

# **Conference Program ICMI-2024**

# **3rd International Conference on Computing and Machine Intelligence**

Central Michigan University, USA April 13-14, 2024

www.icmiconf.com

info@icmiconf.com

# **Program Summary**

# **In-Person Sessions**

All timing follows Eastern Daylight Time, (UTC-4)

Day-1 Venue: Courtyard Hotel Saturday, April 13, 2024

	Venue Room: Alpha	Venue Room: Gamma
07:00 - 17:00	Registration at Alpha room	
07:00 - 08:00	Breakfast at Alpha room	
08:00 - 08:05	Conference Opening at Alpha room	
08:05 - 08:50	Keynote: Prof. Khalid Elgazzar	
08:50 - 09:40	Women in Computing and Education	
09:40 - 10:00	Coffee Break at Alpha room	
10:00 - 10:30	Keynote: Dr. Rasha Gargrees	In Derson Technical Cossian 2
10:30 - 12:00	In-Person Technical Session – 1	In-Person Technical Session – 2
12:00 - 13:00	Lunch at Alpha room	Lunch at Gamma room
13:00 - 13:30	Keynote: Dr. Zag ElSayed	In-Person Technical Session – 4
13:30 - 14:50	In-Person Technical Session – 3	IN-Person recrimical session – 4
14:50 - 15:00	Coffee Break at Alpha room	
15:00 - 17:00	Keynote: Dr. Fahmi Khalifa	In-Person Technical Session – 5
	In-Person Technical Session – 6	
19:00 - 21:00	Dinner at Wood Shop Social Restaurant	

### DAY-2 Venue: Courtyard Hotel Sunday, April 14, 2024

	Venue: Room Alpha	Venue: Room Gamma
07:00 - 17:00	Registration at Alpha room	
07:00 - 08:00	Breakfast at Alpha room	
08:00 - 08:50	Keynote: Prof. Alexander Jesser	
08:50 - 09:30	In-Person Technical Session – 7	In-Person Technical Session – 9
09:30 - 10:10	In-Person Technical Session – 8	

10:10 - 10:30	Coffee Break at Alpha room	
10:30 - 11:00	Keynote: Dr. Linxi Zhang	In-Person Technical Session – 11
11:00 - 12:20	In-Person Technical Session – 10	
12:20 - 13:00	Lunch at Alpha room	Lunch at Gamma room
13:00 - 13:10	Closing at Alpha room	

# **Online Sessions**

All timing follows Eastern Daylight Time, (UTC-4)

# DAY-1: Saturday, April 13, 2024

08:05 - 08:50	Keynote: Dr. Mohamed Elhoseiny	
	<b><u>Google Meet Link</u></b> For online keynote speeches and sessions below	Google Meet Link For sessions given below
09:00 - 10:30	Online Technical Session – 1	Online Technical Session – 2
10:30 - 12:00	Online Technical Session – 3	Online Technical Session – 4
12:00 - 13:00	Lunch	
13:00 - 15:00	Online Technical Session – 5	Online Technical Session – 6
15:00 - 17:00	Online Technical Session – 7	Online Technical Session – 8

# DAY-2: Sunday, April 14, 2024

08:05 - 08:50	Keynote: Mr. Lakshmanan Sethu	
09:00 - 10:30	Online Technical Session – 9	Online Technical Session – 10
10:30 - 12:00	Online Technical Session – 11	Online Technical Session – 12
12:00 - 13:00	Lunch	
13:00 - 15:00	Online Technical Session – 13	Online Technical Session – 14
15:00 - 17:00	Online Technical Session – 15	Online Technical Session – 16

## Program Details In-Person Sessions DAY-1: Saturday, April 13, 2024

	In-Person Technical Session-1 Time: 10:30 - 12:00 Session Chair: Rasha Gargees	Day-1 April 13
Paper ID	Authors / Title	
58	Sethu Mettukulam Jagadeesan; Jordan Leh; Jonathan Gregory; Jesse Eickholt; Daniel Zielinski Evaluating the Effectiveness of a Pipeline to Support Surveillance of Unintended Passage	
85	Stephane Maillard; Mohammad Safayet Khan; Alexander Cramer; Ebru Karanci Sancar Wildfire and Smoke Detection using YOLO-NAS	
98	<b>Rasha Gargees</b> Leveraging Federated Learning for Weather Classification in the Era of Smart	
191	<b>Rasha Gargees</b> Improving Human Activity Recognition through Multisensor Data Fusion Techniques in Wireless Sensor Network	(S
	In-Person Technical Session-2 Time: 10:00 - 12:00 Session Chair: Nelly Elsayed	Day-1 April 13
24	<b>Geoffrey A Solano</b> A Covid-19 Epidemiological Analysis and Forecasting Dashboard for Hospitals using Time-Series Analysis and Deep Learning	
43	<b>Zhaodong Zhou; Jun Chen</b> Modeling Driver Lane Change Behavior Using Inverse Reinforcement Learning	
55	Mingkang Wu; Umer Siddique; Abhinav Sinha; Yongcan Cao Offline Reinforcement Learning with Failure Under Sparse Reward Environments	
68	Saroja Kanchi; Uma Ramabadran; Smaran Rao Particle Size Analysis using Deep Learning	
94	Patrick Seebold; Murali Kaye; Sangyeon; Chang S Nam Explainable Al-based Shapley Additive Explanations for Remaining Useful Life Prediction using NASA Turbofan Dataset	Engine
99	Joshua P Johnson Evaluating Large Language Model Understanding of Due Process	
	In-Person Technical Session - 3 Time: 13:30 - 14:50 Session Chair: Zag Elsayed	Day-1 April 13
122	<b>Nelly Elsayed; Zag ElSayed; Murat Ozer</b> CautionSuicide: A Deep Learning Based Approach for Detecting Suicidal Ideation in Real Time Chatbot Convers	sation
138	Jayden Liu; William C Jiang Optimization of Aquaponics System Efficiency Based on Artificial Intelligence Approach	
165	Jaradat, Shadi; Alhadidi, Taqwa ; Ashqar, Huthaifa ; Hossain, Ahmed; Elhenawy, Mohammed M Exploring Traffic Crash Narratives in Jordan Using Text Mining Analytics	

208	Jaradat, Shadi; Nayak, Richi; Elhenawy, Mohammed M Explainable Language Models For The Identification of Factors Influencing Crash Severity Levels In Imbalanced	Dataset
	In-Person Technical Session - 4 Time: 13:00 - 14:50 Session Chair: Ahmed Ammar	Day-1 April 13
178	Md. Rahatul; Keiichi Horio Identification of human activity by utilizing YOLOv5s approaches	
189	Md Shopon; Fariha Iffath; Katie Ovens; Marina Gavrilova A Deep Learning Approach for Semantic Similarity Prediction between Question Pairs using Siamese Network a Embedding Techniques	and Word
197	Andrew L Zhou A Unique Block-Based 3D U-Net Deep Learning Model for Brain Metastasis MRI Image Segmentation and Class	sification
118	Eddie Zhang; Evan R Zhang Development of A Multimodal Deep Feature Fusion with Ensemble Learning Architecture for Real-Time Gas Lea	ak Detection
211	Arpita Sarker Enhancing Decentralized Federated Learning with User Feedback Loops: A Novel Approach for Personalized ar Learning in IoT Environments	nd Adaptive
	In-Person Technical Sessional-5 Time: 15:00 - 17:00 Session Chair: Ezazul Haque Sabuz	Day-1 April 13
62	Noaman Mehmood; Kenneth Barner Augmentation, Mixing, and Consistency Regularization for Domain Generalization	
95	Victor A Adewopo; Nelly Elsayed; Zag ElSayed; Murat Ozer; Constantinos L. Zekios; Magdy Bayoumi Big Data and Deep Learning in Smart Cities: A Comprehensive Dataset for AI-Driven Traffic Accident Detection Computer Vision Systems	and
151	Sk Aziz Ali; Mohammad Sadil Khan; Didier Stricker BRep Boundary and Junction Detection for CAD Reverse Engineering	
181	Selvia Nafaa , Karim Ashour, Karim Ashour, Hafsa Essam , Doaa Emad, Mohammed Elhenawy, Huthaifa and Taqwa I. Alhadidi Automated Pavement Cracks Detection and Classification Using Deep Learning	I. Ashqar,
201	Selvia Nafaa , Karim Ashour, Karim Ashour, Hafsa Essam , Doaa Emad, Mohammed Elhenawy, Huthaifa and Taqwa I. Alhadidi Advancing Roadway Sign Detection with YOLO Models and Transfer Learning	I. Ashqar,
212	Syed Amir Hamza Advancing Industry 4.0 with Real-Time Machine Vision Integration in Cyber-Physical Systems	
	In-Person Technical Sessional-6 Time: 15:00 - 17:00 Session Chair: Fahmi Khalifa	Day-1 April 13
40	Ali S Irshayyid; Jun Chen Highway Merging Control Using Multi-Agent Reinforcement Learning	
130	Sunkanmi Oluwadare; Zag ElSayed; Kemi Akanbi; Ebubechukwu Edokwe A Cost-Effective, Smart and Secure Integrated IoT System	
141	Sunkanmi Oluwadare; Zag ElSayed; Oluwaseun Adekoya A Brief Review of Unsupervised Learning Algorithms for Zero-Day Attacks in Intrusion Detection Systems	
229	Jinho Hahn; Salma Abdelgawad; Boyoung Kim; Chanseok Jeong Convolutional Neural Network for Detection of Fluid-Filled Inclusions in Solids from Measured Elastodynamic Re	esponses

248	Mirza E Neebraz; Ammar Altaweel; James R Morrison Petri Net Models for the Performance and Design of Persistent Drone Light Shows: An Abridgment	
276	Ammar Altaweel; Mirza E Neebraz; James R Morrison Petri Nets and Linear Program for Cyclic Schedules in UAV and Charging Station Systems: An Example	
	DAY-2: Sunday, April 14, 2024	
	In-Person Technical Sessional-7 Time: 08:50 - 09:30 Session Chair: Fahmi Khalifa	Day-2 April 14
63	Emmanuel Kojo Gyamfi; Zag ElSayed; Jess N Kropczynski; Mustapha Awinsongya Yakubu; Nelly Elsaye Agricultural 4.0 Leveraging on Technological Solutions: Study for Smart Farming Sector	∍d
202	Suryachandra Naidu Siripuram; Ankit Kammar; Arjun Gupta; Kanthala Maha Vishnu Vardhan Reddy; Jav Baqersad Building Digital Twin for Mechanical Systems using Hybrid Expansion Approach	/ad
	In-Person Technical Sessional-8 Time: 09:30 - 10:10 Session Chair: Fahmi Khalifa	Day-2 April 14
69	Samuel C Lobert; Anik Baul; Ahmed Abdelgawad Replication and Advancement of a Functional Electrical Stimulation Device: A Practical Guide	
128	Bodaghi, Morteza; Hosseini, Majid; Gottumukkala, Raju A Multimodal Intermediate Fusion Network with Manifold Learning for Stress Detection	
167	James C Gu MilliFlex: A Multi-legged Millirobot with pH-Responsive Polymers for Targeted Drug Delivery	
	In-Person Technical Sessional-9 Time: 08:50 - 10:10 Session Chair: Mahmoud Darwich	Day-2 April 14
53	Daniel Rosenberger An adversary effort based attack probability model	
93	Robert M Kaster; Di Ma Zero Trust enabling Intrusion Detection Systems for SW Defined Vehicles	
239	Maisha Maliha; Vaishnavi Satya Sreeja Ankam; Nagamani Rudraraju; Wassnaa Al-Mawee IoT Botnet Threat Detection and Classification: A Binary Class Approach	
233	Sharmin Aktar; Abdullah Y Nur Advancing Network Anomaly Detection: An Ensemble Approach Combining Optimized Contractive Autoencoder Means Clustering	s and K-
	In-Person Technical Sessional-10 Time: 11:00 - 12:20 Session Chair: Linxi Zhang	Day-2 April 14
198	Mohamed Dwedar; Fatih Bayram; Alexander Jesser Dynamic Anomaly Detection in 5G-Connected IoT Devices using Transfer Learning	

230	Jacob Auerbach; Linxi Zhang Navigating Through SSL/TLS Implementation Vulnerabilities in Vehicle-related iOS Apps	
187	Ujunwa F Madububambachu; Rabeea Fatima; Kayla White; Justin Riley; Ahmed Sherif; Kasem Khalil Hardware-Acceleration Based Privacy-Aware Authentication Scheme for Internet of Vehicles	
	In-Person Technical Sessional-11 Time: 10:30 - 11:00 Session Chair: Ahmed Ammar	Day-2 April 14
134	Tanner D Patterson; Robert J Hayek; Ahmed Ammar A TDMA Algorithm for Dual-Hop Energy Harvesting Wireless Sensor Networks	
196	Hriba, Enass; Alkhweldi, Marwan; Ammar, Ahmed Connectivity Analysis for mmWave Cellular Networks with Relays	
207	Foster A Yeboah; Mahanthi Ashok; Bukka Keerthi; Dorai Rani; Gaddam Kumar; Kandra Harshitha; Kand Sukeerthi; Lnu Soujanya; Paruchuri Varun; Pillalamarri Vaishnavi; Jones Yeboah; Owusu Nyarko-Boate Automated Scripting for Real-Time Responses to Suspicious User Actions	
147	Md. Abdus Salam; A S M Ahsanul Sarkar Akib; Mahadir Islam; Md Moin Uddin; shahin K Piyal; Md. Ahsa Md. Abu Mosa Precision Fish Farming To Mitigate Pond Water Quality Through IoT	an Habib;

	Program Details		
Online Sessions			
DAY-1: Saturday, April 13, 2024			
Online Technical Session-1			
	Time: 9:00: - 10:30 Session Chair: Mohamed Shaban	Day-1 April 13	
Paper ID	Authors / Title		
3	<b>Rettenmeier, Tobias; Jesser, Alexander</b> Data Augmentation for Entity Resolution: A Comparative Evaluation		
10	Yeboah, Jones; Ritika , Dharamkar; Pradnya, Dudhade; Nti, Isaac K Predicting Cyberbullying Behavior in Social Media for Enhancing Online Safety		
19	Hedrick, Jacob W; Yeboah, Jones; Nti, Isaac K Predicting the Risk Level of a Loan Based on the Customer's Personal Factors Using Machine Learning Models		
20	<b>Tsetse, Anthony K; Yeboah, Jones</b> Predictive Modeling of Energy Requirements in the Design of Buildings: A Comparative Analysis of Machine Lea Algorithms	arning	
23	<b>Chen, Max; Wu, Qiang</b> Distributed Classification by Divide and Conquer Approach		
26	<b>Todmal, Shantanu; Hazra, Tanmoy</b> Text guided image manipulation using LiT and StyleGAN2		
	Online Technical Session-2 Day-1		
	Time: 9:00 - 10:30 Session Chair: Deepika Kumar	April 13	
35	Talaei Khoei, Tala A Safe and Reliable Bayesian Spiking Neural Network in Industrial Control Systems		
37	Girard, William; Xu, Haiping; Yan, Donghui Real-Time Evolving Deep Learning Models for Predicting Hydropower Generation		
52	<b>Onwujekwe, Gerald; Men, Zibo; Duke, Joseph</b> Individualized Location Prediction Using Autoencoders and Long-Short Term Memory Networks		
57	<b>Tiku, Sarvesh</b> Mitigation of User-Prompt Bias in Large Language Models: A Natural Langauge Processing and Deep Learning I Framework	Based	
59	<b>Carberry, Joshua; Xu, Haiping</b> A Hierarchical Fine-Grained Deep Learning Model for Automated Medical Coding		
70	Ho, Pin Hsuan; Jiang, Bing Ru; Lin, Albert Teacher-Free Knowledge Distillation based on Non-Progressive Meta-Learned Simulated Annealing		
	Online Technical Session - 3 Time: 10:30 - 12:00 Session Chair: Tala Talaei Khoei	Day-1 April 13	
66	Andleeb, Ifrah; Elzein, Almiqdad; Patel, Vaibhav; Alginahi, Yasser Deep Learning-Based Melanoma Detection using Attention Maps		
	Mushsharat, Mostafa; Palit, Rajesh		

#### An Intelligent Information Retrieval System Through Natural Language Prompts for Private Database

77	Rahman, Mostafizur; Saad, Mezbah Uddin; Sadek, Md Jafor; Khaled, Shehenaz; Mithila, Shusria Sharn Web-Based Multiple Disease Prediction System with Transfer Learning and Healthcare Chatbot	nin
81	Whitten, Paul C An AI Architecture with the Capability to Explain Recognition Results	
88	Raychawdhary, Nilanjana     Optimizing Multilingual Sentiment Analysis in Low-Resource Languages with Adaptive Pretraining and Strategi     Selection	c Language
89	Raychawdhary, Nilanjana Enhancing Monolingual Sentiment Classification: Pioneering Strategies in Tailored Language Training and Ana Techniques	alytical
	Online Technical Session-4 Time: 10:30 - 12:00 Session Chair: Mohamed Shaban	Day-1 April 13
92	Abdelkarim, Mohamed; Kamal, Hanan; Shawky, Doaa A Novel ML classifier using Modern Hopfield Neural Networks	
96	Xu, Yangjie; Huang, Hui; State, Radu Cropland Quantum Learning: A Hybrid Quantum-Classical Neural Network for Cropland Classification	
97	Li, Juliana Artificial Intelligence-Based Detection of Autism Spectrum Disorder Using Linguistic Features	
105	Akagic, Amila; Kapo, Medina; Kandić, Elma; Bečirović, Merjem; Kadrić, Nerma Brain Tumor Segmentation of MRI images with U-Net and DeepLabV3+	
109	Akanbi, Kemi; Yeboah, Jones; Oluwadare, Sunkanmi ; Nti, Isaac K Predicting Happiness Index Using Machine Learning	
111	Yemmanuru, Bhairava Naga Prathibha Kiran; Yeboah, Jones; Nti, Isaac K Customer Credit Risk: Application and Evaluation of Machine Learning and Deep Learning Models	
	Online Technical Sessional-5 Time: 13:00 15:00 Session Chair: Lakshmanan.S	Day-1 April 13
115	Champa, Arifa Islam; Rabbi, Md Fazle; Zibran, Minhaz Curated Datasets and Feature Analysis for Phishing Email Detection with Machine Learning	
117	Ashour, Ahmed F.; Fouda, Mostafa M.; Md Fadlullah, Zubair ; Ibrahem, Mohamed Optimized Neural Networks for Diabetes Classification Using Pima Indians Diabetes Database	
120	Shao, Claire; Chen, Kayla CIBIP-AI: Development of California Invasive Bird Identification and Prediction Artificial Intelligence System	
124	Wang, Zihe Creation of DALT-NET: Deep learning 3D lookup table generation approach to Daltonization for dichromatic vis	sion
127	Lau, Maggie Progress and Research Trends of Artificial Intelligence Incorporation in Protein Structure Prediction	
131	Li, Ella Artificial Intelligence Model and Experimental Study of Drug Effects on Planarians' Regeneration	
223	Bagchi, Atish; Chandrasekaran, Siva Forecasting of Winding and Oil Temperatures in Power Transformers Using a Hybrid Deep Learning Model wit Feedback	h Attention

	Online Technical Sessional-6 Time: 13:00 15:00 Session Chair: Kasem Khalil	Day-1 April 13
136	<b>Ma, Yuqin</b> Developing the California Aquatic Biotoxin Management System to Predict Marine Biotoxin Levels in Southern C Coast with Multivariate Time Series Machine Learning	California
150	<b>Al-Kerboly, Doreyed Muhammed</b> A Comparative Study of Clustering Algorithms for Profiling Researchers in Universities through Google Scholar	
157	Khan, Shaiq Ahmad; Khan, Faiq Ahmad; Jamil, Akhtar; Hameed, Alaa Ali Interpretable Motor Sound Classification for Enhanced Fault Detection leveraging Explainable Al	
160	Romeo, Jared; Abbass, Mahmoud; Sherif, Ahmed; Khan Mamun, Mohammad Mahbubur Rahman; Elsers Mohamed; Khalil, Kasem Privacy-Preserving Machine Learning for E-Health Applications: A Survey	у,
161	Mustafa, Ata; Jamil, Akhtar; Hameed, Alaa Ali Machine learning based techniques for failure detection and prediction in Unmanned Aerial Vehicle	
21	John, Eugene; Sengupta, Prianka Time Series Pattern Matching Technique for Low-Energy Arrhythmia Classification in Implantable Cardiac Devic	es
	Online Technical Sessional-7 Time: 15:00 - 17:00 Session Chair: Saima Jabeen	Day-1 April 13
166	<b>Abri, Rayan</b> Predicting Earthquakes with lonospheric Data: A Hybrid Approach Utilizing Deep AutoEncoder and LSTM Netwo	orks
172	Altamimi, Jawaher Suliman An intelligent approach for Speed Bump Detection	
180	Rezaei, Abdolazim; Sookhak, Mehdi; Yazdinejad, Mohsen Credit Card Fraud Detection Using Tree-based Algorithms For Highly Imbalanced Data	
190	Soleimani, Faezeh; Bidi, Saeed; Habibzadeh-Bigdarvish, Omid ; Yu, Xinbao Implementation of Predictive Machine Learning Algorithms on Heated Geothermal Bridge Data	
192	Rahman, Nabila; Arefin, Mahira; Rahman, Sabila; Islam, Md Shamiul; Akter, Usha ; khatun, Tammy Enhancing the accuracy of fruit freshness detection by utilizing transfer learning and customizing convolutional r network(CNN).	neural
206	Kuhn, Lisa M; Mire, Allen A Neural Finite Element Control Problem	
155	<b>Zhang, Elizabeth; Wang, Abigail</b> Assessment of Novel Acaricides to Counter European Honeybee Memory Loss and Varroa Destructor Resistand Image Recognition and Artificial Intelligence Approach	ce Using
90	Jacob T Koch; Olufunsho Falowo; Nathan Elrod What We Know About HTTP/3 and Its Implementation: A Literature Review	
	Online Technical Sessional-8 Time: 15:00 - 17:00 Session Chair: Sapna Katiyar	Day-1 April 13
209	<b>Zhou, Caroline</b> Developing a Hybrid Machine Learning System for Parkinson's Disease Detection Using a Combination of Freez Video and Inertial Sensor Data	zing of Gait
210	<b>Lo, Matthew</b> BeeMind AI: Development of an Artificial Intelligence-Based System to Assess Honeybee Health, Behavior, and Effects	Nutrient

213	Aburidi, Mohammed; Marcia, Roummel Adversarial Attack and Training for Graph Convolutional Networks using Focal Loss-Projected Momentum	
218	Alawad, Mohammed Optimizing Federated Learning with Heterogeneous Edge Devices	
221	Darwich, Mahmoud; Khalil, Kasem; Bayoumi, Magdy Utilizing Swarm Intelligence for Optimized Video Data Distribution in Edge Networks	
253	<b>DeJong, Brian; Karadoğan, Ernur</b> Using Machine Learning to Predict Student Success in Undergraduate Engineering Programs	
235	Dar, Zaema; Bokhari, Usman Ali; Raheel, Muhammad; Alazawi, Esraa Mohammed; Jamil, Akhtar; Hameed, Alaa Ali Advanced Generative Al Methods for Academic Text Summarization	
17	Huinian Wang; Jingyao Wang; Baoping Xiao; Yizhou Jiao; Jinghua Guo Drivable Area and Lane Line Detection Model based on Semantic Segmentation	
DAY-2: Sunday, April 14, 2024		
	Online Technical Sessional-9	
	Time: 9:00:00 AM - 10:30 Session Chair: Faezeh Soleimani	Day-2 April 14
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242 234	Session Chair: Faezeh Soleimani Abdullah, Fasih; Alazawi, Esraa Mohammed; Jamil, Akhtar; Hameed, Alaa Ali	April 14
	Session Chair: Faezeh Soleimani   Abdullah, Fasih; Alazawi, Esraa Mohammed; Jamil, Akhtar; Hameed, Alaa Ali   Exploring Deep Learning-based Approaches for Brain Tumor Diagnosis from MRI Images   Karadoğan, Ernur	April 14
234	Session Chair: Faezeh Soleimani   Abdullah, Fasih; Alazawi, Esraa Mohammed; Jamil, Akhtar; Hameed, Alaa Ali   Exploring Deep Learning-based Approaches for Brain Tumor Diagnosis from MRI Images   Karadoğan, Ernur   Predicting the Weber Fractions for Stiffness Discrimination in Haptic Virtual Environments using Machine Learn   Dogru, Hasibe Busra; Kaplan, Ahmet; Zengin, Aydın Tarık	April 14
234 260	Session Chair: Faezeh Soleimani   Abdullah, Fasih; Alazawi, Esraa Mohammed; Jamil, Akhtar; Hameed, Alaa Ali   Exploring Deep Learning-based Approaches for Brain Tumor Diagnosis from MRI Images   Karadoğan, Ernur   Predicting the Weber Fractions for Stiffness Discrimination in Haptic Virtual Environments using Machine Learn   Dogru, Hasibe Busra; Kaplan, Ahmet; Zengin, Aydın Tarık   Image-Based Nystagmus Analysis in BPPV Disorders: Polar Coordinate System and Template Matching   Er, Rezzan Nisa N; Çoğalmış, Kevser Nur	April 14

The Role of Artificial Intelligence Applications in Developing the Quality of Teaching: A case study in Iraq

	Online Technical Sessional - 10 Time: 9:00:00 AM - 10:30 Session Chair: Enkeleda Lulaj	Day-2 April 14
264	Sherafgan, Raheimeen; Jamil, Akhtar; Aamir, Fatima; Arbab, Tehreem; Hameed, Alaa Ali; Bhatti, Fazeel Deep Learning-based Semantic Search Techniques for Enhancing Product Matching in E-commerce	
71	Chakraborty, Subhobrata; Verma, Abhishek Novel Stereo Visual Odometry Pipeline for Autonomous Robot Navigation on Video Data	
65	Paxton, Allison; Verma, Abhishek New Parallel Decision Fusion Models for Improving Multiclass Object Detection in Drone Images	
245	Mane, Priyanka IoT Framework for Battlefield Awareness : Implementation of Soldiers Health Integration for Enhanced Location (SHIELD) System	Deployment

18	Schröder, Christian; Boehm, Rene; Lampe, Alexander Comparison of Autoscaling Frameworks for Containerised Machine-Learning-Applications in a Local and Cloud Environment		
139	Jiang, William C; Liu, Jayden Developing an Optimized Artificial Intelligence and Internet of Things-based Aquaponics System		
	Online Technical Sessional - 11 Time: 10:30 - 12:00 Session Chair: Hesham Daoud	Day-2 April 14	
78	Paxton, Allison; Verma, Abhishek Stacked Generalization Models for Improving Multiclass Object Detection in Drone Images		
79	Chakraborty, Subhobrata; Verma, Abhishek; Hartman, Amiel New LiDAR Based SLAM Systems for Real-Time Campus Tour Robot Navigation		
80	Kilic, Sedat; Tuceryan, Mihran Crime Detection from Pre-crime Video Analysis with Augmented Activity Information		
86	Barua, Saikat; Rahman, Mostafizur; Saad, Mezbah Uddin; Islam, Rafiul; Sadek, Jafor ELMAGIC: Energy-Efficient Lean Model for Reliable Medical Image Generation and Classification using Forward Forward Algorithm		
101	Ifty, Tanzina Taher; Shafin, Saleh Ahmed; Shahriar, Shoeb Mohammad; Towhid, Tashfia Explainable Lung Disease Classification from Chest X-Ray Images Utilizing Deep Learning and XAI		
103	Akagic, Amila; Buza, Emir; Kecman, Stefani; Saric, Rijad; Lewsey, Mathew G.; Čustović, Edhem; Whelan, James Accelerating Semantic Segmentation Labeling of Time Sequence Data via Assistive Label Generation with Conditional GANs		
	Online Technical Sessional-12 Time: 10:30 - 12:00 Session Chair: Anastassia Gharib	Day-2 April 14	
104	Akagic, Amila; Saric, Rijad; Buza, Emir; Kecman, Stefani; Lewsey, Mathew G.; Čustović, Edhem; Whelan, James Rosette Plant Centre Detection and Tracking using YOLO: An Efficient Deep Learning Approach		
114	Natha, Sarfaraz ; Arif, Muhammad; Syed, Shahryar Jamil; Jokhio, Fareed Ahmed ; Syed, Muslim Jameel Improving Traffic Surveillance: Deep Learning Approaches for Road Anomaly Detection in Videos		
132	Xu, Claire Exploring Al-Based Reciprocal Eye Engagement Training to Enhance Dyadic Behavior in Individuals with Alexithymia		
199	Alzyout, Mohammad S.; Al Nounou, Abd Alrahman; Tikkisetty, Yashwanthnaidut; Alawneh, Shadi Performance Analysis of Lidar Data Processing On Multi-Core CPU And GPU Architectures		
159	Suresh, Suhas; Verma, Abhishek Stacking and Voting Ensemble Models for Improving Food Image Recognition		
173	Chakraborty, Subhobrata; Verma, Abhishek; Hartman, Amiel Evaluation of Visual Inertial Navigation System for Autonomous Robot Tours on Campus		
	Online Technical Sessional-13 Time: 13:00 - 15:00 Session Chair: Hesham Daoud	Day-2 April 14	
204	Dev, Antora; Fadlullah, Zubair Md ; Fouda, Mostafa M. Data-Driven Model for Improving MEG Epileptic Spike Detection		

244	Upadhya, Jiblal; Poudel, Khem; Ranganathan, Jaishree Advancing Medical Image Diagnostics through Multi-Modal Fusion: Insights from MIMIC Chest X-Ray Dataset Analysis		
182	<b>Shi, Yifan; Wang, Yizhou</b> Development of A Biodegradable Hybrid Inspired Paper Battery Powered By Carbon-Black with Origami Design Applicable For Biomedical Smart Systems		
74	Eskander, Marina; Othman, Hisham Anomalous Sound Detection for Slider Machine Using Contrastive Learning Under Domain-Shifted Conditions		
170	Nobel, SM Nuruzzaman ; Swapno, S M Masfequier Rahman; Islam, Md Babul; Meena, Dr. V. P.; Benedetto, Francesco Performance Improvements of Machine Learning-Based Crime Prediction, A Case Study in Bangladesh		
56	Amsaad, Fathi; Vardhan Baligodugula, Vishnu Analyzing the Parallel Computing Performance of Unsupervised		
252	Md.Hazrat H Ali Next-Gen Vehicle Attribute Classification: A Multi-head Deep Learning Approach		
231	Tianyi Li; Chengcheng Li Leveraging Transfer Learning from SkimLit to Improve Sentence Classification in NSF Grants and Awards Abstrac	:ts	
	Online Technical Sessional-14 Time: 13:00 - 15:00 Session Chair: Waleed Ead	Day-2 April 14	
174	Swapno, S M Masfequier Rahman; Nobel, SM Nuruzzaman ; Islam, Md Babul; Haque, Rezaul; Meena, Dr. V. Benedetto, Francesco A Novel Machine Learning Approach for Fast and Efficient Detection of Mango Leaf Diseases	. P.;	
223	Bagchi, Atish; Chandrasekaran, Siva     Forecasting of Winding and Oil Temperatures in Power Transformers Using a Hybrid Deep Learning Model with Attention     Feedback		
41	Elsaadany, Riham A Self-Scaling Dynamic Blockchain Model for IoT		
61	Jaggi, Ramneet; Abbas, Muhammad Naveed; Dwivedi, Rahul; Manzoor, Jawad; Asghar, Mamoona Turbulence-driven Autonomous Stock Trading using Deep Reinforcement Learning		
177	Mohaidat, Tamador Nadem; Khalil, Kasem Master Forum: Advancements in Perceptron Hardware for Efficient Implementation in Artificial Neural Network		
123	Alboqmi, Rami; Jahan, Sharmin; F. Gamble, Rose A Risk Adaptive Access Control Model for the Service Mesh Architecture		
184	Vaibhav Pokhriyal; Vignesh Kannan; Dhanesh Mahto; Prajwal V; Vadiraja Acharya Predictive Maintenance for An Industrial Robotic Arm using LoRa Technology		
64	Fathi Amsaad Enhancing Anomaly Detection of IoT using Knowledge-Based and Federated Deep Learning		
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