







10th International Conference on Engineering and Emerging Technologies (ICEET 2024)

27-28 December 2024 DUBAI / UAE

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CONFERENCE PROGRAM BOOKLET

IEEE Conference Record No: 65156



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27 December 2024

Time	ROOM A0 (Physical)
08.30-09.30	Arrival of Participants/Guests
09.30-10.00	Welcoming Speech by General Chair: Prof. Dr. Montasir Qasymeh, Abu Dhabi University, UAE Opening Speech by Rector/Dean: Superior University, Pakistan Montage/Promo Video, Souvenir Distribution, Group Photography Session
10.00-10.30	Plenary Session 1: Keynote Speaker
10.30-10.45	

	PHYSİCAL	VIRTUAL SESSIONS	
Time	ROOM A (Physical)	ROOM B (Physical)	ROOM C (Virtual)
10.45-11.45	Parallel Session 1A: Alternate Energy Systems, Smart Grids & Energy Management (4)	Parallel Session 1B: Mixed Topics (4)	Parallel Session 1C: Information and Network Security (4)
11.45-13.00	Parallel Session 2A: Artificial Intelligence (5)	Parallel Session 2B: Mixed Topics (4)	Parallel Session 2C: Alternate Energy Systems, Smart Grids & Energy Management (6)
13.0014.00	I	UNCH BREAK/PRAYER BREAL	K
14.00-15.30	Parallel Session 3A: Neural Networks, Deep Learning and Intelligent Systems, R & A, BME (5)	Parallel Session 3B: Antenna & Wave Propagation, Modern Communication Technology (5)	Parallel Session 3C: Biomedical Engineering & Systems (6)
15.30-15.45			

	PHYSICAL SESSION	VİRTUAL	SESSIONS
Time	ROOM A	ROOM B	ROOM C
	(Physical)	(Virtual)	(Virtual)
15.45-17.00	Parallel Session 4A: Alternate Energy Systems, Smart Grids & Energy Management (4)	Parallel Session 4B: Information and Network Security, Software Engineering (4)	Parallel Session 4C: Alternate Energy Systems, Smart Grids & Energy Management (5)

VIRTUAL SESSIONS					
Time	ROOM A (Virtual)	ROOM B (Virtual)	ROOM C (Virtual)		
17.15-18.30	Parallel Session 5A: AI, Neural Networks, Deep Learning and Intelligent Systems, R & A (6)	Parallel Session 5B: Education & technologies (E-Learning) (5)	Parallel Session 5C: Biomedical Engineering & Systems (5)		

28 December 2024

	VIRTUAL SESSIONS				
Time	ROOM A (Virtual)	ROOM B (Virtual)	ROOM C (Virtual)	ROOM D (Virtual)	
09.00-09.30	Plenary Session 2: Keynote Speaker				
09.30-11.00	Parallel Session 6A: AI, Neural Networks, Deep Learning and Intelligent Systems, R & A (7)	Parallel Session 6B: Software Engineering (7)	Parallel Session 6C: Mixed Topics (7)	Parallel Session 6D: Antenna & Wave Propagation, Modern Communication Technology (7)	
11.00-11.15		TEA B	REAK		
11.15-11.45	Plenary Session 3: Keynote Speaker				
11.45-13.15	Parallel Session 7A: AI, Neural Networks, Deep Learning and Intelligent Systems, R & A (7)	Parallel Session 7B: Artificial Intelligence (7)	Parallel Session 7C: Mixed Topics (7)	Parallel Session 7D: Antenna & Wave Propagation, Modern Communication Technology (7)	
13.15-13.45		LUNCH BREAK/	PRAYER BREAK		
13.45-14.45	Parallel Session 8A: Artificial Intelligence (5)	Parallel Session 8B: Information and Network Security (5)	Parallel Session 8C: Mixed Topics (5)	Parallel Session 8D: Signal and Image Processing techniques (3)	
14.45-15.15	Closing Session: Best Paper Announcement Closing Remarks by Conference Chairs Participants' Feedback Q/A Session				

Day 1: 27 December 2024

PLENARY SESSION 00

Session 00: Opening Session					
	Room A0				
	Welcoming Speech by General Chair: Prof. Dr. Montasir Qasymeh Abu Dhabi University, UAE				
09.30-10.00	Opening Speech by Rector/Dean: Superior University, Pakistan				
	Montage/Promo Video, Souvenir Distribution, Group Photography Session				

PLENARY SESSION 1

Plenary Session 1: Keynote Speaker				
Room A0				
10.00.10.20	Prof. Dr. Shehzad Ashraf	Title: 6G-Enabled Network in a Box		
10.00-10.30	Chaudhry	Security Oversights and Counter measures		
TEA BREAK				

PARALLEL SESSIONS 1

Parallel Session 1A: Alternate Energy Systems, Smart Grids & Energy Management Room A				
Time	Authors (Presenter)	ID	Title	
	Masoud Zare Shahabadi, Hajar Atrianfar, <mark>Hossein Askarian-</mark> Abyaneh	214	Distributed Event-based Secondary Control for Precise Reactive and Harmonic Power Sharing in Islanded AC Microgrids	
	Tae-Seok Kang, Hyun-Gyu Koh, Ho- Jin Yang, Min-Hyuk Kim, YoungGyu , Yeong-Jun Choi	229	Interleaved Reconfigurable-Bridge LLC Resonant Converter with Ultrawide Voltage Range	
10.45-11.45	Hyunsu Jeong, Nazmus Saqib, Dipto Biswas, Soo Kyun Kim, Joon-Min Gil	243	Regional Power Demand Forecasting Using BiLSTM and ConvBiLSTM Models for Sustainable Energy Management	
	Jung Heon Hyun, Hyun-Gyu Koh, Hee-Jeong Seon, Gwangsoo Kim, Jihyeok Lee, YoungGyu Jin, Yeong- Jun Choi	262	Calculation of the Proper Auxiliary Circuit Phase Number for Multiphase Stacked Interleaved Buck Converters	
BREAKFAST / LUNCH / DINNER/TEA BREAK				

Tea Break

Parallel Session 1B: Mixed Topics Room B				
Time	Authors (Presenter)	ID	Title	
	Jinkyun Cho, Seung-beom Lim, Je- Sang Woo, Eui Jin Kim	148	Improving Data Center Operational Reliability and Energy Efficiency through Hot-Standby based ITE Cooling System Redundancy	
10.45-11.45	Rei Watanabe, Satoshi Okada, Koki Watarai, Takuho Mitsunaga	175	Cloud SecNavigator: RAG Approach to Bridge Gaps and Strengthen Cloud Security Practices with RAGAS Assessment	
10.45-11.45	Zhongyuan Che, Chong peng, Chi Wang	202	Integrating Snake Optimizer and SVR for Motor Rotor Temperature Forecasting	
	Dr. Thirupathi Regula, Anshar Ali, Dr. Dhanasekar N	293	Tourism Enhancement through Hybrid Mobile Application with Web Scraping and Recommendation System Using KNN and MF	
BREAKFAST / LUNCH / DINNER/TEA BREAK				



Parallel Session 1C: Information and Network Security Room C				
Time	Authors (Presenter)	ID	Title	
	Jawad Ahmad	100	Secure Image Encryption Using Dynamic Block Segmentation and Adaptive Pixel Modification with Chaotic Masking	
10.45-11.45	Andriavelonera Anselme A, Rivosoaniaina Alain N, Prof. Mahatody Thomas, Prof. Manantsoa Victor	154	Viability Study Based On Saturation Resource In Data Centers	
	Andrei-Vlad Constantin	218	Blockchain Consensus Algorithm using Cellular Networks Location Services	
	Hélder Pereira, Pedro Oliveira, Paulo Matos	258	Architecture for Efficient Food Management and Waste Reduction	



Parallel Session 2A: Artificial Intelligence Room A				
Time	Authors (Presenter)	ID	Title	
	Mohammad Omar Qassem, Moutasim Billah El Ayoubi, Yazan Majdi Alasmi, Heba Ismail	190	Machine Learning-Driven Detection of Malicious URLs and Network Intrusions	
	Fatimah Alqahtani	221	Optimized Deep Learning Framework for Arabic Handwritten Character Recognition using Coati Optimization Algorithm	
11.45-13.00	Md Rafiul Hassan, Mohammad Mehedi Hassan, Mohammad Anwar Rahman	275	Comparative Analysis of LIME and Shape Analysis Techniques in Prostate Cancer MRI Interpretation	
	Amila Jeevan Wijayawardhana	308	Forecasting future tourism demand to popular tourist attractions to asses overtourism: A machine learning modeling approach	
	Dr. Thirupathi Regula, Dr Warda Al Hoqani, Sunitha Cheriyan, Dr. Sharmila K. Reddy, Dr Naveen Kumar, Ms. Shazia Tazeen, Mr. Kiran Kumar S. G.	327	Smart IoT-Based Solution for Emergency Assistance during Sandstorms and Landslides	
	BREAKFAST / LUNCH	/ DIN	NER/TEA BREAK	
Tea Break				

Parallel Session 2B: Mixed Topics Room B				
Time	Authors (Presenter)	ID	Title	
	Adil Karimov, Saddam Husain, Moldir Kassymbek, Mohammad Hashmi	219	Machine Learning Based Approach to Accurately Model and Optimize Microwave Filters	
	Abrar Galib Zaman, Dr. Huma Zia	269	Lightweight Cryptography For IoT Platforms: Enhancing Security In Embedded Devices	
11.45-13.00	Falk Pospischil, Yves Burkhardt	284	Advanced Modelling of Energy Losses in Railway Vehicles Considering Temperature Dependencies	
	Muhammad Umair Khan, Mohamed Abdi Jama	328	Evaluation of GHI from NASA MERRA-2 and ECMWF ERA5-Land Reanalysis Against In- Situ Observations in Al-Ain, UAE	



Parallel Session 2C: Alternate Energy Systems, Smart Grids & Energy Management Room C

Room C			
Time	Authors (Presenter)	ID	Title
11.45-13.00	Neethu K V, Jiju K, Indhu T R, Arun Gopi, Aby Joseph, Davidson C, Sherin John, Mahesh T	67	Implementation of Advanced Metering Infrastructure in the Indian context with an indigenous approach
	Hamid Gulzar, Dr. Saif Ur Rehman, Dr. Adnan Yousaf	136	Enhancing Power System Protection with Machine Learning: A Smart and Reliable Approach for Insulator Inspection
	Nikolay Zablodskiy, <mark>Orest Kovalchuk</mark> , Stanislav Kovalchuk, Iurii Nasieka	159	Numerical modeling and investigation of streamer breakdown in a coaxial plasma torch based on Townsend processes
	Priya S, Viji Bharathi, Jiju K, Dhanavath Shankar, Dr. Om Krishan Singh, Musham Hari Prasad	226	Development of Indigenous Protocol Testing Platform for Smart and Static Energy Meters Adhering Indian Standards
	Brzo Aziz Qadir, Modafar Ali	268	Optimizing DC-DC Buck-Boost Converters with a PID Controller: Harnessing the Power of Silicon Carbide Technology
	Hareeng Nkuebe, Tebello N.D. Mathaba	271	Optimal sizing of on-grid solar-battery system considering cost, reliability and emission



Parallel Session 3A: Neural Networks, Deep Learning and Intelligent Systems, R & A, BME

Room A

Time	Authors (Presenter)	ID	Title
14.00-15.30	J. Al-Ayoub, F. Marafie, D.Al-Hasan, K. Al-Ansari, S. E. Esmaeili, R. Kassem	157	PaintBot: Autonomous Robotic Solution for Safe and Efficient Wall Painting
	Muhammad Ali Iqbal, Jinwoong Kim, Inchul Han, Soo Kyun Kim	162	Attention-Driven Feature Fusion Integrating Swin Transformer and CNN Models for Improved Ocular Disease Classification
	Saleh I. Alzahrani	165	Decoding Contralateral Finger Movements from fNIRS Signals Using Phase Connectivity Features
	Sarah Alhasan, Zahra Poorshamsi, Loubna Nasser, Alyaziah Alzaabi, Mohammed Ghazal, Jawad Yousaf, Taimur Hassan	181	A Review of Machine Learning Methods for Screening Cardiac Abnormalities using Auscultation
	Farooq H. Dandal , Mohammed M. AL-Qahtani, Mohammed A. AL-Harbi, Ehab S. Alessa, Ibrahim Aljamaan, Gameel Saleh	232	Aerobic Athletes Tracking System Using Smart Glove for Physiological and Kinematic Monitoring



Parallel Session 3B: Antenna & Wave Propagation, Modern Communication Technology

Room	B
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Time	Authors (Presenter)	ID	Title
	Modafar Ati, Yaqoob Jamil, Brzo Aziz Qadir	37	Transforming the Future: An Innovative LiFi Framework to Elevate Sustainability and Security in UAE Smart Cities
	Santosh Kumar	75	A Verifiable Framework using Trusted Execution Environments for Privacy- Preserving Machine Learning
14.00-15.30	Ghazaleh Jafari, Parisa Mousivand, Zahra Nezafat, Reza Peymanfar, Vahid Mirkhan	185	Fabrication of the La0.9Sr0.1CrO3 perovskite nanoparticles as high-performance microwave absorbers
	Raiymbek Nurgali, Jawad Ahmad, Mohammad Hashmi	205	Parasitic Patch Antenna with Beam Switching for 5G Millimeter-Wave Frequencies
	Paul Emmanuel G. Empas	230	Optimized Low-Noise Amplifier with Switchable Carrier Aggregation Mode for LTE-Advanced and 5G Applications



Parallel Session 3C: Biomedical Engineering & Systems Room C			
Time	Authors (Presenter)	ID	Title
	Rahaf Alnuaimi, Moatsum Alawida, Maryam Almarzooqi, Dima Talal Alhalabi, Hamzah Ali Alamairch	91	Detecting Deepfakes in Healthcare: A Review and Proposed Solution
	Salik Mian, Manal Mian, Sarah Mian	163	Utilizing MRI Scans and Machine Learning to Enhance Depression Diagnosis
	Trung Dat Phan, Ly Xuan Truong Pham, Cong Toai Truong, Van Tu Duong, Huy Hung Nguyen	217	Adaptive Sliding Mode Control for a BlowerBased Breathing Simulator with Unknown and TimeVarying Airway Resistance and Compliance
14.00-15.30	Jawaher Alhammadi, Nabila Yasmeen, Nicholas Hallfors, Mei ElGindi, Jeremy Teo, Habiba Al Safar, Herbert Jelinek, Anna-Maria Pappa	222	Bioelectronic Monitoring of Monocyte- toMacrophage Differentiation
	Stanley Agudu, Jennifer Akaade, Kofi Adu-Labi	242	Holistic Fitness Tracking by Integrating Environmental Data Monitoring with Health Data
	Syeda Zainab Bukhari, Sadia Raja, Muhammad Usman Akram, Jahan Zeb, Taimur Hassan	254	Robust and Reliable Assessment of Preeclampsia using Statistical Machine Learning
	BREAKFAST / LUNCH	/ DIN	NER/TEA BREAK
Ten Break			

Parallel Session 4A: Alternate Energy Systems, Smart Grids & Energy Management Room A

200m 11			
Time	Authors (Presenter)	ID	Title
15.45-17.00	Reza Hassanian, Morris Riedel	297	Eulerian-DL Forecasting of Wind Turbulence for Wind Turbines: Enabling Smart Sustainable Energy
	Hossein Shayeghi, Iraj Faraji Davoudkhani, Nicu Bizon	301	Optimized Energy Management in Solar- Powered Parking Lot with Integrating Green Hydrogen Storage
	Susanta K. Das, Spenser Keys	316	Design Optimization of an Electric Motor for Improved Performance of a Battery-Powered Electric Vehicle
	Mohit Murarka, Ashu Verma, Dibakar Rakshit, Sukumar Mishra	332	Optimization of Voltage Windows for Lithium-Ion Cells and Vanadium Redox Flow Battery: An Experimental Investigation
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BREAKFAST / LUNCH / DINNER/TEA BREAK



Parallel Session 4B: Information and Network Security, Software Engineering Room B

	NOU.		
Time	Authors (Presenter)	ID	Title
15.45-17.00	Fatima Rashed Alzaabi, Abid Mehmood	Ш	Classifying Malicious Insider Threats Based On User Activity and Behavioral Profile Using Machine Learning
	Zimbini Faniso-Mnyaka , Edwin Magidimisha, Realeboga Dikole, Teboho Sekopa	274	Analysis of Ceilometer LiDAR(CL51) sensor Atmospheric Profile Images for Urban Environmental Monitoring over Pretoria, South Africa
	Kulsoom Abedi, Nazeeruddin Mohammad, Jawad Ahmed	361	Guarding the Gateways: CBP Cybersecurity Challenges and Strategies
	Muhammad Ilyas, Mustafa Akal, Qutaibah Althebyan	239	Maturity Model for Corporate Sector Based on Zero Trust Adoption



Parallel Session 4C: Alternate Energy Systems, Smart Grids & Energy Management Room C

Time	Authors (Presenter)	ID	Title
15.45-17.00	Adnan Yousaf, Qaiser Nadeem, Jannat Bakht, Manzoor Ellahi, Shafaqut Ali	283	An Overview on Switching to Renewable Energy Resources in Pakistan for Sustainable Future: Its Challenges and Policy Recommendations
	Abdoulaye kebe, Papa Demba Ba, Ibrahima Gueye, Moustapha Diop,	296	Comparative Analysis Of The Performance Of Vector And Neural Controls For Industrial Applications: Case Of A Flour Mill
	Kamran Dawood, Furkan Gezer, Semih tursun	312	Analyzing the Weight Differences of H0 and M4 Core Materials in Dry-Type Transformers
	Syed Mustafa Ali, Amjad Khan, Kaleem Ullah, Tanveer Hussain, Muhammad Osama Aziz, Abdul Basit	334	Enhanced Load Frequency Control Using PSOTuned PID Controller in Two-Area Interconnected Power Systems
	Hamid Wadood, Muhammad Haris, Aqib Hassan, Muhammad Osama Malik, Hamza Yousaf, Kaleem Ullah	356	Deep Learning Applications for Wind Energy Forecasting in Smart Grids



Parallel Session 5A: AI, Neural Networks, Deep Learning and Intelligent Systems, R & A Room A

Time	Authors (Presenter)	ID	Title
17.15-18.30	Omer Nasih Ismael ALHURMUZI, Timur Inan	22	Fatigue Detection of Drivers Using Image Processing and Artificial Intelligence Techniques
	Andreas Hubert, Konrad Doll, Bernhard Sick	44	Influence of Background Color on 6D Pose Tracking Accuracy
	Antoinne Matthew G. Albao, Marcus Cairo N. De Guzman, Daryl Nicole C. Jayme, Criselle J. Centeno, Marilou B. Mangrobang, Vivien A. Agustin	128	Securing Local E-Commerce Businesses Against Cyber Attacks Using Deep Learning Algorithms
17.12 10.30	RAJAONARIMANANA Laingo, ANDRIAMANOHISOA Hery	160	Emotion Analysis Using Multimodal Data
	Joseph Roger Arhin, Xiaoling Zhang, Ernest Owusu Ansah, Eric George Ewusi, Kenneth Coker, Francis Sam	171	BiPath-CNet: Optimizing R-Peak Detection Leveraging Bi-Pathway Cardio Network with Spectral Temporal Attention Mechanism
	Yi-Cheng Ho, Mao-Hsu Yen, Hoang-Yang Lu	<u>172</u>	A Single-Weight Neural Network for MIMO Signal Detection: Algorithm and Implementation



Parallel Session 5B: Education & technologies (E-Learning) Room B			
Time	Authors (Presenter)	ID	Title
	Wei-Zhi Yang, Jing-Ming Luo, Rui- Jie Xiao, Chowwalit Chookhampaeng, Ding-Nan Deng, Jiraporn Chano, Qing-Hu Zhong, Hai- Ning Zhang	143	A Hybrid Framework for Digital Experimental Reports: Integrating Chaoxing Platform in Experimental Education
	Fabio Fraga Paulo, Pedro Filipe Oliveira, Paulo Matos	147	Enhancing video projector connectivity and management with a low-cost solution
17.15-18.30	Telmo Sampaio, Pedro Filipe Oliveira, Paulo Matos	210	Development of a chatbot to support an university institutional website
	Daniel Mawuli Seworye, Kofi Adu- Lab	251	Enhanced Vision Aid For Low Vision Tertiary Students
	Mikhail Bien Acervo, Kenyon Khimo S. Cobre, Karryle Joy T. Gabriel, Criselle J. Centeno, Ariel Antwaun Rolando C. Sison, Jethro L. San Diego	324	BRAILLAI: A Two Way Web-Based Braille Translation Using Convolutional Neural Network with Gamified E-Learning System Applied For Moderately Visually Impaired and Sighted Individuals
Signed Individuals Tea Break			

Parallel Session 5C: Biomedical Engineering & Systems Room C				
Time	Authors (Presenter)	ID	Title	
	Fawzayah Alalaiwi, Areej Alyousef, Munerah Alsaadi, Sarah Alfares, Maram Almansour, Lola El Sahmarany	264	Development of Low Cost "Epi-seizure" Device for the Prediction and Detection of Tonic-Clonic Seizures	
	Zainab A. Al Jomayan, Kawther M. Altalaq, Zahra H. Alhariri, Noor J. Alaseeri, Saleh I. Alzahrani, Bushra M. Melhem	280	Comparative Analysis of Feature Selection Techniques for Eye Movement Classification	
17.15-18.30	Maryum Zulfiqar, Adnan Yousaf, Iram Nasir, Ramal Zahid, Shumaila Javed, Muhammad Aamir	282	Development of Sensor-Embedded Real-time Posture Monitoring Shirt: Enhancing the Awarness for Healthy Posture	
	Shooq Alsabea, Ahd Al Jumah, Ruqayah Alsayegh, Heba Al Ramadhan, Saleh Alzahrani, <mark>Maha Almona Ali</mark> , Hakim Ghazzai	329	Migraine Classification from EEG Signals Using ML Algorithms	
	Sangavi G, <mark>Kajanan Thanfarajah</mark> , Methiny S, Wishalya Tissera, Karthiga Rajendran	346	Decoding Diabetes: Unconventional Indicators for Diabetic Diagnosis	
Karthiga Rajendran Tea Break				

Day 2: 28 December 2024

PLENARY SESSION 2

Plenary Session 2: Keynote Speaker			
Room A			
		Title: Substitution Boxes for Image	
09.00-09.30	Dr. Jawad Ahmad	Encryption Applications in Highly Auto-	
		Correlated Data	

PARALLEL SESSIONS 6

Parallel So	Parallel Session 6A: AI, Neural Networks, Deep Learning and Intelligent Systems, R				
	& A Room A				
Time	Authors (Presenter)	ID	Title		
	Huber Nieto-Chaupis	197	Hamiltonian-based Quantum Paths Guided by Engineered Perceptron		
	Renhong Jin, Xin Yan	215	Graph Neural Network Based on Spectral Parameter Estimation for Mobile Networks		
	Pengfei Li, Muaz Al Radi, Xueting Huang, Said Boumaraf, Yuhang Shen, Fusen Guo, Khalid Yousef Al Awadhi, Jorge Dias, Sajid Javed, Hamad Karki, Taimur Hassan, Naoufel Werghi	237	ES-ATF: Early Smoke Detection based on Attention-aggregated Temporal Feature Extraction		
09.30-11.00	Huber Nieto-Chaupis	260	Bayesian Synapse Driven by Quantum Hamiltonian and Electrical Interactions		
	Mohammad Belal, 1Abdelfatah Ahmed, 1Divya Velayudhan, Taimur Hassan, Ernesto Damiani, Naoufel Werghi	263	Addressing Class Imbalance in X-ray Threat Detection with Self-Supervised Balanced DINO		
	Rahmat Ullah, Ikram Asghar, Hassan Malik, Gareth Evans, Jawad Ahmad, Dorothy Anne Roberts	288	Enhancing Forensic Audio Transcription with Neural Network-Based Speaker Diarization and Gender Classification		
	Raji C.G, Vinod Chandra S.S	294	Deep Learning-Based Survival Prediction in Pediatric Kidney Transplantation: A Comprehensive Model for Improved PostTransplant Outcomes		
	BREAKFAST / LUNCH	/ DIN	NER/TEA BREAK		



Parallel Session 6B: Software Engineering Room B				
Time	Authors (Presenter)	ID	Title	
	Mohamed EL-MOUSSAOUI, Mohamed HANINE, Ali KARTIT, Tarik AGOUTI	27	ARLClustering: R package for community detectionbased association rules learning	
	Brad Knowles, Abdurahim Essayah, Ahmed Abuhatira	245	Optimising Sensor locations and Enhancing preventive maintenance in steel trusses using Finite Element Analysis	
	Andre Oliveira, Paulo Matos, Pedro Filipe Oliveira	265	Sahub - Stackoverflow and Comments integrations	
09.30-11.00	Manuel Patr´ıcio, Mario Sousa, <mark>Paulo Matos</mark> , Pedro Filipe Oliveira	272	Unstructuring the sequentiality of commits into a semantic network with higher informational and functional quality	
	Irfan Ahmed, Fatima Munir, Fouzia Nafees, Jabar Mahmood, Shehzad Ashraf Chaudhry, Maryam Javaid, Khadija Batool	305	The Influence of Kanban Agile Methodology on Software Project Management: A Survey Method	
	Irfan Ahmed, Sadia Naseer, Umm - e - Habiba, Jabar Mahmood, Shehzad Ashraf Chaudhry, Khadija Batool	367	Formal Model of ATM Based on Object Constraint Language (OCL)	
	Ravikumar Vallepu	193	Tackling Challenges in Life Sciences Master Data Management through Effective Machine Learning Implementation	
BREAKFAST / LUNCH / DINNER/TEA BREAK				



Parallel Session 6C: Mixed Topics Room C				
Time	Authors (Presenter)	ID	Title	
	Dima Alhalabi, Shahd Alnakhlani, Bara' Fteiha, Huma Zia	9	Enhancing Smart Home Automation: Secure AC Control and Environmental Monitoring with MQTT	
	Tomonori Kouya	16	Performance evaluation of accelerated real and complex multiple-precision sparse matrix—vector	
	Rene Lehmann, Bodo Vogt	73	Robustness of the compositional data approach in bipolar psychometric Likert scales big bimodal data analysis	
09.30-11.00	Hiroshi Ito, Hideki Ohno, Hikaru Kitano, Shuichi Matsumoto	169	Private 5G MIMO for Cable TV IP Broadcasting	
	Kenneth Coker, Chuyuan Zheng, Joseph Roger Arhin, Kwame Opuni- Boachie Obour Agyekum, Wei Li Zhang,	170	Manipulation of Polaritonic Interferometer in TwoDimensional Hybrid Organic-Inorganic Perovskite Microcavity	
	Huber Nieto-Chaupis	195	Global Inflation Data Modeled by Commutative and Non-Commutative Algebra	
	Kahina Amara, Mohamed Amine Guerroudji, Oussama Kerdjidj, Nadia Zenati, Shadi Atalla	74	Integrating AI and Semi-Immersive AR Technology for Brain Tumor Diagnosis	



Parallel Session 6D: Antenna & Wave Propagation, Modern Communication Technology

T.	
Room	I I I

Time	Authors (Presenter)	ID	Title
09.30-11.00	Masike Malatji	35	A strategic overview of 5G/6G networks: Implications for 6G security
	Samra Arshad, Saif Ur Rehman, Muhammad Ibrar, Manzoor Ellahi	97	Advancing Wearables: Dual-Band Antenna Design with High Permittivity Miniaturization using Natural Substrate
	Mustafa Shakir, Adeel Arshad, Muhammad Owais Tariq, Umaiz Sadiq, Usman Shabbir	142	Development of IoT based Smart System and Data Acquisition for Patient Monitoring
	Sunnam Venkata Srikanth, R Harin, M Prasad, C Murali Krishna	155	India's V2X Future: C-V2X vs. DSRC – A Comparative Study
	Huber Nieto-Chaupis	196	Light Quantization with Classical Fields in Strong Laser
	Jawad Ahmad, Mohammad Hashmi	200	Mutual Coupling Mitigation through Parasitic Structure in a Dual-Band Millimeter-Wave Flexible MIMO Antenna
	Shaista Tarannum, Usha S M	212	Resource Optimization in Smart Cities: The Role of LoRaWAN Sensor Networks and Advanced Data Aggregation Techniques



PLENARY SESSION 3

Plenary Session 3: Keynote Speaker				
Room A				
11.00-11.30	Prof. Ts. Dr. Mardeni Bin	Title: Path Loss Models of 5G mmWave		
Roslee, SMIEEE Communication System				
TEA BREAK				

PARALLEL SESSIONS 7

Parallel Session 7A: AI, Neural Networks, Deep Learning and Intelligent Systems, R & A Room A Time ID Title **Authors** (Presenter) Nhut Thang Le, Minh Tri Nguyen, Recursive Least Squares Algorithm for Online Cong Toai Truong, Van Tu Duong, 322 Parameter Identification of DC Motor: Theory Huy Hung Nguyen and Practice Sabaskaran Developing Accurate Sri Lankan Sign Ratnasingam. Sakajarasa, Dilaxshan Language To Tamil Vocal And American Sign Didula 323 Chamara, Aruna Ishara Gamage Language Translation MUS490: Advanced Feature Selection and Rafsan Uddin Beg Rizan 342 Unsupervised Clustering for Music Categorization Rafsan Uddin Beg Rizan 343 Evaluating 3-D Features for Model Matching 11.45-13.15 Rafsan Uddin Beg Rizan 344 **Evaluating Object Tracking Algorithms** Muhammad Haris, Mansoor Iqbal, Muhammad Osama Malik, Syed Navigating Adverse Weather: An Exploration 357 Ahmad Saleem Bokhari, of YOLOv8's Object Detection in Fog Alahmari, Farooq Azam Muhammad Fahad Munir, Predicting Air Quality in Pakistan with a Focus Muhammad Salman Qaman, Athar on Smog Formation: A Machine Learning Waseem, Ubaid Umar, Mardeni Bin Approach Roslee, Ahmed Saleem BREAKFAST / LUNCH / DINNER/TEA BREAK



Parallel Session 7B: Artificial Intelligence Room B					
Time	Authors (Presenter)	ID	Title		
	Bôa Djavph Yoganguina, Camara Mamadou Samba	79	Predictive Monitoring of Business Processes: A Case Study Using a Cumulative Fact Table Model		
	Zusheng Tan, Xinyi Zhong, Billy Chiu	174	Multimodal Paper Summarization with Hierarchical Fusion		
	Anastasios Manos, Despina Elisabeth Filippidou, Nikolaos Pavlidis, Georgios Karanasios, Georgios Vachtanidis, Ioannis Mallidis, Orestis Tsolakis, Georgia Ayfantopoulou	192	Dynamic Demand Forecasting with AI: Maximizing Supply Chain Value		
11.45-13.15	Huber Nieto-Chaupis	194	Artificial Derivation of Schrodinger Equation "Driven by Artificial Neural Networks		
	Dorababu Nadella	199	Securing Data at Rest: Using ML-Driven Personally Identifiable Information(PII) Detection and Privacy-Preserving Techniques		
	George de Vera Jr., Filmer Ivan L. Romero, Pia Marie P. Serrano, Criselle J. Centeno, Joseph Darwin C. Co, Ariel Antwaun Rolando C. Sison	213	Audcare: Advanced Care for Children with Autism Spectrum Disorder through A Mobile Application for Predicting and Managing Meltdowns Using CNN-LSTM		
	Anastasios Manos, Despina Elisabeth Filippidou, Nikolaos Pavlidis, Georgios Karanasios, Georgios Vachtanidis, Arianna D'Ulizia, Alessia D'Andrea	224	Knowledge Graphs and Machine Learning in Fake News and Disinformation Detection		
	BREAKFAST / LUNCH / DINNER/TEA BREAK				



Parallel Session 7C: Mixed Topics Room C				
Time	Authors (Presenter)	ID	Title	
	Hélder Pereira, Paulo Matos	261	Recreate immersive scenarios for practicing sports in gyms - User Application	
	Huber Nieto-Chaupis	287	Energies from Quantization of Harmonic Oscillator Derived of RC-Circuit	
	Kamran Dawood, Samet Kiliç, Semih Turusn	304	Evaluating Key Performance Parameters of Hermetically Sealed Oil Transformers: A Study on Load Losses, No-Load Losses, and Leakage Impedance	
11.45-13.15	Carlos R. Cunha, Andre Moreira, Joana M.S.R. Fernandes	339	An Architecture for Monitoring Elderly Using Digital Image Processing and Artificial Intelligence	
	Hamad Al Marzooqi, Mohammad Abdulrahman, Hamad Alramsi, Abdulla Hassan, Muhammad Fahad Zia	349	Powering the Future of Urban Air Mobility: Electrical Design and Systems in eVTOL Vehicles	
	Roshan Kumar, Muhammad Osama Aziz, Ramesh Kumar Ayyasamy, Syed Mustafa Ali, Amjad Khan, Daniyal Shaker	359	Predicting Photovoltaic Power Generation in Pakistan Using Machine Learning Algorithms	
	Divya Velayudhan, Muhammad Shafay, Sajid Gul Khawaja, Naoufel Werghi, Taimur Hassan	182	Semi-supervised Segmentation-driven Classification Pipeline for Grading Cassava Leaf Diseases	
	BREAKFAST / LUNCH / DINNER/TEA BREAK			



Parallel Session 7D: Antenna & Wave Propagation, Modern Communication Technology

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Room	I I I

Time	Authors (Presenter)	ID	Title
	Hongye Yuan, Xin Yan, Chunlin Li	201	A Semantic-Driven Data Generative Traffic Modeling Method for Digital Twin Networks
11.45-13.15	Lingzhuo Tu, Xin Yan	211	Multi-modal inter-domain routing based on multi-agent reinforcement learning on heterogeneous networks
	Huinan Zhang, Xin Yan	227	Distributed consensus computing problem over heterogeneous opportunistic networ
	Sayhia TIDJAN	277	An Efficient Predictive Spectrum Allocation Algorithm for Multi-User Cognitive Radio IoT Devices within GSM900 Band
	Ragad M Tawafak, Ghaliya Alfarsi, Abir AlSideiri, Sohail Malik Iqbal, Roy Mathew	336	Social Computing Interactions and Fusion AI Development For Teaching and Entertainment
	Ubaid Umar, Athar Waseem, Aqdas Naveed, Fahad Munir, Mardeni Bin Roslee, Sara Ayub	362	Active User Detection in Massive MIMO Systems Using Compressed Sensing
	Aditya Patel	383	Injectable Applications: Enhancing Privacy and Security in Web Interactions through Priv.ly



Parallel Session 8A: Artificial Intelligence Room A				
Time	Authors (Presenter)	ID	Title	
	Rugashan Jevarajah, Kishanthan Mahinthan, Piriyanthan Mahadeva, Dr.Sanika Wijayasekara, MS.Karthiga Rajendran	228	Smart Training: Unleashing Your Potential with a Personal Intelligent Trainer	
	Muhamad Azam, Rashid Ali, Ranya Muqaddas, Muhammad Ashraf, Ammara Zahoor	303	Predictive Modelling of Diabetes Using Ensemble Classifiers: Findings from a Large and Integrated Data Set	
13.45-14.45	Raj Kashikar	317	Reinforcement Learning-Enhanced Graph Neural Networks for Multi-Scale, Richly Labeled Networks in Interconnected Systems	
	Hector Rafael Morano-Okuno, Guillermo Sandoval-Benitez	319	Exploring Artificial Intelligence to Assist Kinematics Analysis of Rigid Bodies	
	Sunitha Cheriyan, Sudha Sakthivel, Thirupathi Regula, Kiran Kumar S. G., Said Al Riyami	338	Posture Monitoring and Classification for Health Care of Bedridden Patients Using IoT and AI Algorithms	
	BREAKFAST / LUNCH	/ DIN	NER/TEA BREAK	
Tea Break				

Parallel Session 8B: Information and Network Security Room B			
Time	Authors (Presenter)	ID	Title
	Anant Wairagade	278	Enhancing Behavioral Analytics with Zero Trust in Cloud: A Comparative Analysis
13.45-14.45	Sanjeev Kumar, Satyanarayana Raju	279	Enhancing Threat Detection and Response through Cloud-Native Security Solutions
	Mujeeb Ur Rehman, Garima, Nada Alasbali, Ali Jwaid	315	Ensemble Machine Learning-Based Intrusion Detection System for Securing the Internet of Things
	Aqib Hassan, Vengas Memon, Farhan Bashir Shaikh, Saad Alahmari, Mansoor Iqbal, Farooq Azam	360	Evaluating Datagram Congestion Control Protocol (DCCP) for Real-Time Applications: A Comparative Study with TCP in Multi-Node Networks
	Bara' Fteiha, Hadeel Al-Rifa'I, Zaina Ajmal, Manal Jaffarsadiq, Huma Zia	318	Enhancing Cryptographic Security in RTOS: Addressing Vulnerabilities in Embedded Systems

BREAKFAST / LUNCH / DINNER/TEA BREAK



Parallel Session 8C: Mixed Topics Room C				
Time	Authors (Presenter)	ID	Title	
13.45-14.45	Khalid Munir, Nadia Khan, Mansoor Iqbal, Nasser Shebka, Saad Alahmari, Daniyal Shaker	368	Scaling Unicyclic Graph Analysis: Automated Generation, Augmentation, and Machine LearningDriven Prediction	
	Zahid Ullah, Giambattista Gruosso, Muhammad Osama Aziz, Alda Scacciante	379	Impact of Window Glazing and Lighting Controls on Energy Performance Analysis of Public Buildings: A Case Study	
	Enas Elshebli, Ferenc Erdős	236	Optimizing Video Resolution for Machine Learning-Based Traffic Monitoring Systems: A Performance Analysis	
	José Antonio Martínez Díaz, Damián Emilio Gibaja Romero, José Luis Martínez Flores, Juan José Reyes Salgado	204	Coordination strategies for vacating a parking lot	
	Abdullah Al Ghazali, Hadeel Al- Rifa'i, Mohamed Jama, Mohammed Ghazal	299	AI-Powered Indian Myna Trap	
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Parallel Session 8D: Signal and Image Processing techniques Room D				
Time	Authors (Presenter)	ID	Title	
13.45-14.45	Jayesh V. Hire, Vaidehi Gawande, Lalit Kumar, Prof. Prasanta K Panigrahi	134	A Novel Two-Step Hybrid Quantum Watermarking Technique	
	Peter Vestenický, Eduard Kolla	325	Design of Signal Conditioner for Sensor Equipment of Human Body Surrogate for Forensic Crash Testing	
	Rafsan Uddin Beg Rizan	345	Automatic Parsing and Extraction of Structured Data from Fax Images	
BREAKFAST / LUNCH / DINNER/TEA BREAK Too Brook				

CLOSING SESSION

Session 00: Closing Session – Closing Remarks by Conference Chairs Room A Best Paper Announcement Closing Remarks by Conference Chairs Participant Feedback We value your insights and would love to hear about your experience. Please share your feedback on the sessions, speakers, organization, and overall event. Your input is essential in helping us improve future conferences! Q/A Session Thank you very much for your contributions.