











IEEE UEMCON 2024

2024 IEEE 15th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON)

IBM T.J. WATSON RESEARCH CENTER, NEW YORK, USA 17- 19 October 2024

TECHNICAL SCHEDULE CONTENTS

DAY 1 (17th Oct 2024)	EVENT DETAILS	TIMING	PAGE NUMBER
/	INAUGURATION[ROOM - AUDITORIUM]	9:00 AM - 9.30 AM	06
	SESSION 1: ARTIFICIAL INTELLIGENCE AND IoT [ROOM - AUDITORIUM]	9:30 AM – 11:00 AM	06
	SESSION 2: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS [ROOM NO- AISLE 26 FULL ROOM]	9:30 AM – 11:00 AM	07
	SESSION 3: ARTIFICIAL INTELLIGENCE AND IoT [ROOM- 14-101]	9:30 AM – 11:00 AM	08
	BREAK [AISLE 26 AND OVERFLOW INTO CAFETERIA]	11:00 AM - 11:30 AM	08
	KEYNOTE 1 : ARCHITECTURE AND DESIGN APPROACHES TO ML HARDWARE ACCELERATION: PERFORMANCE COMPUTE ENVIRONMENT [ROOM - AUDITORIUM]	11:30 AM – 12:15 PM	09
	KEYNOTE 2: PROMPT ENGINEERING [ROOM - AUDITORIUM]	12:15 PM – 1:00 PM	09
	LUNCH BREAK [AISLE 26 AND OVERFLOW INTO CAFETERIA]	1:00 PM - 2:00 PM	09
	SESSION 4: ARTIFICIAL INTELLIGENCE AND IoT [ROOM - AUDITORIUM]	2:00 PM - 3:30 PM	10
	SESSION 5: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS [ROOM NO- AISLE 26 FULL ROOM]	2:00 PM - 3:30 PM	11
	SESSION 6: ARTIFICIAL INTELLIGENCE AND IoT [ROOM- 14-101]	2:00 PM - 3:30 PM	12
	BREAK [AISLE 26 AND OVERFLOW INTO CAFETERIA]	3:30 PM - 4:00 PM	12
	SESSION 7: ARTIFICIAL INTELLIGENCE AND IoT [ROOM - AUDITORIUM]	4:00 PM - 5:30 PM	13
	SESSION 8: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS [ROOM NO- AISLE 26 FULL ROOM]	4:00 PM – 5:30 PM	14
	SESSION 9: ARTIFICIAL INTELLIGENCE AND IoT [ROOM- 14-101]	4:00 PM – 5:30 PM	15
	DINNER [CAFETERIA]	5.30 PM -7:00 PM	15

DAY 2 (18th Oct 2024)	EVENT DETAILS	TIMING	PAGE NUMBER
Oct 2024)	SESSION 10: BIG DATA, DATA MANAGEMENT AND AI [ROOM – AUDITORIUM]	9:30 AM-11.00 AM	17
	SESSION 11: CLOUD COMPUTING AND ALGORITHMS [ROOM - AISLE 26]	9:30 AM-11.00 AM	18
	SESSION 12: ALGORITHMS AND ML [ROOM – THINKLAB AREA B]	9:30 AM-11.00 AM	19
	BREAK [ROOM – AISLE 26 FULL ROOM AND OVERFLOW INTO CAFETERIA]	11:00 AM-11:30 AM	19
	KEYNOTE 3: VORTEX: VECTOR DATABASE ARCHITECTURE FOR ACCELERATING RAG-LLM QUERIES [ROOM – AUDITORIUM]	11:30 AM-12:15 AM	20
	KEYNOTE 4: UNLOCKING THE PROMISE OF DIGITAL HEALTH: LEVERAGING INNOVATIONS IN SENSING, AI, IOT, AND QUANTUM TECHNOLOGIES [ROOM - AUDITORIUM]	12:15 AM-1:00 PM	20
	LUNCH BREAK[ROOM – AISLE 26 FULL ROOM AND OVERFLOW INTO CAFETERIA	1:00 PM-2.00 PM	20
	SESSION 13: MACHINE LEARNING AND AI [ROOM – AUDITORIUM]	2.00 PM-3:30 PM	21
	SESSION 14: MACHINE LEARNING AND AI [ROOM – AISLE 26]	2.00 PM-3:30 PM	22
	SESSION 15: SECURITY AND PRIVACY [ROOM - THINKLAB AREA B]	2.00 PM-3:30 PM	23
	BREAK [ROOM – AISLE 26 FULL ROOM AND OVERFLOW INTO CAFETERIA]	3.30 PM- 4.00 PM	23
	SESSION 16: MACHINE LEARNING [ROOM – AUDITORIUM]	4:00 PM- 5:30 PM	24
	SESSION 17: SECURITY AND PRIVACY [ROOM – AISLE 26]	4:00 PM- 5:30 PM	25
	SESSION 18: MACHINE LEARNING, SECURITY AND ROBOTICS [ROOM – THINKLAB AREA B]	4:00 PM- 5:30 PM	26

DAY 3 (19th Oct 2024)	EVENT DETAILS	TIMING	PAGE NUMBER
300 202 1)	SESSION 19: MACHINE LEARNING [ROOM – THINKLAB VIZ THEATRE]	9.30 AM-11.00 PM	28
	SESSION 20: SENSOR NETWORKS, NLP [ROOM – THINKLAB MAIN SPACE]	9.30 AM-11.00 PM	29
	SESSION 21: SIGNAL PROCESSING, VLSI AND CONTROL SYSTEMS [ROOM – THINKLAB AREA B]	9.30 AM-10.30 PM	30
	BREAK [THINKLAB ALL]	11:00 AM-11:30 AM	30
	KEYNOTE 5: INTRODUCTION TO QUANTUM CENTRIC SUPERCOMPUTING [ROOM – THINKLAB VIZ THEATRE]	11:30 AM-12:15 PM	31
	KEYNOTE 6: EMPOWERING HEALTHCARE WITH DIGITAL TWINS: FROM DESIGN TO REAL- WORLD IMPACT [ROOM – THINKLAB VIZ THEATRE]	12:15 AM-1:00 PM	31
	LUNCH BREAK [THINKLAB ALL]	1.00 PM-2.00 PM	31
	WORKSHOP ON ASPECTS OF VIRTUAL REALITY [ROOM - THINKLAB ALL]	1.30 PM-4.00 PM	31
	SESSION 22: WIRELESS NETWORKS [ROOM – THINKLAB VIZ THEATRE]	2.00 PM-3:30 PM	33
	SESSION 23: MACHINE LEARNIG, AI [VIRTUAL SESSION] [ROOM – THINKLAB MAIN SPACE]	2.00 PM-4.00 PM	34
	SESSION 24: ARTIFICIAL INTELLIGENCE AND BIG DATA [VIRTUAL SESSION] [ROOM – THINKLAB AREA B]	2.00 PM-4.00 PM	35
	BREAK [THINKLAB ALL]	3.30 PM- 4:00 PM	35
	VALEDICTORY SESSION [ROOM - THINKLAB ALL]	4:00 PM – 5:00 PM	35

DAY 1: 17th Oct 2024

TIME	PARALLEL SESSION
9:00 AM - 9:30 AM	INAUGURATION [ROOM - AUDITORIUM]
9:30 AM – 11:00 AM	SESSION 1: ARTIFICIAL INTELLIGENCE AND IOT [ROOM - AUDITORIUM]
9:30 AM – 10:45AM	SESSION 2: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS [ROOM NO- AISLE 26 FULL
	ROOM]
9:30 AM – 10:45 AM	SESSION 3: ARTIFICIAL INTELLIGENCE AND IOT [ROOM- 14-101]
11:00 AM- 11:30AM	BREAK [AISLE 26 AND OVERFLOW INTO CAFETERIA]
	KEYNOTE 1: INTRODUCTION TO QUANTUM CENTRIC SUPERCOMPUTING [ROOM- AUDITORIUM]
11:30 AM-1:00 PM	
	KEYNOTE 2: PROMPT ENGINEERING [ROOM- AUDITORIUM]
2:00 PM – 3:00 PM	LUNCH [AISLE 26 AND OVERFLOW INTO CAFETERIA]
2:00 PM – 3:30 PM	SESSION 4: ARTIFICIAL INTELLIGENCE AND IOT [ROOM NO- AUDITORIUM]
2:00 PM – 3:30 PM	SESSION 5: IG DATA, DATA MANAGEMENT AND DATA ANALYTICS [ROOM NO- AISLE 26 FULL ROOM]
2:00 PM - 3:30 PM	SESSION 6: ARTIFICIAL INTELLIGENCE AND IOT [ROOM - 14-101]
2.00 1 141 - 3.30 1 141	SESSION 6. ARTIFICIAL INTELLIGENCE AND IOT [ROOM - 14-101]
3.30 PM- 4.00 PM	BREAK [AISLE 26 AND OVERFLOW INTO CAFETERIA]
4:00 PM – 5:30 PM	SESSION 7: ARTIFICIAL INTELLIGENCE AND IOT [ROOM - AUDITORIUM]
400 PM - 445 PM	
4:00 PM – 5:15 PM	SESSION 8: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS [ROOM -AISLE 26 FULL ROOM]
4:00 PM - 5:30 PM	SESSION 9: ARTIFICIAL INTELLIGENCE AND IOT [ROOM - 14-101]
1000 2312 3100 2312	
5:30 PM -7.30 PM	DINNER [CAFETERIA]

PARALLEL SESSIONS

SESSION 1: ARTIFICIAL INTELLIGENCE AND IoT					
SESSION CHAIR: NIZAR TAYEM (TEXAS A & M, USA)					
		SESSION TIME: 9:30 AM – 11:00 AM	M (DAY 1: 17th Oct 2024)		
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY		
9.30 AM – 9.45 AM	1571068233	Lung Cancer Classification Optimization Using CNN and Edge Detector from CT Scan Images	Md Hasanuzzaman (Southern Arkansas University, USA & University of Dhaka, Bangladesh)		
9.45 AM -10.00 AM	1571064899	Optimizing Grass Selection for Beef Cattle Using Multi-Armed Bandit Algorithms: A Data- Driven Approach to Enhance Growth Through Rumination Analysis	Yuan Xing (University of Wisconsin-Stout, USA); Bob Zhiwei Zeng (University of Wisconsin - River Falls, USA); Abhishek Verma, Cheng Chih Liu, Tina Lee and Dongfang Hou (University of Wisconsin-Stout, USA); Haowen Pan (Columbia University, USA); Sam Edwards (University of Wisconsin-Stout, USA); Wyatt Stehr (University of Wisconsin-River Falls, USA)		
10.00 AM – 10.15 AM	1571068226	Eliciting and Measuring Toxic Bias in Human- To-Machine Interactions in Large Language Models	Kyle R Stein (University of West Florida & Institute for Human and Machine Cognition, USA); Alexander Harvey, Aylanna Lopez and Uzma Taj (Johns Hopkins University, USA); Shari Watkins (American University, USA); Lanier Watkins (Johns Hopkins University Information Security Institute, USA)		
10.15 AM -10.30 AM	1571069666	Exploring the Use of Machine-Learning and Non-Radial DEA for Transit Efficiency Score Prediction	Nahom H. Demoz, Shivanjali Khare and Ahmed Omar Salim Adnan (University of New Haven, USA)		
10.30 AM -10.45 AM	1571069972	A Model Based on Genetic Algorithm for Solving Polynomial Equations	Farshid Sahba (Raja University, Iran); Amin Sahba, Ramin Sahba and Vahideh Hahsempour (The University of Texas at San Antonio, USA)		

SESSION 2: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS						
	SESSION CHAIR: MOHAMED AZAB (VIRGINIA MILITARY INSTITUTE, USA)					
		SESSION TIME: 9:30 AM – 10:45 AM	I (DAY 1: 17th Oct 2024)			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY			
9.30 AM – 9.45 AM	1571068269	End-To-End Application and Backend State Management: A Comprehensive Review	Anujkumarsinh Donvir (ADP, USA); Pradeep Kumar Saraswathi (Salesforce, USA); Apeksha Jain (Amazon, USA)			
9.45 AM -10.00 AM	1571069956	Improved Radiation Estimation at High Energy Facility for Public Health	Jerry Cao-Xue (William G. Enloe High School, USA); Hongfang Zhang and Adam Stavola (Old Dominion University, USA); Michael Wu (University of Arizona, USA); Bence Budavari and Chiman Kwan (Signal Processing, Inc., USA); Jiang Li (Old Dominion University & Electrical and Computer Engineering, USA)			
10.00 AM – 10.15 AM	1571069242	Optimizing Transformer-Based Models for Radiation Estimation at High Energy Accelerator Facility	Jiang Li (Old Dominion University & Electrical and Computer Engineering, USA); Jackie Wei (Piedmont Hills High School, USA); Hongfang Zhang and Adam Stavola (Old Dominion University, USA); Bence Budavari and Chiman Kwan (Signal Processing, Inc., USA); Michael Wu (University of Arizona, USA)			
10.15 AM -10.30 AM	1571061432	Cluster-Based Genetic Algorithm Path Planning for Cooperative UGV and UAV Operations in Energy- Efficient Wireless Sensor Networks	Yuan Xing and Abhishek Verma (University of Wisconsin-Stout, USA); Bob Zhiwei Zeng (University of Wisconsin - River Falls, USA); Cheng Chih Liu, Tina Lee and Dongfang Hou (University of Wisconsin-Stout, USA); Haowen Pan (Columbia University, USA); Sam Edwards (University of Wisconsin-Stout, USA)			

SESSION 3: ARTIFICIAL INTELLIGENCE AND IoT							
	SESSION CHAIR: CHETAN JAISWAL [QUINNIPIAC UNIVERSITY, USA]						
		SESSION TIME: 9:30 AM – 10:45 AM	I (DAY 1: 17th Oct 2024)				
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY				
9.30 AM – 9.45 AM	1571048880	Optimizing Sleep Schedules for Energy-Efficient	Yuan Xing (University of Wisconsin-Stout, USA); Bob Zhiwei Zeng (University of				
		Agricultural Wireless Sensor Networks Using	Wisconsin - River Falls, USA); Cheng Chih Liu, Abhishek Verma, Tina Lee and				
		Deep Reinforcement Learning	Dongfang Hou (University of Wisconsin-Stout, USA); Haowen Pan (Columbia				
			University, USA); Sam Edwards (University of Wisconsin-Stout, USA)				
	1571064243	Classification Models and Feature Engineering	David Shilane and Ashwathi Prakash Nair (Columbia University, USA)				
9.45 AM -10.00 AM		for Non-Intrusive Load Monitoring					
10.00 AM – 10.15 AM	1571069947	Building Generative AI Chatbot Using Oracle	Jay A Shah (Canada DevOps Community of Practice & IEEE Region 7, Canada &				
		Cloud Infrastructure	Southern Methodist University, USA); Nisha R Iyer (Walmart, Inc., USA)				
	1571069898	Inkjet-Printed Dry Flexible Electromyography	Nabonita Mitra (Texas Tech & TTU, USA); Ucchwas Talukder Utsha (Texas Tech				
10.15 AM -10.30 AM		Electrode Array for Classifying Finger	University, USA)				
		Movements With AI Algorithms					

Break	11:00 AM- 11:30AM

KEYNOTE SESSION [DAY 1: 17TH OCT 2024]

TIME	NAME OF THE EVENT
	KEYNOTE ADDRESS BY LELAND CHANG
	(PRINCIPAL RESEARCH SCIENTIST AND THE SENIOR MANAGER OF AI HARDWARE AT IBM RESEARCH)
	TITLE OF TALK: ARCHITECTURE AND DESIGN APPROACHES TO ML HARDWARE
11:30 AM – 12:15 PM	ACCELERATION: PERFORMANCE COMPUTE ENVIRONMENT
	KEYNOTE ADDRESS BY SANJEEV KUMAR MARIMEKALA
12:15 PM – 1:00 PM	(IBM CERTIFIED SENIOR ENTERPRISE TECHNOLOGY ARCHITECT)
	TITLE OF TALK: PROMPT ENGINEERING

1:00 AM-2:00 AM	LUNCH BREAK
-----------------	-------------

SESSION 4: ARTIFICIAL INTELLIGENCE AND IoT							
	SESSION CHAIR: NIZAR TAYEM (TEXAS A & M, USA)						
	S	ESSION TIME: 2:00 PM – 3:30 PM	(DAY 1: 17TH OCT 2024)				
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY				
2.00 PM – 2.15 PM	1571069877	Music Therapy for Autism Spectrum Disorder: A Comprehensive Literature Review on Therapeutic Efficacy, Limitations, and AI Integration	Beatrice Low (Columbia University, USA); Xindi Liu (Rye Country Day School, USA); Richard Z. Li (Longmeadow High School, USA); Elizabeth Ren (Castilleja School, USA); Jasmine X Zhang (San Marino High School, USA)				
2.15 PM – 2.30 PM	1571066671	AITracker: A Neural Network Designed for Efficient and Affordable Eye Tracking	Jacob Hogrefe (Quinnipiac University); Emilio Cruz, Chetan Jaiswal and Jose A Riofrio (Quinnipiac University, USA)				
2.30 PM – 2.45 PM	1571068096	A Review: State-Of-The-Art of Integrating AI Models With Moving-Target Defense for Enhancing IoT Networks Security	Amal Hamada (Alexandria University, Egypt); Salwa M Hassan (University of Alexandria, Egypt); Salma Samy (The British University in Egypt & Faculty of Engineering, Alexandria University, Egypt); Mohamed Azab (Professor, CIS, Virginia Military Institute & Virginia Tech, USA); Efat Fathalla (Virginia Military Institute, USA & VMI, USA)				
2.45 PM -3.00 PM	1571069996	AI-Driven Automated Measurement of Abdominal Aorta Diameter in CT Scan Images	Vahideh Hahsempour, Ramin Sahba and Amin Sahba (The University of Texas at San Antonio, USA); Farshid Sahba (Raja University, Iran)				

SESSION 5: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS							
	SESSION CHAIR: SHERIF S. RASHAD [MOREHEAD STATE UNIVERSITY, USA]						
	S	ESSION TIME: 2:00 PM – 3:15 PM	(DAY 1: 17TH OCT 2024)				
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY				
2.00 PM – 2.15 PM	1571069799	DyRAM: Dynamic Data Allocation and Resource Management in Distributed Machine Learning Systems	Vaibhavi Tiwari, Rahul Thakkar and Jiayin Wang (Montclair State University, USA)				
2.15 PM – 2.30 PM	1571069651	Predicting Audience Interests From Social Media Captions Using a Semi-Supervised Approach	Ahmed Omar Salim Adnan (University of New Haven, USA); Hosnara Happy and Sadia Alam Tumpa (North South University, Bangladesh); Shivanjali Khare (University of New Haven, USA)				
2.30 PM – 2.45 PM	1571069223	Social Media Fake News Detection Using Machine Learning Models and Feature Extraction Techniques	Ayman Gharaibeh (Louisiana Tech University, USA); William B Glisson (Faculty/Louisiana Tech University, USA); Xiyuan Liu (Louisiana Tech University, USA); Zuhair Tahat (Yarmouk University, Jordan); Majd Z. Tahat (Louisiana Tech University, USA); Hosam Alamleh (University of North Carolina Wilmington & Louisiana Tech University, USA)				
2.45 PM -3.00 PM	1571069189	Accelerating Product Innovation: Impact of Serverless Computing and Generative AI on Application Development	Anujkumarsinh Donvir (ADP, USA); Gunjan Paliwal (Meta, USA & Massachusetts Institute of Technology, USA); Sriram Panyam (Omlet Inc & Google, USA); Praveen Gujar (LinkedIn, USA)				

SESSION 6: ARTIFICIAL INTELLIGENCE AND IoT					
	SESSION CHAIR: SHAHAB TAYEB (CALIFORNIA STATE UNIVERSITY, FRESNO)				
	S	ESSION TIME: 2:00 PM – 3:30 PM	(DAY 1: 17TH OCT 2024)		
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY		
2.00 PM – 2.15 PM	1571068319	Secure and Ultra-Reliable 6G IoT Algorithms With AI-Enhanced Shared Key Physical Layer Security	Israt Ara (University of Texas at San Antonio, USA); Brian T Kelley (University of Texas at San Antonio & JBSA 5G PTO, USA)		
2.15 PM – 2.30 PM	1571070482	Development and Evaluation of a Smart Agricultural Chatbot	Rahat Bhatia (Eastern Washington University, USA)		
2.30 PM – 2.45 PM	1571069164	Utilizing Visual-Spatial Perception to Detect Drowning-Induced Suffocation in Swimming Pools			
2.45 PM -3.00 PM	1571068466	The Dark Side of AI: Large Language Models as Tools for Cyber Attacks on Vehicle Systems	Yusuf Usman (Quinnipiac University, USA); Prashnna K Gyawali (West Virginia University, USA); Sohan Gyawali (East Carolina University, USA); Robin Chataut (Texas Christian University, USA)		

3:30 PM- 4:00 PM	COFFEE BREAK

SESSION 7: ARTIFICIAL INTELLIGENCE, IoT AND ROBOTICS SESSION CHAIR: CHETAN JAISWAL [QUINNIPIAC UNIVERSITY, USA] SESSION TIME: 4:00 PM - 5:45 PM (DAY 1: 17TH OCT 2024) TIME ALLOTTED PAPER ID PAPER NAME **AUTHORS WITH AFFILIATION & COUNTRY Towards Immersive Cybersecurity** Fatemeh Sarshartehrani and Anthony Lee (Virginia Tech, USA); Mohamed Azab 1571069916 Workforce Development for Mission-Critical (Virginia Military Institute, USA); Denis Gracanin (Virginia Tech, USA) 4.00 PM - 4.15 PMIoT Systems A Survey: Emerging Cybersecurity Threats Vaibhavi Tiwari, Dharshana Rajasekar and Jiayin Wang (Montclair State 1571069268 4.15 PM - 4.30 PMin Driverless Cars University, USA) 1571069194 Federica Aveta, Maria Apostle and Luke Bassett (Wentworth Institute of High-Precision Robotic Arm for Silicon 4.30 PM - 4.45 PMWafer Handling and Alignment in Small-Technology, USA) Scale Semiconductor Fabrication 1571069724 Remotely-Controlled Telerehabilitation in Joseph Finkelstein (University of Utah, School of Medicine, USA); Te-Yi Tsai Virtual Reality Using IoT Architecture 4.45 PM - 5.00 PM (Data Scientist, University of Utah, USA) Interpretable Deep Learning for Monkeypox Misbah Ahmad (Univerity of West of England, Bristol, United Kingdom (Great 1571067311 5.00 PM - 5.15 PM Lesion Classification: A Study Using Model-Britain) & Hartpury University, United Kingdom (Great Britain)); Imran Ahmed Agnostic Explainability Techniques (Anglia Ruskin University, Cambridge, United Kingdom (Great Britain)) Misbah Ahmad (Univerity of West of England, Bristol, United Kingdom (Great 1571067314 IYOLO-FAM: Improved YOLOv8 With 5.15 PM - 5.30 PM Britain) & Hartpury University, United Kingdom (Great Britain)); Wenhao Zhang Feature Attention Mechanism for Cow (University of the West of England, United Kingdom (Great Britain)); Melvyn **Behaviour Detection** Smith (University of the West of England, Bristol, United Kingdom (Great Britain)); Ben Brilot and Matt Bell (Hartpury University, United Kingdom (Great Britain)) Misbah Ahmad (Univerity of West of England, Bristol, United Kingdom (Great 1571069143 AI-Enhanced Visual Inspection Systems for

Robust Detection of Product Packaging

Defects in Manufacturing Environments

All the timings are given in Eastern Daylight Time (UTC-4)

Britain) & Hartpury University, United Kingdom (Great Britain)); Imran Ahmed

(Anglia Ruskin University, Cambridge, United Kingdom (Great Britain)); Muftooh Siddiqi (Aston University, United Kingdom (Great Britain))

5.30 PM - 5.45 PM

SESSION 8: BIG DATA, DATA MANAGEMENT AND DATA ANALYTICS

SESSION CHAIR: SANJEEV KUMAR MARIMEKALA [IBM CERTIFIED SENIOR ENTERPRISE TECHNOLOGY ARCHITECT]

SESSION TIME: 4:00 PM - 5:15 PM (DAY 1: 17TH OCT 2024

DEDDICK TIME. 4.00 INI D. 13 INI (D. 11 I. 17 III OCI 2024)			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
4.00 PM – 4.15 PM	1571068481	Enhancing Phishing Detection With AI: A Novel Dataset and Comprehensive Analysis Using Machine Learning and Large Language Model	Robin Chataut (Texas Christian University, USA); Yusuf Usman (Quinnipiac University, USA); Mohammad Abid Rahman Chowdhury (West Virginia University, USA); Sohan Gyawali (East Carolina University, USA); Prashnna K Gyawali (West Virginia University, USA)
4.15 PM – 4.30 PM	1571069097	A Data-Centric Approach to Post-Pandemic Housing Market Analysis	Matin Pirouz (California State University, Fresno, USA); Preston Mccullough (California State University, USA)
4.30 PM – 4.45 PM	1571068137	Assessment of Water Conservation Function Based on Deep Autoencoder	Xiaoqing Fan and Xianghong Lin (Northwest Normal University, China); Hao Liu (Ningxia University, China)
4.45 PM - 5.00 PM	1571069093	Performance Comparison of Estimation Methods in Network Analysis	Matin Pirouz (California State University, Fresno, USA)

SESSION 9: ARTIFICIAL INTELLIGENCE AND IoT

SESSION CHAIR: SHERIF S. RASHAD [MOREHEAD STATE UNIVERSITY, USA]

SESSION TIME: 4:00 PM - 5:30 PM (DAY 1: 17TH OCT 2024)

	SESSION TIME: 4.00 FM = 5.50 FM (DAT 1. 17 III OCT 2024)			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY	
4.00 PM – 4.15 PM	1571068313	Conversational Swarms of Humans and AI Agents Enable Hybrid Collaborative Decision-Making	Louis Rosenberg and Hans Schumann (Unanimous AI, USA); Christopher Dishop (Carnegie Mellon University, USA); Gregg Willcox (Unanimous AI, USA); Ganesh Mani and Anita Williams Woolley (Carnegie Mellon University, USA)	
4.15 PM – 4.30 PM	1571067865	Multilingual Standalone Trustworthy Voice Based Social Network for Disaster Situations		
4.30 PM – 4.45 PM	1571067460	Affordable Self-Tuning Smart Queue Management for Home Networks	Andy Zheng and Mira Yun (Boston College, USA)	
4.45 PM - 5.00 PM	1571067441	Adaptive Tracking: Dynamic Frame Rate for Drone-Based Target Following	Junpeng Guo and Chunyi Peng (Purdue University, USA)	
5.00 PM - 5.15 PM	1571068316	Enhanced Person Tracking With Metric- Based Learning and Diverse Detector Integration	Arnab Mukherjee and David Orville Johnson (University of Kansas, USA)	

5.30 PM -7:00 PM DINNER

Day 2: 18th OCT 2024

TIME	PARALLEL SESSION
9:30 AM-11:00 AM	SESSION 10: BIG DATA, DATA MANAGEMENT AND AI [ROOM - AUDITORIUM]
9:30 AM-11.00 AM	SESSION 11: CLOUD COMPUTING AND ALGORITHMS [ROOM - AISLE 26]
9:30 AM-11:00 AM	SESSION 12: ALGORITHMS AND ML [ROOM – THINKLAB AREA B]
11.00 AM – 11.30 AM	BREAK [ROOM - AISLE 26 FULL ROOM AND OVERFLOW INTO CAFETERIA
11:30 PM – 1.00 PM	KEYNOTE 1: VECTOR DATABASE ARCHITECTURE FOR ACCELERATING RAG-LLM QUERIES [ROOM – AUDITORIUM] KEYNOTE 2: UNLOCKING THE PROMISE OF DIGITAL HEALTH: LEVERAGING INNOVATIONS IN SENSING, AI, IOT, AND QUANTUM TECHNOLOGIES [ROOM – AUDITORIUM]
1.00 PM-2:00 PM	LUNCH [ROOM – AISLE 26 FULL ROOM AND OVERFLOW INTO CAFETERIA]
2.00 PM-3:30 PM	SESSION 13: MACHINE LEARNING AND AI [ROOM - AUDITORIUM]
2.00 PM-3:30 PM	SESSION 14: MACHINE LEARNING AND AI [ROOM - AISLE 26]
2.00 PM-3:30 PM	SESSION 15: SECURITY AND PRIVACY [ROOM - THINKLAB AREA B]
3:30 PM- 4:00 PM	BREAK [ROOM - AISLE 26 FULL ROOM AND OVERFLOW INTO CAFETERIA]
4.00 PM- 5:30 PM	SESSION 16: MACHINE LEARNING [ROOM – AUDITORIUM]
4:00 PM- 5:30 PM	SESSION 17: SECURITY AND PRIVACY [ROOM - AISLE 26]
4:00 PM- 5:30 PM	SESSION 18: MACHINE LEARNING, SECURITY AND ROBOTICS [ROOM - THINKLAB AREA B]

SESSION 10: BIG DATA, DATA MANAGEMENT AND AI SESSION CHAIR: DAVID LI [YESHIVA UNIVERSITY]

SESSION TIME: 9:30 AM-11:00 AM (DAY 2: 18TH OCT 2024)

	DEBBION TIME. 7.50 AM-11.00 AM (DAT 2.10 OCT 2024)			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY	
9.30 AM – 9.45 AM	1571066510	Fully Auto-Regressive Multi-Modal Large Language Model for Contextual Emotion Recognition	Hiroshi Nonaka (Soka University of America, USA); Damian Valles (Texas State University, USA)	
9.45 AM -10.00 AM	1571061345	Enhancing Fire Safety With UAV Real-Time 3D Mapping and Hotspot Detection for Improved Emergency Response	Swarnamouli Majumdar (Zenext AI, USA); Sonny Kirkley (Indiana University, USA); Mayur Srivastava and Aamir Khan (Zenext AI, USA)	
10.00 AM – 10.15 AM	1571059777	Revolutionizing Road Accident Analysis: A Deep Learning Approach to Entity Recognition and Extraction	Aakarsh Surendra (CSUF, USA); Kanika Sood (California State University, Fullerton, USA); Craig Albuquerque, Shirin Akbar, Gourav Joshi and Pallavi Sakshi (CSUF, USA)	
10.15 AM -10.30 AM	1571048145	Implementation and Testing of an Experimental Near-Real-Time Patient Bedside Monitor Datastream Analysis and Alerting System in a Live Emergency Department	Leo Kobayashi (Alpert Medical School of Brown University, USA); Adewole Oyalowo (Rhode Island Hospital, USA); Uday Agrawal and Shyue-Ling Chen (RIH, USA); John Gosbee (University of Michigan, USA); Xiao Hu (Emory University, USA); Kenneth Loparo (Case Western Reserve University, USA); Gregory Jay (Alpert Medical School of Brown University, USA); Derek Merck (USA)	
10:30 AM – 10.45 AM	1571067361	Hybrid CNN-LSTM Model for Jail Activity Recognition	Dinesh Kothandaraman, Shivanjali Khare and Mounika Sri Sai Apurva Nemalipuri (University of New Haven, USA)	

SESSION 11: CLOUD COMPUTING AND ALGORITHMS SESSION CHAIR, MOHAMED AZAR INJUCINIA MILITARY INSTITUTE LIGAL					
	SESSION CHAIR: MOHAMED AZAB [VIRGINIA MILITARY INSTITUTE, USA]				
		SESSION TIME: 9:30 AM-11:00 AM (· · · · · · · · · · · · · · · · · · ·		
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY		
9.30 AM – 9.45 AM	1571067100	An Empirical Study of Caching Impact on an AWS- Hosted Website	Dane C Richardson and Wei Hao (Northern Kentucky University, USA)		
9.45 AM -10.00 AM	1571068180	Towards a Lightweight Self-Sovereign Identity Framework for IoT Network in a Zero Trust Environment	Efat Fathalla (Virginia Military Institute, USA & VMI, USA); Youssef Azab (Rockbridge County High School, USA)		
10.00 AM – 10.15 AM	1571068714	InDeKX: A High Efficiency Intrusion Detection and Knowledge Exchange Architecture for Secure Edge Computing Services	Nishar Miya, Rasib Khan, Preshika Basnet and Sajan Poudel (Northern Kentucky University, USA)		
10.15 AM -10.30 AM	1571068076	Supervised Learning Algorithm for Deep Spiking Neural Networks Based on Instantaneous Error	Yanan Li, Xianghong Lin and Xiaoqing Fan (Northwest Normal University, China)		
10:30 AM – 10.45 AM	1571056517	A Parallel Steganography Algorithm Using a New Secret Key Generation	Ahmed Imad Hammoodi Al-Jarah (Universidad Nacional Autónoma de México & Tecnológico de Monterrey, Mexico); Jorge Luis Ortega-Arjona (Universidad Autónoma de México, Mexico)		

SESSION 12: ALGORITHMS AND ML

SESSION CHAIR: SANJEEV KUMAR MARIMEKALA [IBM CERTIFIED SENIOR ENTERPRISE TECHNOLOGY ARCHITECT]

SESSION TIME: 9:30 AM-11:00 AM (DAY 2: 18TH OCT 2024)

DEDDION TIME. 7.30 AM-11.00 AM (DAT 2.10 OCT 2024)				
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY	
9.30 AM – 9.45 AM	1571069963	Comparative Study of Machine Learning Algorithms for Student Retention, Early Warning and Intervention Systems for Institutions of Higher Learning	Milka C I Madahana and John E.D Ekoru (University of the Witwatersrand, South Africa)	
9.45 AM -10.00 AM	1571065978	Autoregressive Modeling of Time Series in Renewable Energy Systems	Kaan Icer, Showrov Rahman and Kaushallya Adhikari (University of Rhode Island, USA)	
10.00 AM – 10.15 AM	1571069957	Architectural Flaw Detection in Civil Engineering Using GPT-4	Aditi Singh (Cleveland State University, USA); Abul Ehtesham (The Davey Tree Expert Company, USA); Saket Kumar (The Mathworks, USA); Tala Talaei Khoei (Northeastern University, USA)	
10.15 AM -10.30 AM	1571061995	Continuous Authentication of Smartphones Using a Convolutional Neural Network Model	John Reichenbach and Sherif S. Rashad (Morehead State University, USA)	

11:00 AM- 11:30 AM	COFFEE BREAK

KEYNOTE SESSION [DAY 2: 18TH OCT 2024)]

TIME	NAME OF THE EVENT
11:30 AM-12:15 AM	KEYNOTE ADDRESS BY KEN BIRMAN
	(PROFESSOR, CORNELL UNIVERSITY, USA)
	TITLE OF TALK: VORTEX: VECTOR DATABASE ARCHITECTURE FOR ACCELERATING RAG-LLM QUERIES
12:15 AM-1:00 PM	KEYNOTE ADDRESS BY JEFF ROGERS
	(GLOBAL RESEARCH LEADER FOR DIGITAL HEALTH AND A DISTINGUISHED SCIENTIST AT IBM)
	TITLE OF TALK: UNLOCKING THE PROMISE OF DIGITAL HEALTH: LEVERAGING INNOVATIONS IN SENSING, AI, IOT, AND QUANTUM TECHNOLOGIES

1:	00 AM-2:00 AM	LUNCH BREAK
----	---------------	-------------

PARALLEL SESSIONS

SESSION 13: MACHINE LEARNING AND AI

SESSION CHAIR: EMAN ABDELFATTAH [SACRED HEART UNIVERSITY]

SESSION TIME: 2.00 PM-3:30 PM (DAY 2: 18TH OCT 2024)

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
2.00 PM – 2.15 PM	1571069988	Detecting Various Hand Gestures From EMG Signals Using Inkjet-Printed Dry Flexible Electrodes With Machine Learning Algorithms	Nabonita Mitra (Texas Tech & TTU, USA)
2.15 PM – 2.30 PM	1571069147	Predicting Climate Change: A Linear Regression & Convex Optimization Approach	Saurabh Kapoor (Amazon & Amazon.com, USA)
2.30 PM – 2.45 PM	1571069120	Deepfake Attacks on Biometric Recognition: Evaluation of Resistance to Injection Attacks	Rahul Vijaykumar, Sandip Purnapatra, Richard Plesh, Masudul Imtiaz, Stephanie Schuckers and Daqing Hou (Clarkson University, USA)
2.45 PM -3.00 PM	1571061973	Fitting and Filtering Functional Data for Use in Video Data Analysis	Mohamad El-Hajj (MacEwan University, Canada); Iain Nicholas Smith (University of Alberta, Canada)

SESSION 14: MACHINE LEARNING AND AI SESSION CHAIR: DAMIAN MOLINA VALLES [TEXAS STATE UNIVERSITY, USA]

SESSION TIME: 2.00 PM-3:30 PM (DAY 2: 18TH OCT 2024)

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
2.00 PM – 2.15 PM	1571068960	Predicting Emotional States From Wearable ECG	Timothy C Sweeney-Fanelli (Clarkson University, USA & Affects AI LLC, USA); Ernesto Sola-Thomas, Naveenkumar G Venkataswamy, Justin Au-Yeung and Masudul Imtiaz (Clarkson University, USA)
2.15 PM – 2.30 PM	1571061702	Pedestrian Crosswalk Safety at Intersections Using YOLOv8 Detection	Mann Patel and Heba Elgazzar (Morehead State University, USA)
2.30 PM – 2.45 PM	1571071117	A Framework for Automated Selective Fine-Tuning of Domain-Specific Large Language Models Using Graph-Based Retrieval Augmented Generation	Hariharan Govindharajan (Researcher, USA); Senthil Kumar V (Resercher, Indonesia)
2.45 PM -3.00 PM	1571069953	Dynamic Logistic Ensembles With Recursive Probability and Automatic Subset Splitting for Enhanced Binary Classification	David Li and Mohammad Zubair Khan (Yeshiva University, USA)
3.00 PM – 3.15 PM	1571067837	Using Fitbit to Implement Personalized Walking Programs in Older Adults	Aref Smiley (University of Uath, USA); Te-Yi Tsai (Data Scientist, University of Utah, USA); Joseph Finkelstein (University of Utah, School of Medicine, USA)

SESSION 15: SECURITY AND PRIVACY

SESSION CHAIR: KHALED M. ELLEITHY [SCHOOL OF ENGINEERING, UNIVERSITY OF BRIDGEPORT, USA]

SESSION TIME: 2.00 PM–3:30 PM (DAY 2: 18^{TH} OCT 2024)

SESSION TIME: 2.00 PM-5:50 PM (DAY 2: 18 OCT 2024)			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
2.00 PM – 2.15 PM	1571067413	Comparison of Quantum Computing Algorithms for Network Traffic Partitioning and Early Mitigation of DoS / DDoS Attacks	Casimer DeCusatis, Dominick P Foti, Evan Spillane and Meghan O'loughlin (Marist College, USA)
2.15 PM – 2.30 PM	1571066637	Understanding and Mitigating Social Engineering Attacks to Elderly People: A Comprehensive Survey of Methods, Impacts, and Future Solutions	Hayin Tamut and Indira K Dutta (Arkansas Tech University, USA)
2.30 PM – 2.45 PM	1571069899	Adaptive Row Activation and Refresh a Hybrid Approach to Mitigate RowHammer	Nevzat U Demirseren and Iman Vakilinia (University of North Florida, USA)
2.45 PM -3.00 PM	1571067501	The Rise of Artificial Intelligence: Industry Insights and Applications in Security Information and Event Management (SIEM)	Md L. Ali (Rider University, USA); Kutub Thakur (University of Maryland GC, USA); Helen Barker (University of Maryland, GC, USA); Michael Chan (Baruch College, CUNY, USA)
3.00 PM – 3.15 PM	1571068274	System for Detecting and Jamming Unauthorized Communications Using RF- SDR	Hosam Alamleh (University of North Carolina Wilmington & Louisiana Tech University, USA); Laura Estremera (University of North Carolina Wilmington, USA)

3:30 PM- 4:00 PM	COFFEE BREAK
------------------	--------------

	SESSION 16: MACHINE LEARNING				
	SESSION CHAIR: HEBA MOHAMED ELGAZZAR [MOREHEAD STATE UNIVERSITY]				
	SESSION	TIME: 4:00 PM- 5:30 PM (DAY 2: 18 ^T			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY		
4.00 PM – 4.15 PM	1571069150	Towards User-Driven Exoskeletal Assistive Control Using Deep Reinforcement Learning	Chinmayi Goyal (Yorktown NY)		
4.15 PM – 4.30 PM	1571069128	Optimal Variable Ordering for Solving Systems of Nonlinear Equations	Christopher F. S. Maligec (Western University & ORCCA Lab, Canada)		
4.30 PM – 4.45 PM	1571068465	Bangla SBERT - Sentence Embedding Using Multilingual Knowledge Distillation	Md. Shihab Uddin (Comilla University, Bangladesh); Mohd Ariful Haque (Clark Atlanta University, USA); Rakib Hossain Rifat (Texas Tech University, USA); Marufa Kamal (BRAC University, Bangladesh); Kishor Datta Gupta (Clark Atlanta University, USA & Silicon Orchard Ltd, Bangladesh); Roy George (Clark Atlanta University, USA)		
4.45 PM – 5.00 PM	1571067214	Video Steganography Algorithm Defining the ROI Using Haar-Like Features and Convolutional Neural Network	Arzu Susoglu (University of Bridgeport, USA); Khaled M. Elleithy (School of Engineering, University of Bridgeport, USA)		
5.00 PM – 5.15 PM	1571066981	Application of Machine Learning Models for Predictive Analytics on AI4I 2020	Eman Abdelfattah, Hard Shah and Brian Haley (Sacred Heart University, USA)		

SESSION 17: SECURITY AND PRIVACY

SESSION CHAIR: MD ALI [RIDER UNIVERSITY, USA]

SESSION TIME: 4:00 PM- 5:30 PM (DAY 2: 18TH OCT 2024)

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
4.00 PM – 4.15 PM	1571062603	Securing Mobile Finance: Trends, Mitigations, and Best Practices	Hosam Alamleh (University of North Carolina Wilmington & Louisiana Tech University, USA); Laura Estremera (University of North Carolina Wilmington, USA)
4.15 PM – 4.30 PM	1571069985	Devphish: Exploring Social Engineering in Software Supply Chain Attacks on Developers	Tahereh Jafarikhah (University of North Carolina Wilmington, USA); Hossein Siadati, Elif Sahin, Elijah Lorenzo Tripp and Terrence Brent Hernandez (UNCW, USA); Denis Khryashchev (NYU, USA); Amin Kharraz (FIU, USA)
4.30 PM – 4.45 PM	1571069864	Anonymous Messaging for IoT and Cloud Security Using PUF-Based Protocols: A Lightweight Alternative to SSL	Tristan Digert, Madj Safi, Eric Clark and Tarek Idriss (Western Washington University, USA)
4.45 PM – 5.00 PM	1571069673	Emergency Wireless Chatting Using RF	Jobin Joseph, Ramone Bolton and Constantin Filiuta (Farmingdale State College - SUNY, USA); Chris Danetti and Supriyo Karmakar (Farmingdale State College-SUNY, USA)
5.00 PM – 5.15 PM	1571069216	Fingerprinting Browsers in Encrypted Communications	Sandhya Aneja (Marist College, USA); Nagender Aneja (Virginia Tech, USA)

SESSION 18: MACHINE LEARNING, SECURITY AND ROBOTICS					
SE	SESSION CHAIR:				
		FIME: 4:00 PM- 5:30 PM (DAY 2: 18 ^T	,		
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY		
4.00 PM – 4.15 PM	1571066814	6G Vision-Intelligent Millimeter-Wave Systems on High Altitude Platform Stations	Mohammad Shah Alamgir (University of Texas at San Antonio, USA); Brian T Kelley (University of Texas at San Antonio & JBSA 5G PTO, USA)		
4.15 PM – 4.30 PM	1571066668	Virtual Reality on Assessing the Motor Skills of Individuals with Autism Spectrum Disorder	Ayesha A Malik (University of Central Florida, USA); Abrar M Zaki (Rensselaer Polytechnic Institute, USA); Ngoc Chung Tran (California State University Fullerton, USA); Irene Liang (Cornell University, USA); Ting Liu (Texas A&M University-San Antonio, USA); Damian Valles (Texas State University, USA)		
4.30 PM – 4.45 PM	1571066508	Deepfake Detection Using Transfer Learning	Shafiqul Alam Khan and Damian Valles (Texas State University, USA)		
4.45 PM – 5.00 PM	1571066974	Is Everlasting Security Necessary?	Albert H Carlson (Austin Community College, USA); Benjamin Williams (University of Idaho, USA); Sai Ranganath Mikkilineni (Delaware State University, USA)		
5.00 PM – 5.15 PM	1571067905	An Interactive Robotic System for Efficient Book Borrowing and Returning in a Library Environment	Amna Mazen (Michigan Technological University, USA); Weiming Chen (University of Michigan, USA); Wenting Wei, Daojun Teng and Mariam Faied (University of Detroit Mercy, USA)		
5:15 PM – 5:30 PM	1571071151	RoboRuggles: Design of a Combat Robot	Saurav Basnet (550 Huntington Ave & Wentworth Institute of Technology, USA)		

Day 3: 19th OCT 2024

TIME	PARALLEL SESSION
9:30 AM-11:00 AM	SESSION 19: MACHINE LEARNING [ROOM – THINKLAB VIZ THEATRE]
9:30 AM-11.00 AM	SESSION 20: SENSOR NETWORKS, GREEN COMPUTING AND NLP [ROOM - THINKLAB MAIN SPACE]
9:30 AM-10.30 AM	SESSION 21: SIGNAL PROCESSING, VLSI AND CONTROL SYSTEMS [ROOM - THINKLAB AREA B]
11.00 AM- 11.30 AM	BREAK [THINKLAB ALL]
11:30 PM – 1.00 PM	KEYNOTE 5: ARCHITECTURE AND DESIGN APPROACHES TO ML HARDWARE ACCELERATION: PERFORMANCE COMPUTE ENVIRONMENT [ROOM – THINKLAB VIZ THEATRE]
	KEYNOTE 6: EMPOWERING HEALTHCARE WITH DIGITAL TWINS: FROM DESIGN TO REAL-WORLD IMPACT [ROOM – THINKLAB VIZ THEATRE]
1.00 PM-2.00 PM	LUNCH [THINKLAB ALL]
1:30 PM – 4:00 PM	WORKSHOP ON ASPECTS OF VIRTUAL REALITY [ROOM - THINKLAB ALL]
2.00 PM-3:30 PM	SESSION 22: WIRELESS NETWORKS [ROOM - THINKLAB VIZ THEATRE]
2.00 PM-4.00 PM	SESSION 23: MACHINE LEARNIG, AI [VIRTUAL SESSION] [ROOM – THINKLAB MAIN SPACE]
2.00 PM-4.00 PM	SESSION 24: ARTIFICIAL INTELLIGENCE AND BIG DATA [VIRTUAL SESSION] [ROOM - THINKLAB AREA B]

SESSION 19: MACHINE LEARNING

SESSION CHAIR: DAVID LI [YESHIVA UNIVERSITY]

SESSION TIME: 9.30 AM-11.00 AM (DAY 3: 19th OCT 2024)

SESSION TIME: 9.50 AM-11.00 AM (DAY 5: 19th OCT 2024)			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
9.30 AM – 9.45 AM	1571071154	Towards A Minimalistic Sensor-Based Smart Soccer Net With Machine Learning	Nguyen Ho, Zaid Fafouri, Austin Gregory and Michael Okwori (Union College, USA)
9.45 AM -10.00 AM	1571066007	Supervised Learning With Informed Graph Convolution	Linden David Aites and David E Stewart (University of Iowa, USA)
10.00 AM – 10.15 AM	1571066710	Enhancing Early Diagnosis of Autism With Machine Learning Algorithms Using Postural Control Features	Maya Nachega (Vanderbilt University, USA); Sugru A Yahaya (Purdue University, USA); Ila Wallace (Texas State University, USA); Ting Liu (Texas A&M University-San Antonio, USA); Damian Valles, Rachel Koldenhoven and Yumeng Li (Texas State University, USA)
10.15 AM -10.30 AM	1571069901	Sidewalk-Based Accessible Pedestrian Routing	Andrew J. Park and Finian Lugtigheid (Trinity Western University, Canada); Eunju Hwang (Virginia Tech, USA); Valerie Spicer and Patricia L. Brantingham (Simon Fraser University, Canada)
10:30 AM – 10.45 AM	1571061946	An Innovative System for Real-Time Translation From American Sign Language (ASL) to Spoken English Using a Large Language Model (LLM)	Larry Emerson Johnson and Sherif S. Rashad (Morehead State University, USA)
10:45 AM – 11.00AM	1571068271	Intelligent Automation of SFO Crime Prediction Using Multiple Artificial Intelligence Methods	Praveen Kuruvangi Parameshwara (Infosys Ltd. & Www.infosys.com, USA); Shilpa Gupta (SJSU, USA)

SESSION 20: SENSOR NETWORKS, GREEN COMPUTING AND NLP SESSION CHAIR: SANDHYA ANEJA [MARIST COLLEGE, USA]

SESSION TIME: 9.30 AM-11.00 AM (DAY 3: 19th OCT 2024)

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
	1571069198	Achieving Net-Zero for 555 Huntington	Federica Aveta, Logan Cabral, TJ Colville, Adam Gonneville and Tedi Qafko
9.30 AM – 9.45 AM		Avenue	(Wentworth Institute of Technology, USA); Saurav Basnet (550 Huntington Ave &
			Wentworth Institute of Technology, USA)
	1571067902	A Small-Scale Intra-IoT Network Prototype	Wookwon Lee and Keegan J McCann (Gannon University, USA); Nicholas A. Nagy
9.45 AM -10.00 AM		for Centralized Monitoring of CPS/IoT	(University of Gannon, USA); Joseph Kvortek, Christopher P Petteys, Jr., Joshua A
		Devices on Isolated Intranets	Hicks and Damien T Chu (Gannon University, USA)
10.00 AM – 10.15 AM	1571069206	Object Tracking Spherical Underwater	Federica Aveta, Tedi Qafko, Patrick R. Blanchard and Quang L. Vu (Wentworth
		Sensing Robot	Institute of Technology, USA)
	1571069982	Enabling Moving Target Defense for Real-	Rajarshi Mukherjee (Virginia Polytechnic and State University, USA); Mohamed
10.15 AM -10.30 AM		Time CPS Security	Azab (Virginia Military Institute, USA); Thidapat Chantem (Virginia Polytechnic
			and State University, USA)
10:30 AM – 10.45 AM	1571067430	Enhancing Abstraction in Large Language	Pravir Malik (Deep Order Technologies, USA); Arjun Subedi (Iandmyai, USA)
10.507111 10.457111	13/100/130	Models Through Nature-Inspired Semantic	Truvii Mank (Beep Order Teenhologies, Obri), riijan babear (tahaniyar, Obri)
		Patterns	
10:45 AM – 11.00AM	1571069999	Effects of Common Sense and Supporting	Trung Thanh Nguyen (Winona State University, USA); Amartya Hatua (Fidelity
		Texts for the Important Words in Solving Text	Investments, USA)
		Entailment Tasks - A Study on the e-SNLI	
		Dataset	

SESSION 21: SIGNAL PROCESSING, VLSI AND CONTROL SYSTEMS SESSION CHAIR: HEMANT PUROHIT [FLORIDA INSTITUTE OF TECHNOLOGY]					
	SESSION TI	ME: 9.30 AM-11.00 AM (DAY 3: 19tl	h OCT 2024)		
TIME ALLOTTED	TIME ALLOTTED PAPER ID PAPER NAME AUTHORS WITH AFFILIATION & COUNTRY				
9.30 AM – 9.45 AM	1571064593 1571046256	Hardware Implementation of Real-Time 2D DOA Estimation Algorithm Using an L- Shaped Array Future Non-Volatile Memory for	Nizar Tayem (Texas A & M, USA); Austin Burns, Kameron Hansen, Sam Pearson, Noah Blount and David Reyes (Texas A & M University - Commerce, USA); Ahmed Hussain (Prince Mohammed University, Saudi Arabia) Supriyo Karmakar (Farmingdale State College-SUNY, USA)		
9.45 AM -10.00 AM		Semiconductor Industry			
10.00 AM – 10.15 AM	1571069214	An Adaptive Dropout and Parallel Computing Approaches for Accelerating RNN Controller			

11:00 AM- 11:30 AM COFFEE BREAK

KEYNOTE SESSION [DAY 3: 19th OCT 2024]

TIME	NAME OF THE EVENT
11:30 AM-12:15 PM	KEYNOTE ADDRESS BY CHRISTOPHER LIRAKIS (DESEA DOLL STAFE MEMBER IN THE IBM OLIANTUM TEAM)
	(RESEARCH STAFF MEMBER IN THE IBM QUANTUM TEAM) TITLE OF TALK: INTRODUCTION TO QUANTUM CENTRIC SUPERCOMPUTING
	KEYNOTE ADDRESS BY JUAN LI [VIRTUAL]
12:15 AM-1:00 PM	(PROFESSOR, NORTH DAKOTA STATE UNIVERSITY, USA)
	PARTICIPATION LINK - LINK
	TITLE OF TALK: EMPOWERING HEALTHCARE WITH DIGITAL TWINS: FROM DESIGN TO REAL-WORLD IMPACT

1:00 AM-2:00 A	AM	LUNCH BREAK		
	Workshop on Aspects of Virtual Reality 1:30 PM – 4:00 PM			
	By			
Dr. Phi	Dr. Phillip Bradford (University of Connecticut, Stamford, USA)			

SESSION 22: WIRELESS NETWORKS				
SESSION CHAIR: SUPRIYO KARMAKAR [FARMINGDALE STATE COLLEGE-SUNY]				
SESSION TIME: 2.00 PM-3:30 PM (DAY 3: 19th OCT 2024)				
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY	
2.00 PM – 2.15 PM	1571060776	Interference-Limits Aware Power Optimization for 5G NR-U and Wi-Fi6E in Shared-Spectrum	Rasika Nilaweera Kalahe Wattege and Fernando Beltran (University of Auckland, New Zealand); Jairo A Gutierrez (Auckland University of Technology, New Zealand)	
2.15 PM – 2.30 PM	1571068297	Revisiting FastTap: Effects of Increasing Command Capacity of Spatial Memory Menus in Tablets	Sayeem Md Abdullah and Md. Sami Uddin (University of Regina, Canada)	
2.30 PM – 2.45 PM	1571069163	MBSE for Contingency Planning for Cellular Networks With OPM	Hemant Purohit and Siddhartha Bhattacharyya (Florida Institute of Technology, USA)	
2.45 PM -3.00 PM	1571066499	LUT-Based Multipliers for IEEE-754 Floating Point Arithmetic on FPGAs	Noureddine Chabini (Royal Military College of Canada, Canada); Marilyn Wolf (University of Nebraska-Lincoln, USA); Rachid Beguenane (Royal Military College of Canada, Canada)	

SESSION 23: MACHINE LEARNING, AI [VIRTUAL SESSION]					
SESSION CHAIR: EFAT FATHALLA (VIRGINIA MILITARY INSTITUTE, USA & VMI, USA)					
SESSION TIME: 2.00 PM-4.00 PM (DAY 3: 19th OCT 2024)					
PARTICIPATION LINK: CLICK HERE					
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY		
2.00 PM – 2.15 PM	1571068290	WingsSL: Integrated Approach for the Detection and Conservation of Birds in Sri Lanka	Hashini S Rajapaksha, Dulmi C Gonapoladeniya, Hiruni S Peiris, Naduni S Siriwardana and Narmada Gamage (Sri Lanka Institute of Information Technology, Sri Lanka); Thilini Sanvitha Kasthuriarachchi (SLIIT, Sri Lanka)		
2.15 PM – 2.30 PM	1571068287	CodeNexa: A Novel Security Framework for Federated Learning to Mitigate Man-In-The-Middle Attacks	Livindu Peiris (Sri Lanka Institute of Information Technology (SLIIT), Sri Lanka)		
2.30 PM – 2.45 PM	1571069776	Graph-Based Ranking Techniques for Improving VLSI Placement	Xuan-Truong Xuan Truong and Tien-Dung Do (Posts and Telecommunications Institute of Technology, Vietnam)		
2.45 PM -3.00 PM	1571066342	Optimizing Breast Cancer Classification With Ensemble Methods: A Focus on Bagging Techniques	Sultan Ahmed Almalki (Najran University, Saudi Arabia)		
3.00 PM – 3.15 PM	1571069784	Remote Estimation of Above Ground Forest Biomass Using LiDAR and Drone Imagery Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato, Neil Loftus, Sam McGrath, Husnu S Narman and Rick Gage (Music Cade Parlato)			
3.15 PM – 3.30 PM	1571068423	Performance Analysis of Machine Learning Models for Predicting Order Process Management	Arun Prasad Jaganathan (Anna University, USA & Jugl, USA); Shadi Khan Baloch (Mehran University of Engineering and Technology Jamshoro Sindh Pakistan, Pakistan)		
3.30 PM – 3.45 PM	1571069995	Design of a Machine for the Production of Advanced Fabrics	Raul Oswaldo Meza Torres, Anthony Jesus Hinostroza Flores, Luis Enrique Soto Otivo, Sario Angel Chamorro Quijano and Roberto Belarmino Quispe Cabana (Universidad Continental, Peru)		
3.45 PM -4.00 PM	1571068292	Modified Transmission Map Function With Hyperparameter Tuning for Single Image Dehazing	Arya Agrawal (VIT Vellore, India); Teena Sharma (Indian Institute of Technology Guwahati, India); Nishchal K Verma (Indian Institute of Technology Kanpur, India); Shantaram Vasikarla (California State University-Northridge, USA)		

SESSION 24: ARTIFICIAL INTELLIGENCE AND BIG DATA [VIRTUAL SESSION]

SESSION CHAIR: ROBIN CHATAUT (TEXAS CHRISTIAN UNIVERSITY, USA)

SESSION TIME: 2.00 PM-4.00 PM (DAY 3: 19th OCT 2024)

PARTICIPATION LINK: CLICK HERE

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY	
2.00 PM – 2.15 PM	1571069800	Dynamic Strategy Optimizer (DSO): Application in Enhancing New User Engagement in Hybrid Recommender System	Ali M Mohammadi (State University of New York at Buffalo, USA); Ali Soleimani (Azad University, Iran); Shamsad Parvin (University at Buffalo, USA)	
2.15 PM – 2.30 PM	1571065659	Mapping Crime Dynamics: Integrating Textual, Spatial, and Temporal Perspectives Shamsad Parvin, Reddi Tarun and Charvi Kusuma (University at Buffalo, USA)		
2.30 PM – 2.45 PM	1571069271	Maximum Likelihood Estimator for Zipf Distribution: A New Approach Lizeth Carrillo Mancilla (ITESO, Mexico); Luis Rizo-Dominguez (Iteso University Mexico)		
2.45 PM -3.00 PM	1571067883	Federated Learning With Authenticated Clients Dipankar Dasgupta and Sagar Pathak (The University of Memphis, U		
3.00 PM – 3.15 PM	1571067313	A Dual-Stage Ensemble Approach to Detect and Classify Ransomware Attacks Peizhi Yan, Tala Talaei Khoei, Reena Sajad Hyder and Reemaa Saja (Northeastern University, USA)		
3.15 PM – 3.30 PM	1571065953	Development and Evaluation of an AI- Enhanced Python Programming Education System Eric Zabala and Husnu S Narman (Marshall University, USA)		
3.30 PM – 3.45 PM	1571069557	Stacked Ensemble of Fine-Tuned CNNs for Knee Osteoarthritis Severity Grading Technology Guwahati, India); Nishchal K Verma (Indian Institute of Technology Guwahati, India); Shantaram Vasikarla (California State University-Northridge, U		
3.45 PM -4.00 PM	1571069182	Enhanced Categorization of Cybersecurity Vulnerabilities	Ocheme Anthony Ekle (Tennessee Technological University, USA); Denis Ulybyshev (Florida Polytechnic University, USA)	

4.00 PM- 4:30 PM	COFFEE BREAK
VALEDICTORY SESSION	4:30 PM – 5:30 PM