

17th IEEE INTERNATIONAL CONFERENCE ON OPEN-SOURCE SYSTEMS AND TECHNOLOGIES (ICOSST 2023)

version 14

20th -21st December 2023

OPENING CEREMONY

Wednesday 20th December 2023 | Duration [09:30 – 10:15] Hrs.

Venue: Transport Seminar Hall, UET, Lahore, Pakistan

Time	Activity
[09:30 – 09:33]	Recitation of Holy Quran
[09:32 – 09:35]	National Anthem
[09:35 – 09:37]	Video flashback of the ICOSST
[09:37 – 09:45]	Welcome Note by: Prof. Dr. Waqar Mahmood Director, KICS UET Lahore
[09:45 – 09:48]	Prospects of the 17th ICOSST 2023 Video
[09:48 – 09:52]	Remarks by: Mr. Ahsan Younas MD Punjab Safe Cities Authority
[09:52 – 09:55]	Remarks by: Mr. Ayub Ghauri CEO – Founder HospitAll (Pvt) Ltd
[09:55 – 10:00]	Remarks by: Prof. Dr. Habib ur Rehman Vice Chancellor UET Lahore
[10:00 – 10:15]	Presentation of souvenirs
[10:15]	Group photo
	Exhibition Visit and Tea Break 45 mins

DAY 1 (20th DECEMBER 2023)

Time Track – 1A	Venue: UET Main Auditorium CRI Room	Time Track – 1B	Venue: UET Main Auditorium CR2 Room Track Tile: NLP, Artificial Intelligence, and Autonomous Systems
<i>Session Chair: Dr. Majid Hussain</i>		<i>Session Chair: Dr Syed Waqar ul Qounain Jaffry</i>	
[11:00-11:45] Hrs 45 Minutes	Talk 1 Innovation, Knowledge Base Economy & Chip Design Dr. Rashad Ramzan <i>National University of Computer and Emerging Sciences, (FAST-NU) Islamabad</i>	[11:00-11:15] Hrs 15 Minutes	Vote Bank Forecast Based on Social Media Sentiment Analysis <i>(Engineer Muhammad Imran Ghafoor)</i>
		[11:15-11:30] Hrs 15 Minutes	Cross comparison of COVID-19 fake news detection machine learning models <i>(Abdul Hannan)</i>
		[11:30-11:45] Hrs 15 Minutes	Multilingual Transliteration based Urdu Chatbot using Rasa Framework <i>(Hira Mohiuddin)</i>
[11:45 - 12:30] Hrs 45 Minutes	Talk 2 Cognitive Approach to Subjectivity in machines Prof. Dr. Wajahat Mahmood Qazi <i>COMSATS Lahore</i>	[11:45-12:00] Hrs 15 Minutes	Isolated Words Speech Recognition System for Brahvi Language using Recurrent Neural Network <i>(Muhammad Khalid)</i>
		[12:00-12:15] Hrs 15 Minutes	Speech Emotion Recognition in Pakistani-Accented English Language <i>(Muhammad Bilal)</i>
		[12:15-12:30] Hrs 15 Minutes	Low-cost multi-layer approach for motion detection system for area monitoring <i>(M Farhan Shahid)</i>
[12:30 - 13:15] Hrs 45 Minutes	Talk 3 Saving Our Cities with Technology and Data-Driven Decision Making Prof. Dr. Momin Uppal <i>LUMS</i>	[12:30-12:45] Hrs 15 Minutes	Advancing Epilepsy Disease Classification through Machine Learning and Deep Learning Models Utilizing EEG Data <i>(Adnan Saleem)</i>
		[12:45-13:00] Hrs 15 Minutes	Mitigating Challenges in Fraud Transaction Detection: Overcoming Imbalanced Datasets and Feature Complexity via Down-Sampling and Dimension Reduction <i>(Yasir Malik)</i>
		[13:00-13:15] Hrs 15 Minutes	Robotrolley: Customer Following Trolley (CFT) <i>(Aneeqa Ramzan)</i>
		[13:15-13:30] Hrs 15 Minutes	Multi-Modal Architecture for Cricket Highlights Generation Using Computer Vision and Large Language Model <i>(Husnain Sattar)</i>
		Industrial Projects Exhibition at Main Auditorium Lobby	
		Generative AI and Cyber Security Workshops in Smart Classroom (Chair Dr Aslam)	
		Recruitment Drive (Walk in Interviews)	

Lunch and Prayer Break [13:15 - 14:00] Hrs

SESSION-II			
Time Track – 2A	<i>Venue: UET Main Auditorium CRI Room</i>	Time Track – 2B	<i>Venue: UET Main Auditorium CR2 Room Track Title: IoT, Robotics, Networking, and Cloud Computing</i>
<i>Session Chair: Dr. Amir Mehmood</i>		<i>Session Chair: Dr. Amjad Hussain</i>	
<p>[14:00 - 14:45] Hrs 45 Minutes</p>	<p>Talk 4</p> <p>Transforming the Future with Artificial Intelligence <i>Dr. Yasir Ayyaz</i> Chairman/CPD at National Center of Artificial Intelligence (NCAI) NUST Islamabad</p>	<p>[14:00 - 14:15] Hrs 15 Minutes</p>	<p>An Artificial Bee Colony Based PID Tunning Algorithm for Inverted Pendulum and Cart System (Sabir Husnain)</p>
		<p>[14:15 - 14:30] Hrs 15 Minutes</p>	<p>Ownership Verification For Digital Art Using Smart Contract And Blockchain Technology (Engineer Muhammad Imran Ghafoor)</p>
		<p>[14:30 - 14:45] Hrs 15 Minutes</p>	<p>Forecasting Groundwater Depletion in Quetta Sub-Basin using Remote Sensing Data: Deep Learning Approach (Fatima)</p>
<p>[14:45 - 15:30] Hrs 45 Minutes</p>	<p>Talk 5</p> <p>Enabling Technologies for Internet of Things in 6G Networks <i>Dr. Waleed Ijaz</i> Lakehead University Canada</p>	<p>[14:45 - 15:00] Hrs 15 Minutes</p>	<p>Securing Bio-FET Interfaces in IoBNT Systems using Deep Learning Techniques (Taimur Bakhshi)</p>
		<p>[15:00 - 15:15] Hrs 15 Minutes</p>	<p>DBoT: Enhancing Scalability and Privacy in Intelligent Buildings through a Blockchain-Based Direct Acyclic Graph (Syed Irfan Raza Naqvi)</p>
		<p>[15:15 - 15:30] Hrs 15 Minutes</p>	<p>Automated White Box Test Case Generation for Statement Coverage Using U-NSGA-III (Mehwish Naz)</p>
<p>[15:30 - 16:15] Hrs 45 Minutes</p>	<p>Talk 6</p> <p>Emerging Trend of Augmenting Intelligence in ICT Systems <i>Dr. Shoab Ahmad Khan</i> CEO CARE</p>	<p>[15:30 - 15:45] Hrs 15 Minutes</p>	<p>MIoT-based Smart Cardiac Healthcare Monitoring System for Ubiquitous Healthcare Services (Umara Umar)</p>
		<p>[15:45 - 16:00] Hrs 15 Minutes</p>	<p>Securing the Skies: Enhancing Communication Security for Unmanned Aerial Vehicles (Iram Fatima Hashmi)</p>
		<p>[16:00 - 16:15] Hrs 15 Minutes</p>	<p>A Real-Time System for Classification of Pakistan Sign Language using Machine Learning (Muhammad Tanveer Riaz)</p>

Industrial Projects Exhibition at Main Auditorium Lobby

Recruitment Drive (Walk in Interviews)

[16:15 - 16:45] Hrs 30 Minutes	Talk 6a From Data to Dreams: Unlocking the Potential of Generative AI with AWS Cloud Computing <i>Dr. Amir Mehmood</i> <i>KICS UET Lahore</i>			
Closing Remarks Day 1				

DAY 2 (21th DECEMBER 2023)

SESSION-I				
Time: Track-3A	<i>Venue: UET Main Auditorium CR1 Room</i>		Time: Track-3B	<i>Venue: UET Main Auditorium CR2 Room</i> <i>Track Title: Computer Vision, Meta Verse, and Virtual Reality</i>
<i>Session Chair: Dr. Usman Ghani</i>			Session Chairs: Dr. Yasir Saleem and Dr. Majid Hussain	
[10:00-10:45] Hrs 45 Minutes	Talk 7 Foresight into the role Generative AI powered Care Robots for the aging world population <i>Dr. Humayun (Hugh) Rashid</i> <i>CEO Xaver</i>		[10:00-10:45] Hrs 45 Minutes	Talk 11 Envisioning precision medicine : augmented reality (open source solutions) shaping the future of epilepsy surgery <i>Dr. Muhammad Shahzad Zafar</i> <i>Professor of Pediatrics Assistant Professor in Neurology United States</i>
[10:45-11:30] Hrs 45 Minutes	Talk 8 NCAI's Impactful Journey in AI Domains <i>Dr. Usman Ghani</i> <i>UET Lahore</i>		[10:45-11:00] Hrs 15 Minutes	<i>Uncovering Sentiments Expressed on GPT in Academic Papers</i> <i>(Alicia Hong)</i>
			[11:00-11:15] Hrs 15 Minutes	<i>EfficientNetB0 Ensemble Model for Unified Deepfakes Detection</i> <i>(Samiya Afzal Minhas)</i>
			[11:15-11:30] Hrs 15 Minutes	<i>Review on Detection and Classification of Diabetic Retinopathy using Fundus Images</i> <i>(Azhar Imran)</i>
[11:30-12:15] Hrs 45 Minutes	Talk 9 Talk Title: Why LLM's are not enough <i>Ahad Khurshed</i> <i>Agile CEO Saudi</i>		[11:30-11:45] Hrs 15 Minutes	<i>Path Tracking and Obstacle Avoidance Control Using Deep Reinforcement Learning for Autonomous Vehicles</i> <i>(Tariq Naeem)</i>
			[11:45-12:00] Hrs 15 Minutes	<i>Automated Hematology: Blood Cell Detection and Classification Using Deep Learning Algorithms</i> <i>(Tahira Mahboob)</i>
			[12:00-12:15] Hrs 15 Minutes	<i>Automated Deep Learning Based Knee Osteoarthritis Joint Extraction and Classification</i> <i>(Sonain Jamil)</i>

Brainiac Student competition in KICS 5 Room Main Auditorium

<p>[12:15-13:00]</p> <p>Hrs</p> <p>45 Minutes</p>	<p>Talk 10</p> <p>The Weakest Link</p> <p>Khurram Javed</p> <p><i>Director Capacity Building at National CERT, Government of Pakistan</i></p>	<p>[12:15-12:30]</p> <p>Hrs</p> <p>15 Minutes</p>	<p>AR Qaida: AR Assisted Multi-level Interactive Framework for Smart Learning of Early to Primary School Children</p> <p><i>(Ayesha Azam)</i></p>	<p>Brainiac Student competition</p>
		<p>[12:30-12:45]</p> <p>Hrs</p> <p>15 Minutes</p>	<p>Formal Modeling and Verification of IoT-based Smart Waste Management System using SPIN</p> <p><i>(Husnain Raza)</i></p>	
		<p>[12:45-13:00]</p> <p>Hrs</p> <p>15 Minutes</p>	<p>Evaluation of the Energy Pricing of Electric Vehicle Charging Stations using Convex Optimization Strategy</p> <p><i>(Muneeb Hassan)</i></p>	
		<p>[13:00-13:15]</p> <p>Hrs</p> <p>15 Minutes</p>	<p>LsStk: Lightweight solution to preventing Stack from buffer overflow vulnerability</p> <p><i>(Muhammad Ahsan)</i></p>	
		<p>[13:15-13:30]</p> <p>Hrs</p> <p>15 Minutes</p>	<p>License compatibility for Python packages: the FASTEN PyPI plugin</p> <p><i>(Michele Scarlato)</i></p>	
		<p>[13:30-13:45]</p> <p>Hrs</p> <p>15 Minutes</p>	<p>LCV-CM: a FASTEN Open Source License Compliance Verifier with Compatibility Matrix</p> <p><i>(Michele Scarlato)</i></p>	

Lunch and Prayer Break 13:00 – 14:00

Day 2 SESSION-II

<p>Time:</p> <p>Track-4A</p>	<p>Venue: Transport Seminar Hall</p>		
<p>Session Chair: Dr. Amir Mehmood</p>			
<p>[14:15-15:00]</p> <p>Hrs</p> <p>45 Minutes</p>	<p>Talk 12</p> <p>All Technology is Social: Going Beyond Building LLMs</p> <p>Dr Ather usama</p> <p><i>Edtech</i></p>		
<p>[15:00-16:00]</p> <p>Hrs</p> <p>60 Minutes</p>	<p>Panel Discussion</p> <p>Generative AI: The Engine of the Next Digital Revolution - Challenges and Opportunities.</p> <p>Moderator</p> <p><i>Mr. Farhan Riaz</i></p> <p>Panelists</p> <p><i>Dr. Waqar Mehmood</i></p> <p><i>Dr. Amir Mehmood</i></p> <p><i>Mr. Ahad Khurshid</i></p> <p><i>Mr. Malik Mudasir</i></p> <p><i>Ms. Sadia Gondal</i></p>		

CLOSING CEREMONY

Thursday 21st December 2023 | Duration [04:00 – 05:00] Hrs.

Venue: Transport Seminar Hall, UET, Lahore, Pakistan

Time	Activity
[04:00 – 04:03]	Recitation of Holy Quran
[04:03 – 04:05]	National Anthem
[04:05 – 04:10]	Closing Notes by: Prof. Dr. Waqar Mahmood Director, KICS UET Lahore
[04:10 – 04:12]	ICOSST 2023 Highlights
[04:12 – 04:17]	Remarks by: Mr. Ahad Khurshid Co-founder Agile Loop
[04:17 – 04:21]	Remarks by: Mr. Malik Mudasir Central Executive Committee Member, P@sha
[04:21 – 04:24]	Remarks by: Dr. Ather Osama Managing Partner, EDTech
[04:24 – 04:30]	Remarks by: Prof. Dr. Habib ur Rehman Vice Chancellor UET Lahore
[04:30 – 04:45]	Presentation of Souvenirs and Prize Distribution
[04:45]	Group photo & Hi-Tea