

Tentative Technical Schedule of UNIFIED 2024 Conference at MNIT Jaipur

26th NOVEMBER 2024 (Tuesday)

10:30 AM to 11:30 AM Inaugural Function, Venue: Neeti Sabhagaar, Prabha Bhanwan 2nd floor

High tea (11.00AM – 11:30AM)

**12 PM- 1 PM Key note session Prof. Uday Kumar (Lulia University, Sweden),
Prof. Andrew Ball (University of Huddersfield, U.K.)**

Lunch (1:00 PM to 2:00 PM)

Time (2:00 PM to 3:30 PM)	Session A Session Chair: Dr. Om Ji Shukla (Assistant Professor,NIT Patna) Track Owner: Dr. Naresh Raghuvanshi (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Siddharth Singh(6263744910) Pardhuman chahar(8963859013) Venue: NKN-1	Session B Session Chair: Dr. Mangey Ram (Professor, Graphic Era, Dehradun) Track owner: Dr. Gulab Pamnani (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Puspendra Upadhyay(9929334868) Rahul Sharma(9358104640) Venue: Neeti Sabhagaar	Session C Session Chair: Prof. Pawan Kumar Kankar (Professor, IIT Indore) Track owner: Dr. Nikhil Sharma (Assistant Professor , MNIT Jaipur) UNIFIED Rep: Vishnu(9251762768) Suyesh Wankhede(9082810006) Venue: NKN-2
2:00 PM to 2:15 PM	UNIFIED_2024_05 Biometric based Secured Voting System for Election Ravindra Pratap Narwaria	UNIFIED_2024_04 Predictive Modeling of Surface Roughness in Abrasive Machining Operation Using Machine Learning Gajesh I S. Usgaonkar	UNIFIED_2024_132 Pathway to Net-Zero Emissions in Supply Chain: A comprehensive analysis of Industry 4.0 Technologies and Emission Reduction Practices Shobha Rathore
2:15 PM to 2:30 PM	UNIFIED_2024_33 Denial-of-Service (DOS): Adaptive Approach and Strategies Monika Rani	UNIFIED_2024_51 Electric Mobility in Urban India: Tackling Technological and Infrastructure Hurdles Abhishek Das	UNIFIED_2024_73 Applications of learning curves in maintenance industry 4.0: A comprehensive review Prakash Naraian Sharma

2:30 PM to 2:45 PM	UNIFIED_2024_44 A Blockchain architecture for healthcare waste management practices-An Indian Case Rajeev Agrawal	UNIFIED_2024_114 A temporal decomposition-based LSTM model for forecasting reservoir inflow using real-time data Kshitij Tandon	UNIFIED_2024_144 Optimization of the Blade pitch angle of wind turbine using physics informed Machine learning for maximum power output. Gitesh Karan
2:45 PM to 3:00 PM	UNIFIED_2024_50 Machine Learning Based Anomaly Detection for Pneumatic Actuators driven Flexible Manufacturing System Hansika Gupta	UNIFIED 2024_27 Brittle Fracture Analysis using Phase Field Pushpendra Upadhyay	UNIFIED_2024_82 A Conceptual Framework to Evaluate Customers' Response to Use Product Recommendation Systems Aman Mathan
3:00 PM to 3:15 PM	UNIFIED_2024_55 Bearing Defects Classification using Wavelet Time Scattering Features and ensemble techniques Nitin Upadhyay	UNIFIED 2024_30 A Novel Method for Damage Identification of Frame Structures using Extended Improved Particle Swarm Optimization Technique Thakur Das Goswami	UNIFIED_2024_N_105 Application of a Large Language Model for Failure Mode and Effect Analysis (FMEA) Kamal V. Charan
High Tea (3.30 – 4.00 PM)			
Time (4:00 PM to 5:30 PM)	Session A Session Chair: Dr. Surya Prakash (Associate Professor, Great Lakes Institute of Management Gurgaon) Track Owner: Dr. Naresh Raghuvanshi (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Siddharth Singh(6263744910) Pardhuman chahar(8963859013) Venue: Neeti Sabhagaar	Session B Session Chair: Dr. Anup Malik (Assistant Professor, MNIT Jaipur) Track owner: Dr. Gulab Pamnani (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Puspendra Upadhyay(9929334868) Rahul Sharma(9358104640) Venue: NKN2	Session C (ONLINE Mode) Session Chair: Dr. Neeraj Goyal (Associate Professor, IIT Kgp) Track owner: Dr. Nikhil Sharma (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Vishnu (9251762768) Suyesh Wankhede (9082810006) Venue: NKN 1
4:00 PM to 4:15 PM	UNIFIED_2024_19 The Role of Lifestyle in Enhancing Employee Health and Productivity G Balakrishna Reddy	UNIFIED_2024_N_102 Proposed Framework for Nonintrusive Monitoring Solution for Independent Elderly Halldor Broddi Thorsteinsson	UNIFIED_2024_13 Integrating poly-Coherent Composite Spectrum of Measured Vibration Responses and Machine Learning for Fault Detection in Rotating Machinery Khalid M Almutairi

4:15 PM to 4:30 PM	UNIFIED_2024_64 Detecting Additive Manufacturing Anomalies with a Shallow Residual Convolution Network Suveg V Iyer	UNIFIED_2024_N_103 Prediction of Power Produced in a Wind Turbine Using SCADA Data with Deep LSTMs Even Torbjørnsen	UNIFIED_2024_18 The Importance of the Correct Use and Management of Aerial Means of Rotary Wing in Forest Fires Jorge Rafael Raposo
4:30 PM to 4:45 PM	UNIFIED_2024_88 Enhanced Gear Fault Diagnosis Using Optimized Spectrogram-Based CNNs for Multiple and Compound Fault Detection Priyom Goswami	UNIFIED 2024_21 A Novel Approach for Assessment of Risk Matrix of Offset Printing Machine ARUN KIRAN PAL	UNIFIED_2024_37 Enhancing Marine Maintenance Operations: The Impact of Human Factors and Customized Training Needs Nilesh Soni
4:45 PM to 5:00 PM	UNIFIED_2024_83 Probabilistic assessment on natural frequencies of functionally graded plates using artificial neural network approach Dr. Ravi Ranjan Kumar	UNIFIED 2024_68 Temporal Feature Extraction Based Real Time Damage Detection of Floating Offshore Wind Turbine Mooring Lines Ananay Thakur	UNIFIED 2024_38 Enhancing Safety and Risk Management in the Oil and Gas Industry: Lessons from Major Catastrophic Incidents Nilesh Soni (Mr.Ashutosh Dubey)
5:00 PM to 5:15 PM	UNIFIED_2024_14 Maximizing Reliability of Hybrid Energy System: A Comparison between Mayfly and Driving Training-Based Optimization Algorithm Jaya choudhary	UNIFIED_2024_11 Performance Evaluation of an Electric Vehicle System under Multistate Modelling Labhanshi Vashishtha	UNIFIED 2024_40 Evolution of Safety Systems and the Increased Potential for Hidden Failures: Case Studies from Automotive and Aviation Industries LAR ENGLISH

27 th NOVEMBER 2024 (Wednesday)			
10.00AM – 11 AM (Key note: Mr. Venkataramana Runkana (Tata Consultancy Services) and Prof. Rakesh Mishra (University of Huddersfield, U.K.)			
High tea (11.00AM – 11:30AM)			
Time (11:30 AM to 1:00 PM)	Session A2 Session Chair: Dr. Sameer Mittal Track Owner: Dr. Naresh Raghuvanshi (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Siddharth Singh(6263744910) Pardhuman chahar(8963859013) Venue: NKN-2	Session B2 (ONLINE) Session Chair: Dr. Deepak Verma (Associate Professor MNIT Jaipur) Track owner: Dr. Gulab Pamnani (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Puspendra Upadhyay(9929334868) Rahul Sharma(9358104640) Venue: Neeti Sabhagaar	Session C2 (ONLINE) Session Chair: Dr. Satyasai J. Nanda (Associate Professor, MNIT Jaipur) Track owner: Dr. Nikhil Sharma (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Vishnu(9251762768) Suyesh Wankhede(9082810006) Venue: NKN-1
11:30 AM to 11:45 AM	UNIFIED_2024_47 A Framework Proposal for the Assets Ranking Based on their Criticality in Industry Mohamad Afiq Amiruddin Bin Parnon	UNIFIED_2024_59 Multi-Fault Classification of Rotor Systems Based on Torsional Energy Trajectory Characteristic Pattern Chunrong Hua	UNIFIED_2024_65 Vehicle Wheel Monitoring and Diagnosis Based on the Vibration Signals of an On-Rotor Sensor Kunzuo Zhong
11:45 AM to 12:00 PM	UNIFIED_2024_75 Potential of Artificial intelligence in Millets supply chain risk management Hemant Kumar	UNIFIED_2024_61 LM-BP Neural Network Model of Hydraulic Shock Absorbers in Varying Temperature Environment Chunrong Hua	UNIFIED_2024_25 An ultrasonic-based novel method for condition monitoring of lithium-ion batteries Lei Fu
12:00 PM to 12:15 PM	UNIFIED_2024_52 Condition Monitoring- An Emerging Predictive Maintenance Technique in Continuous Process Plants Parag K. Muley	UNIFIED_2024_49 Research on dynamic characteristics of direct-drive wind turbine main bearing based on digital twin Wentao Zhao	UNIFIED_2024_41 Research on adding fuzzy stage to permanent magnet motor based on synovial control Yuanzhen Wei
12:15 PM to 12:30 PM	UNIFIED_2024_53	UNIFIED_2024_66	UNIFIED_2024_54 Characterizing of the Electromechanical Transmissions in the FDM 3D Printing Process

	Design, analysis and development of an efficient thermal management system for electric vehicles Parag K. Muley	Speed Tracking and Dynamic Analysis of Condition Monitoring of Industrial Collaborative Robot Based on Vibration Signal Huanqing Han	Enables Condition Monitoring via Multi-information Fusion Xinfeng Zou
12:30 PM to 12:45 PM	UNIFIED_2024_28 Analysis of Reactor Pressure Vessel during Pressurized Thermal Shock Dinesh Loyal	UNIFIED_2024_90 ORS-based Bearing Fault Diagnosis for Marine Electric Propulsion Systems Chun Li	UNIFIED_2024_08 Bearing Fault Diagnosis and Generalization Error Analysis Based on Transfer Learning Tingting Deng
Lunch (1:00 PM to 2:00 PM)			
	OFFLINE SESSIONS		
Time (2:00 PM to 3:30 PM)	Session A3 Session Chair: Dr. Satish Sharma Track Owner: Dr. Naresh Raghuvanshi (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Siddharth Singh(6263744910) Pardhuman chahar(8963859013) Venue: NKN-2	Session B3 Session Chair: Prof. Ramin Karim, (Lulea university of Technology, Sweden) Track owner: Dr. Gulab Pamnani (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Puspendra Upadhyay(9929334868) Rahul Sharma(9358104640) Venue: Neeti Sabhagaar	Session C3 (Online) Session Chair: Dr. Kuldeep Singh (Associate Professor,MNIT Jaipur) Track owner: Dr. Nikhil Sharma (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Vishnu(9251762768) Suyesh Wankhede(9082810006) Venue: NKN-1
2:00 PM to 2:15 PM	UNIFIED_2024_112 Combined Effect of Charge Rate and Temperature on Battery Health of Electric Vehicles Namrata Mohanty	UNIFIED_2024_57 Financial Barriers to Electronic Commerce Adoption in SMEs Kartik Pareek	UNIFIED_2024_48 Optimisation of Distance between Sensor Locations in a Long Pipe Network for Condition Monitoring using Acoustic Wave Reflection Technique Buloere F Ekeu-wei
2:15 PM to 2:30 PM	UNIFIED_2024_36 Electric Radiators and Heat Decarbonisation: An Experimental Study on Energy Efficiency Ruhail Gulzar	UNIFIED_2024_97 A Parametric Approach Towards Vibration Level Prediction for a Fighter Aircraft Line Replaceable Units Santha J Panigrahi	UNIFIED_2024_56 A Comparative Study between Bayesian Filters and Autoencoder Networks for Bearing RUL Prediction Haobin Wen

2:30 PM to 2:45 PM	UNIFIED_2024_100 Condition Monitoring of Hydraulic Systems Using Multi-Output Classification Convolutional Neural Networks Pawan Kumar Kankar	UNIFIED_2024_124 Mars Rover: Autonomous Exploration and Terrain Analysis Soma Sekhar Bhimanapalli	UNIFIED_2024_63 Inverter Based Resource Complemented Control using Immune Response Analogy Isaac K Aidoo
2:45 PM to 3:00 PM	UNIFIED_2024_67 Fatigue Damage Assessment of FOWT Mooring Lines Using Sequence-to-Sequence Based Indirect Sensing Rohit Kumar	UNIFIED_2024_N_101 Gearbox Prognostics and Health Assessment Using ProgPy: An Open-Source Condition Monitoring and Diagnostics Tool Magnus Santos Nordeide	UNIFIED 2024_69 An Energy management strategy for Piezoelectric Energy Harvester for low-power applications Anshu Gaur
3:00 PM to 3:15 PM	UNIFIED_2024_81 Understanding the Role of Cyber Physical Technology in Supporting Supply Chain Flexibility: A Systematic Literature Review Angel Singh	UNIFIED_2024_79 (121) Weak analysis of HQC a quantum proof scheme Ajay Shivaji Rodge	UNIFIED_2024_86 Damage identification of steel box girder based on impact load and Wavelet Packet Permutation Entropy Yutao Zhou
High Tea (3.30 PM – 4:00 PM)			
Time (4:00 PM to 5:30 PM)	Session A4 Session Chair: Dr. Satyander Singh Chauhan (Assistant Professor, MNIT Jaipur) Track Owner: Dr. Naresh Raghuvanshi (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Siddharth Singh(6263744910) Pardhuman chahar(8963859013) Venue: NKN-1	Session B4 (ONLINE) Session Chair: Dr. Divesh Kumar (Associate Professor, MNIT Jaipur) Track owner: Dr. Gulab Pamnani (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Puspendra Upadhyay(9929334868) Rahul Sharma(9358104640) Venue: NKN-2	Session C4 (ONLINE) Session Chair: Dr. Ashish Tripathy (Assistant Professor, MNIT Jaipur) Track owner: Dr. Nikhil Sharma (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Vishnu(9251762768) Suyesh Wankhede(9082810006) Venue: Neeti Sabhaagar
4:00 PM to 4:15 PM	UNIFIED_2024_92 Vibration Trend Monitoring of Indigenous Wankel Rotary Engine Brijesh kumar, J Shah	UNIFIED_2024_72 An Improved Framework to Transition from TBM to CBM in the Maintenance of Freight Locomotives Mohamed MAA Ali Alaswed	UNIFIED 2024_71 Inter-organizational and multi-objective operational risk management: a case study of well control management for land drilling operation in Iraq Tore Markeset (Dr.Guicang Peng)

4:15 PM to 4:30 PM	UNIFIED_2024_74 A Review on Cable-Driven Soft Robotic Systems used for Surgical Applications Chetan Jalendra	UNIFIED_2024_87 Gearbox Anomaly Detection In Wind Turbines Using Classical Machine Learning Arvind Keprate	UNIFIED_2024_32 Statistical Modelling and Analytics of Shutdown in Waterflood System on a Deep-water Production Platform Offshore Nigeria Akorede O. Joledo
4:30 PM to 4:45 PM	UNIFIED_2024_113 Bi-LSTM-Based Model for Software Reliability Prediction in Multi-Sprint Agile based Software Shikha Dwivedi	UNIFIED_2024_62 Multi-Model Based Condition Monitoring Framework for the Health Assessment of the Tool Center Point and Joints of Industrial Collaborative Robots Samuel Ayankoso	UNIFIED_2024_80 Sequential hybrid solution to alleviate congestion utilizing distributed generations and FACTs devices in the power network Pawan Sharma
4:45 PM to 5:00 PM	UNIFIED_2024_N_104 Development of Human Cognition Inspired Digital Twins for Optimized Performance of Process Equipment Maneesh Singh	UNIFIED_2024_35 Emergency vehicles (ambulances) The importance of Condition maintenance in the Service Quality Hugo DN Raposo	UNIFIED 2024_126 The integration of Artificial Intelligence in the context of Industry 4.0. Aleksey Tashkinov
5:00 PM to 5:15 PM	UNIFIED_2024_93 Investigating the Influencing Factors for the Acceptance of Artificial Intelligence in the Manufacturing Industry using DEMATEL Technique Man Mohan Siddh	UNIFIED_2024_84 Wind Farm Optimization Along the Norwegian Coast: Comparing Multi-Rotor and Single-Rotor Turbines Johannes Aarstein	UNIFIED_2024_26 Life Cycle Investment and Sustainable Asset Management: Exploring the Potential of ISO 55001 in the Circular Economy Jose Edmundo de-Almeida-e-Pais
5:15 PM to 5:30 PM	UNIFIED_2024_77 (120) A survey on Hamming Quasi Cyclic (HQC) Ajay Shivaji Rodge	UNIFIED_2024_70 A Framework for Development of Industrial Metaverse in Maintenance RAVDEEP KOUR	UNIFIED_2024_91 Experimental investigation of vibrational characteristics of prosthetic feet Preeti Chauhan
7.30 PM- 10.00 PM	Dinner (Open in quadrangle)		

28th NOVEMBER 2024 (Thursday)**10.00- 11.00 AM : Keynote (Prof. Alok Verma and Prof. Faizal Khan/Prof. Carol)****High tea (11.00AM – 11:30AM)**

Time (11:30 AM to 1:00 PM)	Session A2 Session Chair: Dr. Sumit Sonkar (Associate Professor, MNIT Jaipur) Track Owner: Dr. Naresh Raghuvanshi (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Siddharth Singh(6263744910) Pardhuman chahar(8963859013) Venue: NKN-2	Session B2(Online) Session Chair: Dr. Priyanka Harjule (Assistant Professor, MNIT Jaipur) Track owner: Dr. Gulab Pamnani (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Puspendra Upadhyay(9929334868) Rahul Sharma(9358104640) Venue: Neeti Sabhagaar	Session C2 (Online) Session Chair: Prof. Arvind Keprate (Professor , Oslo Metropolitan University) Track owner: Dr. Nikhil Sharma (Assistant Professor, MNIT Jaipur) UNIFIED Rep: Vishnu(9251762768) Suyesh Wankhede(9082810006) Venue: NKN 1
11:15 AM to 11:30 AM	UNIFIED_2024_76 Improvement of FMECA Framework: A Case Study Anindya Bhattacharya	UNIFIED_2024_24 Optimal location selection based on Grey Wolf coupled Cuckoo algorithm Yuan Miao	UNIFIED_2024_7 Short-term Photovoltaic Power Prediction Based on Semi-lar Day Clustering and Combined SBOA- CNN-BiLSTM-Attention Model Li Youwei
11:30 AM to 11:45 AM	UNIFIED_2024_133 Integrating Automation and Orchestration in Security Incident Handling: A Review of SOAR Frameworks and Platforms Pragya Rathore	UNIFIED_2024_29 A rolling bearing fault diagnosis based on IBKA optimized VMD-SVM Zhenna Ma	UNIFIED_2024_17 Research on Wind Turbine Pitch Control Based on Whale Optimization Algorithm Jun Xia
11:45 AM to 12:00 PM	UNIFIED 2024_98 Application of Condition-Based Monitoring for Improvement of Diagnostic Coverage of Safety Mechanisms Pramit Nag	UNIFIED_2024_125 Enhancing Phishing Detection Sandeep Malipeddi	UNIFIED 2024_20 Research on permanent magnet synchronous motor control based on improved active disturbance rejection control Chuang Zhou

12:12.15 AM to 12:30 PM	UNIFIED 2024_99 Predictive Maintenance of Hydraulic systems using multi-task Transfer learning with multi- layer perceptron Pawan Kumar Kankar	UNIFIED_2024_31 Optimization design of active suspension system control of rover based on Gray Wolf algorithm Kai Wang	UNIFIED 2024_22 A Whale Optimization Algorithm Based Strategy to Govern DC Bias Lulu Liu
12:00 PM to 12:15 PM	UNIFIED_2024_12 Reliability Analysis of Complex System using Markov Process and Neural Network Algorithm Deepanshi Chauhan	UNIFIED_2024_23 Identifying key methodologies for modelling Interdependencies in Dependent Networks Paras Grag	UNIFIED_2024_96 Digital Governance RFP Analysis: BERT Model adoption for Document Classification Manisha Tiwari
12:30 PM Onwards	VALEDICTORY SESSION followed by LUNCH		