Design Solutions to Reduce Post-Harvest Losses in Logistics	Supply Chain, Logistics, and Mobility Engineering	
	0930 - 0945 h	1571290166	Airspace Cost Allocation by Sector-Based Pricing Using Graph Theory: A Case Study for the Colombo FIR	Supply Chain, Logistics, and Mobility Engineering	
	0945 - 1000 h		Tea		
T20-B	1000 - 1015 h	1571289040	Integration of IoT with Supply Chains: A Study on Small and Medium-Scale vs. Large-Scale Manufacturing Enterprises	Supply Chain, Logistics, and Mobility Engineering	
	1015 - 1030 h	1571290223	Barriers to Implementing Green Purchasing Strategies Among SMEs in Sri Lanka: A Best-Worst Method Approach	Supply Chain, Logistics, and Mobility Engineering	
	1030 - 1045 h	1571289763	Human Factors in Freight Transport: A Mixed-Methods Approach to Driver Risk Identification	Supply Chain, Logistics, and Mobility Engineering	
	1045 - 1100 h	1571289979	Influence of Communication Methods on Procurement Performance Evidence from the Sri Lankan Apparel Industry Using PLS-SEM	Supply Chain, Logistics, and Mobility Engineering	
	1100 - 1200 h		Keynote		
	1200 - 1300 h		Lunch		
T1-A	1300 - 1315 h	1571290224	A Dual-Branch Graph-Temporal Neural Network for Predicting α -Synuclein Pathology Spread Across the Brain Connectome	Biomedical Engineering and Instrumentation	
	1315 - 1330 h	1571288336	RespGeomLib: A Reproducible Parametric Engine for Generating Analysis-Ready Human Airway Lumen Geometry	Biomedical Engineering and Instrumentation	
	1330 - 1345 h	1571290088	TARVI: Transcription-Factor Aided RNA Velocity Inference with Supervised Latent Time and Velocity-Pseudotime Blending	Biomedical Engineering and Instrumentation	
	1345 - 1400 h	1571280357	Gait Coordination Analysis with Hilbert Transform Across Terrain Conditions Using IMU Wearable Technology	Biomedical Engineering and Instrumentation	
	1400 - 1430 h		Tea		
T1-B	1430 - 1445 h	1571290299	Patient Aware Contrastive Learning for Paroxysmal Atrial Fibrillation Detection Using RR Intervals	Biomedical Engineering and Instrumentation	
	1445 - 1500 h	1571290354	Development of a Cable-Driven Prosthetic Finger with Active Variable Stiffness Joints	Biomedical Engineering and Instrumentation	
	1500 - 1515 h	1571268084	Wearable Finger Rehabilitation Glove for Mobility Recovery Using a Servo-Driven Cable Mechanism and Multimodal Sensing	Biomedical Engineering and Instrumentation	
	1515 - 1530 h	1571282940	Gradient-Based Explainable Graph Attention Networks for Parkinson's Disease Classification Using Feature-Informed Structural Brain Networks	Biomedical Engineering and Instrumentation	
	1530 - 1545 h	1571289100	A Privacy-Preserving Multi-Stage Framework for Contactless Neonatal Jaundice Classification and Bilirubin Estimation	Biomedical Engineering and Instrumentation	
	1545 - 1600 h	1571290407	Design and Optimisation of a Passive Polycentric Knee Mechanism for Incline Walking	Biomedical Engineering and Instrumentation	

V4 - Civil Eng Bldg Environmental Engineering PG Room

Date	13-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		15
T17-A	0830 - 0845 h	1571279805	From Shape Estimation to Control: A Digital Rehearsal Framework for Deformable Purse-Seine Net Shooting	Robotics and Intelligent Systems	
	0845 - 0900 h	1571290260	Decentralized Hierarchical 3D UAV Swarm Coordination Using Hierarchical MARL and Graph Neural Networks	Robotics and Intelligent Systems	
	0900 - 0915 h	1571290052	Lightweight CNN-Based Embedded System for Li-Ion Battery Fault Diagnosis	Robotics and Intelligent Systems	
	0915 - 0930 h	1571290267	A Vision-Guided Hovering System for Autonomous UAV Package Pickup	Robotics and Intelligent Systems	
	0930 - 0945 h	1571290340	Fuzzy Semantic Grounding with ANFIS for LLM-Based Robot Task Planning	Robotics and Intelligent Systems	
	0945 - 1000 h		Tea		
T17-B	1000 - 1015 h	1571280269	Hierarchical Supervisory Motion Planning for Frontal Following Mobile Robots Using Guided Model Predictive Path Integral and Dynamic Virtual Rail	Robotics and Intelligent Systems	
	1015 - 1030 h	1571290238	Dynamic Evaluation of Classical and Control-Aware Optimal Trajectory Planning in Robot Manipulators	Robotics and Intelligent Systems	
	1030 - 1045 h	1571290311	Intelligent Ergonomic Chair with AI-Driven Posture Analysis and Correction with Real-Time Feedback	Robotics and Intelligent Systems	
	1045 - 1100 h				
	1100 - 1200 h		Keynote		
	1200 - 1300 h		Lunch		
T16-A	1300 - 1315 h	1571289135	A Decentralized Virtual Inertia and Adaptive Droop Control Strategy for Frequency Stability Enhancement in Low-Inertia Power Systems	Power Systems, Electrical Machines and High Voltage Engineering	
	1315 - 1330 h	1571290089	Design and Control of a Battery Energy Storage System (BESS) for Frequency Response in a Low Inertia Power System	Power Systems, Electrical Machines and High Voltage Engineering	
	1330 - 1345 h	1571290091	Reinforcement Learning-Based Energy Management for Aggregators Under Network Constraints	Power Systems, Electrical Machines and High Voltage Engineering	
	1345 - 1400 h	1571286892	Short-Term Wind Power Forecasting Using Transformer-XGBoost Hybrid Model	Power Systems, Electrical Machines and High Voltage Engineering	
	1400 - 1430 h		Tea		
T16-B	1430 - 1445 h	1571289987	Dynamic Voltage Support for PV-BESS Systems Using VSG-Based Grid-Forming Inverters	Power Systems, Electrical Machines and High Voltage Engineering	
	1445 - 1500 h	1571290050	Adaptive Virtual Inertia Control Strategy for Power Electronic Based Inertia Emulation to Enhance Islanded Microgrid Stability	Power Systems, Electrical Machines and High Voltage Engineering	
	1500 - 1515 h	1571282049	Comparative Techno-Economic Feasibility Analysis of Solar Thermal Collectors for Domestic Hot Water Integration in Munitibar, Basque Country, Spain	Power Systems, Electrical Machines and High Voltage Engineering	
	1515 - 1530 h				
	1530 - 1545 h				
	1545 - 1600 h				

V5 - TBA					
Date	13-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		16
T5-A	0830 - 0845 h	1571277123	SafePathAI: Uncertainty-Aware Trajectory Prediction for Safe Autonomous Driving	Data Science and Artificial Intelligence	
	0845 - 0900 h	1571283219	Monsoon Mayhem to Market Waves: Forecasting Fisheries Resilience in Sri Lanka	Data Science and Artificial Intelligence	
	0900 - 0915 h	1571283221	Impact of Cyclone Ditwah on the Colombo Stock Exchange: An Event Study on Market Reactions to Natural Disasters	Data Science and Artificial Intelligence	
	0915 - 0930 h	1571283222	Environmental Drivers of Respiratory Disease: A District Level Analysis	Data Science and Artificial Intelligence	
	0930 - 0945 h	1571283229	When Prices Double in a Week: Forecasting of Agricultural Volatility in Import-Isolated Markets	Data Science and Artificial Intelligence	
	0945 - 1000 h		Tea		
T5-B	1000 - 1015 h	1571283308	Golden Hour Divide: Trauma Care Accessibility and Resource Vulnerability in Sri Lanka	Data Science and Artificial Intelligence	
	1015 - 1030 h	1571283311	Forecasting Weather-Driven Price Dynamics Across Sri Lankan Tea Market Catalogues	Data Science and Artificial Intelligence	
	1030 - 1045 h	1571290235	Data-Driven Seasonality Discovery in Elephant Movement via PCA-Enhanced Spectral Clustering	Data Science and Artificial Intelligence	
	1045 - 1100 h				
	1100 - 1200 h		Keynote		
	1200 - 1300 h		Lunch		
T10-A	1300 - 1315 h	1571289028	Machine Learning-Based Chlorosis Detection Using RGB Image Analysis and Electrophysiological Sensing	Image Processing and Computer Vision	
	1315 - 1330 h	1571275001	Cinnamon Quality Grading from Outer Bark Images Using Deep Learning	Image Processing and Computer Vision	
	1330 - 1345 h	1571289767	PlugNDetect: A Lightweight Plug-and-Play Adapter for Cross-Domain Object Detection	Image Processing and Computer Vision	
	1345 - 1400 h	1571290310	SpectralSynth: Spectrum-Specific Synthetic Iris Image Generation with Privacy Preservation and Biometric Utility Enhancement	Image Processing and Computer Vision	
	1400 - 1415 h		Tea		
T10-B	1415 - 1445 h	1571277054	Enhanced Machine Learning Workflows for Coastal Cliff Change Detection: From Auto GCP Transfer to Semantic Debris Mapping	Image Processing and Computer Vision	
	1445 - 1500 h	1571279784	Edge-Optimized Hybrid Computer Vision Architecture for Real-Time Road Rule Violation Detection in Unstructured Traffic Environments	Image Processing and Computer Vision	
	1500 - 1515 h	1571279978	A Hybrid Deep Wavelet Feature Fusion Framework for Rice Leaf Disease Classification	Image Processing and Computer Vision	
	1515 - 1530 h	1571290165	CSM-SR: Conditional Structure-Informed Multi-Scale GAN for Scientific Image Super-Resolution	Image Processing and Computer Vision	
	1530 - 1545 h				
	1545 - 1600 h				

V6 - TBA					
Date	13-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		16
T15-A	0830 - 0845 h	1571280145	From Sinhala to Dhivehi: Cross-Lingual Transfer Learning for Low-Resource Speech Recognition	Natural Language Processing	
	0845 - 0900 h	1571280029	Ontology-Guided Pedagogically Meaningful Knowledge Component Extraction from Code	Natural Language Processing	
	0900 - 0915 h	1571289890	HyperNetwork-Based Prompt Tuning for Sinhala-English Code-Mixed and Code-Switched Sentiment Analysis	Natural Language Processing	
	0915 - 0930 h	1571283161	Trilingual Topic Modeling of Sri Lankan Parliamentary Debates	Natural Language Processing	
	0930 - 0945 h	1571289134	Spam Email Detection and Categorization Using Deep Learning Techniques	Natural Language Processing	
	0945 - 1000 h		Tea		
T15-B	1000 - 1015 h	1571290319	GeoScribe: An Agentic Spatial Reasoning Framework for Explainable LLM-Based Property Valuation	Natural Language Processing	
	1015 - 1030 h	1571279973	Cross-Temporal Sinhala OCR: Page-Level Adaptation and Diachronic Analysis	Natural Language Processing	
	1030 - 1045 h	1571280840	Automated Argument Mining and Entity Recognition in Sri Lankan Legal Judgments Using Large Language Models	Natural Language Processing	
	1045 - 1100 h				
	1100 - 1200 h		Keynote		
	1200 - 1300 h		Lunch		
T18-A	1300 - 1315 h	1571290106	CROWDio: A Developer-Friendly Mobile Crowd Computing Framework	Software Engineering and Cloud Computing	
	1315 - 1330 h	1571279889	A Hybrid AI and Kansei Engineering Framework for Post-Release Requirement Prioritization in Banking Applications: Balancing Customer Emotions and Developer Constraints	Software Engineering and Cloud Computing	
	1330 - 1345 h	1571279927	Lightweight Application-Layer IDS for Simultaneous Sinkhole and Selective Forwarding Detection in RPL Networks	Software Engineering and Cloud Computing	
	1345 - 1400 h	1571280181	Exposing per-Pod OverlayFS Amplification in Kubernetes via eBPF: Whiteout Metadata Churn and Copy-Up Inode Cost	Software Engineering and Cloud Computing	
	1400 - 1430 h		Tea		
T18-B	1430 - 1445 h	1571287456	ShadowBoard: A Three-Layer Software Framework for Shadow-Robust Hand-Tracking Interactive Whiteboards Using Commodity Webcams	Software Engineering and Cloud Computing	
	1445 - 1500 h	1571289326	ARP Spoofing Prevention in SDN Using Host Agents and Cryptographically Verified IP-MAC Bindings	Software Engineering and Cloud Computing	
	1500 - 1515 h	1571274626	LexMate: A Context-Aware Smart Legal Office Management System with Hybrid Rule-Based Intelligence for Emerging Jurisdiction Law Firms	Software Engineering and Cloud Computing	
	1515 - 1530 h	1571289596	Enhanced Museum Applications for Smart Devices: AI Based for Cultural Engagement and Intelligent Interaction	Software Engineering and Cloud Computing	
	1530 - 1545 h				
	1545 - 1600 h				

V1 - Civil Eng Bldg Structural Engineering PG Room

Date	14-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration & Opening Ceremony		10
T19-A	0830 - 0845 h	1571281019	Hybrid Imaging-Based Full-Field Thermo-Mechanical Deformation Measurement System	Structural Engineering and Building Materials	
	0845 - 0900 h	1571289972	Experimental and Numerical Investigation of the Residual Buckling Resistance of Steel Members Under Pitting Corrosion	Structural Engineering and Building Materials	
	0900 - 0915 h	1571290025	Experimental Investigation of Web Crippling in Built-Up Cold-Formed Steel Members	Structural Engineering and Building Materials	
	0915 - 0930 h	1571281016	Characterization of Transition Region of Coiled Open Cross-Section Deployable Booms	Structural Engineering and Building Materials	
	0930 - 0945 h	1571290286	Optimal Design of Steel Portal Frames Using Heterogeneous Graph Neural Networks	Structural Engineering and Building Materials	
	0945 - 1000 h		Tea		
T19-B	1000 - 1015 h	1571290321	Physics-Constrained Diffusion WGAN: A Hybrid Generative Framework for Code-Compliant Structural Design	Structural Engineering and Building Materials	
	1015 - 1030 h	1571280035	Experimental Study of Hybrid TRC-BFRP Strengthening for Shear Enhancement of RC Beams	Structural Engineering and Building Materials	
	1030 - 1045 h	1571289722	Comparative Study of Surface Coatings for Enhancing the Durability of Concrete	Structural Engineering and Building Materials	
	1045 - 1100 h	1571290055	Development of an Innovative Interlocking Plastic "Bottle-Brick" for Sustainable Partition Wall Construction	Structural Engineering and Building Materials	
	1100 - 1115 h	1571290591	Performance Assessment of Lime-Based Mortars for Historic Brick Masonry Conservation	Structural Engineering and Building Materials	
	1115 - 1130 h				
	1130 - 1230 h		Keynote		
	1230 - 1330 h		Lunch		
	1330 - 1730 h		Awards Ceremony and Keynote		

V2 - Civil Eng Bldg Transportation Engineering PG Room

Date	14-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration		10
T24-A	0830 - 0845 h	1571289904	Resource-Constrained Comparative Analysis of Road Asset Management Decision Frameworks	Transportation Engineering	
	0845 - 0900 h	1571290328	A Hybrid Simulation and Machine Learning Framework for Short-Term Waiting Time Prediction in Airport Departure Terminals	Transportation Engineering	
	0900 - 0915 h	1571290115	Investigation of the Combined Effect of Polymer-Modified Bitumen Incorporated Aspha-Min Modified Warm Mix Asphalt	Transportation Engineering	
	0915 - 0930 h	1571280564	Traffic Volume Prediction Using Temporal and Weather Features with Explainable Machine Learning	Transportation Engineering	
	0930 - 0945 h	1571290239	Spatial Distribution and Lateral Interaction in Heterogeneous Traffic: A Trajectory-Based Analysis	Transportation Engineering	
	0945 - 1000 h		Tea		
T24-B	1000 - 1015 h	1571280321	Bus Travel Time Prediction Under Heterogeneous Traffic Conditions Using a Transformer Encoder-Based Model: A Comparative Study	Transportation Engineering	
	1015 - 1030 h	1571287979	Dynamic PCU-Based Adaptive Signal Control for Heterogeneous Urban Traffic: A Microsimulation Approach	Transportation Engineering	
	1030 - 1045 h	1571278534	Improving Motorcycle Safety in Sri Lanka: Behavioural Insights for Enhanced Rider Training and Licensing	Transportation Engineering	
	1045 - 1100 h	1571290606	Financial Appraisal of Battery Electric Freight Vehicles in Sri Lanka	Transportation Engineering	
	1100 - 1115 h	1571288480	HERMEX: IOT-Integrated Simulation for Urban Transport and Highway Infrastructure Pre-Planning and Climate R	Transportation Engineering	
	1115 - 1130 h				
	1130 - 1230 h		Keynote		
	1230 - 1330 h		Lunch		
	1330 - 1730 h		Awards Ceremony and Keynote		

V3 - Civil Eng Bldg Construction Management PG Room					
Date	14-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration		10
T9-A	0830 - 0845 h	1571280633	Assessing Physics-Informed Neural Networks in Streamflow Predictions for Tropical Monsoonal Basins in Sri Lanka	Hydraulics and Environmental Engineering	
	0845 - 0900 h	1571280643	Contribution of Hydrological Feature Engineering and Multi-Source Data Fusion to Rainfall Imputation Accuracy: A Case Study in the Tweed River Catchment, Australia	Hydraulics and Environmental Engineering	
	0900 - 0915 h	1571289027	Exploring the Potential of Multi-Variable Calibration in HEC-HMS: Utilizing River Flow and Groundwater Data for Hydrological Modeling	Hydraulics and Environmental Engineering	
	0915 - 0930 h	1571290624	Hydro-Morphodynamic Assessment of Pier Scour Vulnerability at a Flood-Affected Bridge: Insights from Hanwellla Bridge, Sri Lanka	Hydraulics and Environmental Engineering	
	0930 - 0945 h	1571267577	Design and Experimental Evaluation of an IoT-Enabled Semi-Autonomous Platform for Sediment Level Detection and 3D Mapping in Urban Canals	Hydraulics and Environmental Engineering	
	0945 - 1000 h		Tea		
T9-B / T4	1000 - 1015 h	1571281029	Water Conservation Strategies for Achieving Sustainable Development Goal 6 in Water and Sanitation in Sri Lanka	Hydraulics and Environmental Engineering	
	1015 - 1030 h	1571289779	Missing Data Estimation in Precipitation and Streamflow Data Using Machine Learning in Tropical River Basins in Sri Lanka	Hydraulics and Environmental Engineering	
	1030 - 1045 h	1571290208	Sustainable Aeration Solution for Water Treatment Using Surface Modified Plunging Jet Technology	Hydraulics and Environmental Engineering	
	1045 - 1100 h	1571280129	Fusion of AI, Machine Learning, and Remote Sensing for Proactive Landslide Detection	Construction Engineering and Risk Management	
	1100 - 1115 h	1571270671	Reducing Environmental Pollution Through Sustainable High-Percentage Construction and Demolition Waste Utilization in Interlocking Paving Blocks: A Tropical Climate Case Study	Construction Engineering and Risk Management	
	1115 - 1130 h				
	1130 - 1230 h		Keynote		
	1230 - 1330 h		Lunch		
	1330 - 1730 h		Awards Ceremony and Keynote		

V4 - Civil Eng Bldg Environmental Engineering PG Room					
Date	14-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration		11
T8 / T14	0830 - 0845 h	1571288287	Modelling of Soil-Concrete Interface Shear Behaviour for Geotechnical Applications	Geotechnical Engineering	
	0845 - 0900 h	1571280599	Predicting Compaction Characteristics of Geopolymer-Stabilised Soils Using Chemistry-Informed Machine Learning	Geotechnical Engineering	
	0900 - 0915 h	1571280639	From Laboratory to Field Scale: Performance of Cement-RHA Stabilised DSM Columns in Peat	Geotechnical Engineering	
	0915 - 0930 h	1571280753	Influence of Degree of Saturation and Degree of Compaction on Unsoaked CBR Values	Geotechnical Engineering	
	0930 - 0945 h	1571285736	Hydro-Mechanical Performance of Bambusa Vulgaris for Riverbank Stabilization Under Variable Hydraulic Conditions: A Nature-Based Solutions Approach	Geotechnical Engineering	
	0945 - 1000 h	1571290284	Quantifying Degradation and Post-Extraction Ecological Recovery at the Aruwakkalu Limestone Quarry Using Landsat Spectral-Thermal Indicators	Mining and Earth Resources Engineering	
	1000 - 1015 h		Tea		
T6	1015 - 1030 h	1571289157	AMM-Based Dynamic Modeling and PSO-Optimized FOPID Control for Vibration Suppression in a Two-Link Flexible Manipulator	Electronics, Control, and Instrumentation	
	1030 - 1045 h	1571280041	A Scalable Framework for Remote Real-Time Debugging of Embedded EV Chargers via WebSocket and XCP	Electronics, Control, and Instrumentation	
	1045 - 1100 h	1571290063	Resilient IIoT Edge-to-Cloud Framework for Real-Time Monitoring of Renewable Energy Plants	Electronics, Control, and Instrumentation	
	1100 - 1115 h	1571290261	A Lightweight on-Device Blockchain Framework for Resource-Constrained Microcontrollers	Electronics, Control, and Instrumentation	
	1115 - 1130 h	1571289054	FPGA-Based Hardware Accelerator for U-Net: A Resource-Efficient, Pipelined Micro-Architecture for Real-Time Image Segmentation	Electronics, Control, and Instrumentation	
	1130 - 1230 h		Keynote		
	1230 - 1330 h		Lunch		
	1330 - 1730 h		Awards Ceremony and Keynote		

V5 - TBA					
Date	14-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration		9
T11-A	0830 - 0845 h	1571290596	Extraction and Property Analysis of Local Resins for Sustainable Adhesive Applications	Materials Science and Engineering	
	0845 - 0900 h	1571289010	Synthesis of Fluoride-Containing Varnish for Application to the Tooth Surface	Materials Science and Engineering	
	0900 - 0915 h	1571289175	Synthesis, Characterization, and Numerical Modeling of Hydroxyapatite-Barium Titanate Composites for Piezoelectric Performance Evaluation	Materials Science and Engineering	
	0915 - 0930 h	1571290459	Synthesis of Cellulose Based Nano-Filaments Using Waste Cotton Fabrics	Materials Science and Engineering	
	0930 - 0945 h	1571290601	Characterization and Interfacial Failure Analysis of a Flexible Interdigitated Electrode Smart Sticker for Fruit Ripeness Tracking	Materials Science and Engineering	
	0945 - 1000 h		Tea		
T11-B / T23	1000 - 1015 h	1571290599	Design of an Ozone Gas Chamber and Development of a Predictive Model for Natural Rubber Ozone Degradation	Materials Science and Engineering	
	1015 - 1030 h	1571290515	Water-Repellent Performance of a Natural Oil-Based Wood Coating Using Dehydrated Castor Oil and Beeswax	Materials Science and Engineering	
	1030 - 1045 h	1571290447	Multi Scale Modeling of ZnO/PVDF Piezoelectric Nanocomposite Sensors for Wearable Heart Rate Monitoring	Materials Science and Engineering	
	1045 - 1100 h	1571290081	Numerical Simulation of Heat Transfer and Mechanical Stress in Microencapsulated Phase Change Materials for Wearable Textile Applications	Textile and Apparel Engineering	
	1100 - 1115 h				
	1115 - 1130 h				
	1130 - 1230 h		Keynote		
	1230 - 1330 h		Lunch		
	1330 - 1730 h		Awards Ceremony and Keynote		

V6 - TBA					
Date	14-08-26	Paper ID	Topic	Track	Paper count
Track	Time				
	0745 - 0830 h		Onsite Registration		10
T21-A	0830 - 0845 h	1571284156	Adaptive Dynamic Reconfiguration of PV Arrays to Maximize Power Output Under Partial Shading in String Inverter Based PV Systems	Sustainable Energy & Environment	
	0845 - 0900 h	1571289809	Comparative Assessment of Wave Energy Converters Using Long-Term Hindcast Data: A Case Study of Sri Lanka	Sustainable Energy & Environment	
	0900 - 0915 h	1571289943	Modeling Realism in PV Soiling Digital Twins: A Physics-Based Simulation Approach	Sustainable Energy & Environment	
	0915 - 0930 h	1571287984	STC-Net: Electroluminescence-Based Solar Cell Crack Segmentation for Power Loss Estimation	Sustainable Energy & Environment	
	0930 - 0945 h	1571290068	Effect of Pretreatment of Palm Oil Mill Effluent on Anaerobic Sequenced Batch Reactor Operation	Sustainable Energy & Environment	
	0945 - 1000 h		Tea		
T21-B	1000 - 1015 h	1571280356	GIS-AHP Renewable Energy Siting with Deep Reinforcement Learning and Digital Twin Battery for 24/7 Carbon-Free Dispatch in Sri Lanka	Sustainable Energy & Environment	
	1015 - 1030 h	1571290359	A Biomass Torrefaction Model Based on Normalized Severity Factor	Sustainable Energy & Environment	
	1030 - 1045 h	1571283016	Sustainable Clay-Coconut Coir Composite Panels for Tropical Construction: Optimization of Composition for Enhanced Thermal and Acoustic Performance in Sri Lankan Climate Conditions	Sustainable Energy & Environment	
	1045 - 1100 h	1571288873	Performance Characterization and Statistical Analysis of Waste-Derived Coconut Coir Fibre Composite Ceiling Panels with Binary, Ternary, and Quaternary Binder Combinations	Sustainable Energy & Environment	
	1100 - 1115 h	1571290046	Assessment and Prioritization of Green Airport Strategies at Bandaranaike International Airport	Sustainable Energy & Environment	
	1115 - 1130 h				
	1130 - 1230 h		Keynote		
	1230 - 1330 h		Lunch		
	1330 - 1730 h		Awards Ceremony and Keynote		

MERCon 2026 - Poster Sessions		
13th August 2026 (Day1)		
Morning 0830 - 1100 h		
#	Title	Track name
1571280574	Non-Destructive Quantification of Urea Adulteration in Bovine Milk Using Transmittance Multi-Spectral Imaging	Image Processing and Computer Vision
1571289158	Few-Step Self-Distillation for Efficient Diffusion-Based Low-Light Image Enhancement	Image Processing and Computer Vision
1571289359	SymAD-ECNN: Geometry-Aware Equivariant Learning for Anomaly Detection in Brain MRI	Image Processing and Computer Vision
1571289998	Deep Learning-Based Fusion for Multispectral Text Enhancement Using Supervised Conditional GAN	Image Processing and Computer Vision
1571290134	CineAR: Real-Time Augmented Reality Guidance for Template-Based Mobile Cinematography	Image Processing and Computer Vision
1571280421	An Integrated Approach to Forensic Bloodstain Pattern Analysis and Weapon Classification Using Image Processing and Deep Learning	Image Processing and Computer Vision
1571289122	MambaRefine-CD: MambaVision with Region-Boundary Temporal Refinement	Image Processing and Computer Vision
1571289994	Cross-Domain Waste Classification Using Deep Learning: Addressing Geographic Generalization Failure in Sri Lanka	Image Processing and Computer Vision
1571290111	A Controlled Visual-Backbone Benchmark for Multimodal Short-Term Solar Irradiance Forecasting	Image Processing and Computer Vision
1571289111	Math2Visual-X: A Modular Framework for Pedagogically Aligned Lower-Primary Math Visuals Generation	Image Processing and Computer Vision
1571290163	An Advanced Non-Invasive Blood Group Detection Using Fingerprint Biometrics: A Deep Learning Approach	Image Processing and Computer Vision
1571280006	Brain Tumor Classification Using Deep Residual Networks	Image Processing and Computer Vision
1571278299	Probabilistic Wind Power Forecasting Using Adam-OBL Optimized DeepAR Model	Power Systems, Electrical Machines and High Voltage Engineering
1571282043	Grid Forming Control of Solar PV Plants to Support Black Start Capability of a Power Grid	Power Systems, Electrical Machines and High Voltage Engineering
1571287503	Physics Informed Neural Network Based Conductor Temperature Estimation for Dynamic Line Rating in Distribution Networks	Power Systems, Electrical Machines and High Voltage Engineering
1571289164	Impact of Electric Vehicle Charging Loads on Distribution Transformers: A Case Study for Sri Lanka (Residential Areas)	Power Systems, Electrical Machines and High Voltage Engineering
1571288899	A Tariff-Aware Hybrid Home Energy Eco-Management System for PV-BESS-EV Integration with Bidirectional Charging, Grid Support, and Battery Health Constraints	Power Systems, Electrical Machines and High Voltage Engineering
1571280023	A Comparative Study of Deep Learning Models for Energy-Aware Workload Prediction in Edge-Cloud Environments	Software Engineering and Cloud Computing
1571280132	A Dataset-Aware Drift-Robust Log Anomaly Detection Pipeline for Cloud Service Reliability	Software Engineering and Cloud Computing
1571289761	CWC: A Cognitive Weighted Complexity Metric for Object-Oriented Programming	Software Engineering and Cloud Computing
1571290295	A Multi-Layer Zero Trust Security Framework for Kubernetes	Software Engineering and Cloud Computing
1571287483	Deployment-Oriented Cost-Benefit Analysis of Deep Learning Models for Automated Duplicate Bug Report Detection in Open-Source Projects	Software Engineering and Cloud Computing
Afternoon 1300 - 1530 h		
1571278995	Does Training Protocol Matter? One-Class vs. Unsupervised Anomaly Detection on ECG Data	Data Science and Artificial Intelligence
1571280465	IoT Botnet Flow Level Dataset for Detection of Encrypted Command-and-Control (C2) Conversation	Data Science and Artificial Intelligence
1571288338	AI-Powered Web-Based Performance Dashboard for Apparel Manufacturing: Predictive Analytics and NLP-Driven Decision Support	Data Science and Artificial Intelligence
1571290292	Integrated Machine Learning Framework for Short-Term and Long-Term Shoreline Forecasting and Coastal Risk Assessment in Sri Lanka	Data Science and Artificial Intelligence
1571280142	Behavioral-Augmented Machine Learning for Relationship Discovery in Enterprise Data Fabrics	Data Science and Artificial Intelligence
1571287734	Performance Analysis of Multilayer Perceptron Architectures for One-Dimensional Nonlinear Function Approximation	Data Science and Artificial Intelligence
1571289539	D-IMM: Distributed Iterative Mistake Minimization	Data Science and Artificial Intelligence
1571289577	A Comparative Study of Tabular, Geometric, and Lorentz-Aware Models for Higgs Event Classification	Data Science and Artificial Intelligence
1571290139	XRAG-CJG: A Trust-Aware and Explainable Retrieval Framework for Reviewer Recommendation	Data Science and Artificial Intelligence
1571290253	A Fair and Explainable Reciprocal Recommendation Framework for Online Labor Marketplaces Using Heterogeneous Graph Transformers	Data Science and Artificial Intelligence
1571278988	The Remittance Blueprint: Data-Driven Intelligence for Sri Lanka	Data Science and Artificial Intelligence
1571282975	Predicting Sri Lankan Consumers' Willingness to Pay for Eco-Friendly Apparel Produced for Export Markets	Data Science and Artificial Intelligence
1571283184	The Effect of Search Intent Data on Predicting Post-Crisis Daily Tourist Arrivals in Sri Lanka	Data Science and Artificial Intelligence
1571284201	CogniAnimate: An AI-Driven Cognitive-State-Aware Visual Learning System for Grade 6 Science Education	Data Science and Artificial Intelligence
1571289740	CAPTR: A Context-Aware Personalized Travel Place Recommendation System Using Heterogeneous Graph Transformers	Data Science and Artificial Intelligence

1571289974	Multimodal Emotion Recognition with Emotion-Specific Cross-Modal Attention Blocks	Data Science and Artificial Intelligence
1571290019	AI-Driven Multimodal Platform for Cognitive Assessment, Communication Training, Personalized Learning, and Vocational Readiness in Students with down Syndrome	Data Science and Artificial Intelligence
1571290614	Tag Entropy: A Structure-Agnostic Curriculum Learning Framework for Graph Neural Networks	Data Science and Artificial Intelligence
1571283501	How Environment and Urbanization Shape Bird Diversity in Sri Lanka	Data Science and Artificial Intelligence
1571288072	A Host-Based Multi Module Intrusion Detection Framework for Secure Public Wi-Fi Using Metadata Based Analysis and Real Time Risk Advisory	Data Science and Artificial Intelligence
1571290281	Decision Intelligence in Football: A State-Based Framework for Evaluating Player Decisions Using Expected Value and Opponent Context	Data Science and Artificial Intelligence
1571279742	Optimizing Traffic Flow in Sri Lanka Using Reinforcement Learning-Based Traffic Light Control Approach	Data Science and Artificial Intelligence
1571280497	FishMate: An IoT-Enabled Decision Support System Using Hybrid Ensemble Machine Learning for Predicting Safe and Optimal Fishing Zones for Small-Scale Vessels in Sri Lanka	Data Science and Artificial Intelligence
1571288055	A Multi-Modal IoT and Deep Learning Platform for Real-Time Bus Safety Monitoring and Passenger Intelligence	Data Science and Artificial Intelligence
1571290178	HGCacheMem: A Robust Architectural Approach to Improve Contextual Coherence and Retrieval Speed in Agentic Systems	Data Science and Artificial Intelligence
1571276878	Uncertainty-Aware Protein Subcellular Localization via Deep Ensembles and Monte Carlo Dropout	Data Science and Artificial Intelligence
1571290198	CoMemo: A Hybrid Vector and Graph Cognitive Memory Framework with Admission, Reinforcement, Decay and Lifecycle Management for AI Agents	Data Science and Artificial Intelligence
1571290234	Adaptive Sequential Probability Framework for Ultra-Low Latency Fault Detection in High-Speed Engineering Systems	Engineering Mathematics and Statistics
1571287608	LMSpell: Spell Correction with Pre-Trained Language Models	Natural Language Processing
1571289144	SalAngaBhava: A Sinhala Market Dataset for Aspect-Based Sentiment Analysis	Natural Language Processing
1571280913	Enhancing Resume Grading Using NLP and Explainable AI	Natural Language Processing
1571283715	Fault of Our Stars: Behavioral Drivers of Rating-Sentiment Incongruence	Natural Language Processing
1571290280	Prompt Sensitivity or Evaluation Artifact? A Task-Aware Analysis for Large Language Models	Natural Language Processing
1571290031	Design and Implementation of a Test-Bed for Virtual RCM Algorithms	Robotics and Intelligent Systems
1571290160	Particle Swarm Optimization-Based Shape Reconstruction of Pipelines Using 3D Point Clouds	Robotics and Intelligent Systems
1571275693	Dynamic Droop Coefficient Prediction for Grid-Forming Inverters Using Feedforward Neural Network	Robotics and Intelligent Systems
1571280085	Systematic GPU Acceleration for Autonomous Robotic Ultrasound Imaging via Point Cloud Pipeline Optimization	Robotics and Intelligent Systems
1571280879	Design and Development of an Autonomous SCARA Robotic System for Intelligent Chess Playing - SCARAMate	Robotics and Intelligent Systems