

## Conference Program

## Horizons of Information Technology and Engineering (HITE-2024)

15th -16th OCTOBER 2024

## OPENING CEREMONY

**Tuesday 15th October 2024 | Duration [09:30 - 11:10] Hrs.**

**Venue: UCP Auditorium, Lahore, Pakistan**

Time	Activity
[09:00 – 09:03]	Recitation of Holy Quran
[09:03 – 09:05]	National Anthem
[09:05 – 09:07]	Video of UCP -Events
	Welcome Note by:
[09:07 – 09:15]	<b>Dr. Muhammad Amjad Iqbal</b>
	Dean , FoIT UCP Lahore
	Opening Address by Pro-Rector
[09:15 – 09:25]	<b>Dr. Hammad Naveed</b>
	<b>Keynote-I - Virtual Reality: ACatalyst for Upskilling Medical Staff in Developing Economies</b>
[09:25 – 10:00]	Prof. Dr. Andrew Ware
	Professor
	University of South Wales, UK
	<b>Keynote-II - AI on the Leading Edge</b>
	<b>Prof. Dr. Yasar Ayaz</b>
[10:00 – 10:35]	Chairman and Central Project Director
	National Center of Artificial Intelligence (NCAI)
	Remarks by:
[10:35 – 10:45]	<b>Guest of Honor</b>
	Affiliation
	Remarks by:
[10:45 – 10:55]	<b>Chief Guest</b>
	Affiliation
[10:55 – 11:10]	Presentation of souvenirs
[11:10]	Group photo
	Exhibition Visit and Tea Break
	30 min

## DAY 1 (15th OCTOBER 2024)

## SESSION-I

Time		Track Title: Artificial Intelligence, and Data Science Track	
Session-1		Venue: UCP - Conference Hall, A Building	
Session Chair: Dr. Waqar Quonain (NCAI-PU), Co-Chair: Dr. Abbas Khalid (UCP), Dr. Zulqadar (UCP)			
[12:00-12:40]	Talk 1: The Future of Autism Care: A Machine Learning Perspective		
Hrs	Dr. Sheeraz Akram		
40 Minutes	Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia		
[12:40-12:55]	P_ID:2- Steering Angle Prediction of Autonomous Vehicle Using Machine Learning		
	Khan, Muhammad Shahid*; Omer, Abdul Rehman; Yousafzai, Abdullah		
[12:55-13:05]	P_ID:5- Enhancing Concrete and Pavement Crack Prediction through Hierarchical Feature Integration with VGG16 and Triple Classifier Ensemble		
	Saif Ur Rehman Khan, Asif Raza, Inzamam Shahzad, and Ghazanfar Ali		
[13:05-13:20]	P_ID:6- Personalized Email Marketing: A Machine Learning Approach for Higher Engagement and Conversion Rates		
	Abdullah, Nida Hafeez, Muhammad Umar Nasir,Maryam Shabbir, Shahid Mehmood		
[13:20-13:35]	P_ID:27- A New Regularization-Based Continual Learning Framework		
	Sajida Hassan, Nadia Rasheed and Muhammad Ali Qureshi		
[13:35-13:50]	P_ID:40- Transforming Parkinson's Disease Diagnosis Using Deep Neural Network		
	Muhammad Hamza Farooq, Hafiz Umer Daraz, Muhammad Kamran Khan , Usman Ghani Khan		
[13:50-14:05]	P_ID:48- Age-Invariant Face Recognition: A Comprehensive Study of Methods, Datasets, and New Algorithm for Immigration Control		
	Mohsin Sharif, Muhammad Awais, Abdullah, Muhammad Huzaifa Tariq, Dr. Allah Bux Sargano and Prof. Dr. Zulfiqar Habib		
[14:05-14:20]	P_ID:82-Predictive Analytics in Cognitive Radio: Neural Network Based Approach for Spectrum Sensing		
	Jehanzaib Nasim Javed*, Mohsin Khalil*, Syed M. Kazam Abbas Kazmi and M. Saad Ikram		
[14:20-14:35]	P_ID:79- Enhancing Transparency in Humanitarian Crowdfunding: A Blockchain and MVC-Based Approach for Non-Profit Organizations in Pakistan		
	Hanan Munir, Ayesha Rashid Khan, Aimen Qaiser, Touseef Tahir, Farooq Ahmad		

Time		Track Title: Remote Sensing and Robotics	
Session-2		Venue: UCP - Board Room, A Building	
Session Chair: Dr. Rana Asif Rehman (Fast-NU), Co-Chair: Dr. Adnan Siddique (ITU)			
[12:00-12:25]	Talk 2: Artificial Intelligence for Robotics		
25 Minutes	Dr. Khawaja Fahad Iqbal		
	National University of Sciences and Technology (NUST), Islamabad		
	Talk 3: Oil Spills in Pakistan's Exclusive Economic Zone: How remote sensing is helping us monitor marine pollution?		
[12:25-12:50]	Dr. Adnan Siddique		
25 Minutes	Information Technology University of Punjab, Lahore		
	Talk 4: Robotics and Sensing in Smart Agriculture		
[12:50-13:15]	Dr. Yasir Niaz		
25 Minutes	Punjab Safe City Authority		
[13:15-13:30]	P_ID:97-FPGA-Enabled Rapid Prototyping of Isolated Bidirectional Full-Bridge DC-DC Converter Control for Electric Vehicle Applications		
	Ahsan Ali, Syed Jahania Shah, Khuzaima Ali Khan, Niha Faisal, Zohaib Zia, Ishtiyaq Makda, and Ahmad Usman		
[13:30-13:45]	P_ID:61- Deep Learning on Sentinel-1 SAR Imagery for Ship Detection Using YOLO-V8 Model		
	Malik Ahmad Javed, Ehtasham Naseer, and Muhammad Adnan Siddique		
[13:45-14:00]	P_ID:125- Spatio-Temporal Analysis of Annual NO2 Concentration and Population Exposure in Palestine and Israel		
	Muhammad Nauman Arshad , Malik Ahmad Javed, Ehtasham Naseer and Muhammad Adnan Siddique		
[14:00-14:15]	P_ID:75- Spatial Recognition of Citrus Trees, Seedlings, and Gaps: A Deep Learning and Geometric Approach on Satellite-Based RGB Imagery		
	Muhammad Hamza Hussain and Syed Atif Mehdi		

Time		Online Track - Overseas	
Session		Venue: UCP - BCL-202, B Building	
Session Chair: Dr. Mahfooz (UCP), Dr. M. Umair (UCP), Dr Ali Ahmad (UCP)			
[12:00-12:20]	P_ID:11- IOT and Blockchain: Transforming Demand Response in Smart Grids		
	Muhammad Athar, Bin Li, Zaid Bin Tariq Baig, Ali Muqtadir, Shiming Tian and Songsong Chen		
[12:20-12:40]	P_ID: 12- Blockchain-Enabled Demand Response: A Sustainable Approach to Energy Management		
	Muhammad Athar, Bin Li, Zaid Bin Tariq Baig, Ali Muqtadir, Shiming Tian and Songsong Chen		
[12:40-13:00]	P_ID:113- Innovative Materials for Enhanced Heat and Mass Transfer in Membrane Distillation		
	Muhammad Arslan, Xian Haizhen, M. Nouman Khalid Khan, Kashif Ali and Zaid Bin Tariq Baig		
[13:00-13:20]	P_ID:33- Study on the Impact of AI-Powered GHRM Practices on Employee Behavior and Organizational Performance: Evidence from SMEs of Pakistan		
	Waseem Umer, Rukhshanda Fawad, Tayyeba Bashir,Burhan Sadiq and Ammara Naseem		
[13:20-13:40]	P_ID: 34- A study on the Impact of how AI-powered Green Development Influence Employee Green Behavior within an Organization		
	Waseem Umer, Rukhshanda Fawad, Tayyeba Bashir,Burhan Sadiq and Ammara Naseem		
[13:40-14:00]	P_ID:56- Expanding Horizon: The Role of Reconfigurable Intelligent Surfaces in Enabling Massive Connectivity		
	Muhammad Shoaib Ayub, Pablo Adasme, Demostenes Zegarra Rodriguez, Muhammad Saadi, Thokozani Shongwe and Ainur Zhumadillayeva Kanadilovna		

**Lunch Break (14:30-15:10)**

Session Chair: Prof. Dr. Andrew Ware (USW), Co-Chair: Dr. Mohsin Ashraf (UCP)		Session Chair: Prof. Dr. Ayyaz Hussain (QAU), Co-Chair: Dr. Naveed Hussain (UCP)		Remote Sensing Workshop by Dr. Adnan Siddique (ITU) and Mr. Ehtasham Naseer (ITU), CCL-403, C Building (Resource Person: Raja Muzammil Munir (UCP))	
Time	Track Tile: Artificial Intelligence, and Data Science Track, Software Engineering	Time	Track Tile: Artificial Intelligence, and Data Science Track, Software Engineering		
Session-3	Venue: UCP - Conference Hall, A Building	Session-4	Venue: UCP - Board Room, A Building		
	Talk 5		Talk 6		
[15:10-15:50]	AI & Oncology: The oncologist's perspective	[15:10-15:50]	Applications of Deep Learning in Medical Imaging		
Hrs	Dr. Amjad Zafar	Hrs	Dr. Muhammad Nazir		
40 Minutes	Allama Iqbal Medical College	40 Minutes	HITEC University Taxila, Pakistan		
[15:50-16:05]	P_ID:10- IoBNT-ABAC: An Access Control Model for the Internet of Bio Nano Things	[15:50-16:05]	P_ID:122- Scrum in Action: Highlighting the Motivations and Strategies behind its Practical Implementation		
	Sidra Zafar, Ahmad Kamran Malik and Komal Bashir		Ayesha Saleem, Iqra Tariq, M. Saad Bin Ilyas, Muhammad Aadil Butt, Arslan Tariq and Bushra Rizwan		
[16:05-16:20]	P_ID:145- NRB-BiLNET: A Novel Deep Learning Architecture for Crop Leaf Disease Classification	[16:05-16:20]	P_ID:19- Classifiers for Unjustified Malware Detection of Android Devices Data Consuming SMOTE and ROC-AUC Metrics		
	Irfan Haider, Muhannad Nazir, Muhammad Attique Khan and Mudassar Raza		Muhammad-Haseeb-Zia, Ali Hussain, Muhammad-Hamza		
[16:20-16:35]	P_ID:135- (Sk)^2: Saadaali Salamti fi Kidney Kanceri – predicting survivability of kidney cancer using a multi – tier classification framework	[16:20-16:35]	P_ID:85- Improving Intrusion Detection System using Feature Extraction		
	Rafia Mubashar Gondal, Bilal Wajid, Faria Anwar, and Imran Wajid		Usman Inayat, Rida Ayesha, and Sajid Mahmood		
[16:35-16:50]	P_ID:81- EMG Based Control of Prosthetic Hand for Trans Humeral Amputee	[16:35-16:50]	P_ID:102- Improved Neural Network Compression using Generative Adversarial Networks		
	Naqash Ahmad, Muhammad Talha and Zareena Kausar		Salaar Khan, Syed Meharullah and Ali Murtaza		
[16:50-17:05]	P_ID:57- MACHINE LEARNING AND DEEP LEARNING TECHNIQUES TO DETECT MUTATION IN GENE SEQUENCES FOR EARLY DETECTION OF BREAST, THYROID, LOWER GRADE GLIOMA, SARCOMA, AND GASTRIC CANCER	[16:50-17:05]	P_ID:124- A Novel Approach for Hashtag Topic Classification with Multimodal Features and VLMs		
	Muhammad Ayaz Farid Shah		Hafiza Tayyaba Zafar, Bilal Tahir and Muhammad Amir Mehmood		
[17:05-17:20]	P_ID:141- An IoT-enabled Smart-phone as Digital Doctor (SPADD) Empowered Machine Learning Techniques	[17:05-17:20]	P_ID:74- Machine Learning Based Early Detection for Brain Stroke		
	Zahid Hasan, Kashif Iqbal, Muhammad Zubair, Bi Bi Maryam, Nafisa Tahir and Hammad Ghulam Mustafa		Abdullah Khan, Hasnain Abbas Sherazi, Nimra Saleem and Dr. Waqas Tariq Toor		
Closing Remarks Day 1					
DAY 2 (16th OCTOBER 2024)					
Time	Track Title: Electronic Devices, Circuits, and Communication Systems, Power and Energy	Time	Track Title:Artificial Intelligence, and Data Science Track		Robotics Workshop by Dr. Khawaja Fahad (NUST), Webinar Room (Resource Person: Haider Sultan Ahad (UCP))
Session-5	Venue: UCP - Conference Hall, A Building	Session-6	Venue: UCP - Board Room, A Building		
Session Chair: Dr. Stefan Poslad (QMUL), Co-Chair: Dr. Sarwar Ehsan (UCP)		Session Chair: Prof. Dr. Arfan Jaffer, Co-Chair: Dr. Muzammil Hussain (UCP)			
[09:30-10:10]	Talk-7: Power Electronics for Green, Reliable and Efficient Data Centers	[09:30-10:10]	Talk-8: Title		
40 Minutes	Dr. Ahmad Usman	40 Minutes	Prof. Dr. Arfan Jaffar		
	Habib University, Karachi		Superior University, Lahore		
[10:10-10:35]	P_ID:9- Iterative DPD based Multi-Objective Optimization of RF Power Amplifier for Increased Linearity and Output Power	[10:10-10:35]	P_ID:126- Detecting Stress from Competitive Gaming using Machine Learning-Based ECG Classification		
	Humayun Zahid,M. Kamran Saleem and Abdul Maalik		Aleena Kamal, Minahil Kamal, Faisal Amin, Muhammad Falak Anjum and Hamza Ghazanfar Toor		
[10:35-10:50]	P_ID:58- Optimization and Performance Evaluation of Transformerless HERIC and H5 PV Inverters: Minimizing Leakage Current, Enhancing Efficiency, and Waveform Control	[10:35-10:50]	P_ID:130- Exploring the Application of Machine Learning for Soil Moisture Forecasting over In-situ Soil Moisture Sensors Network		
	Hafiz Haider Ali Muazzam		Muhammad Ahmad, Hamza Rafique and Abubakr Muhammad		
[10:50-11:05]	P_ID:76- Fast Implementation of Eta-T pairing on FPGAs	[10:50-11:05]	P_ID:137- AI-Driven Chatbot for Intrusion Detection in Edge Networks: Enhancing Cybersecurity with Ethical User Consent		
	Waseem Aslam and Asim Raza		Mugheez Asif, Abdul Manan, Abdul Moiz ur Rehman, Mamoon Naveed Asghar and Muhammad Umair		
[11:05-11:20]	P_ID:134- Stepper-based Precise Paper Cutting Machine with PLC And HMI	[11:05-11:20]	P_ID:24- An Integrated Data Warehouse to Identify HIV/AIDS Prevalence		
	Muhammad Zia Ur Rahman, Muhammad Shams Shabbir, Muhammad Hassan, Mehmood Ul Hassan, Haroon Ahmad and Aashir Waleed		Aneela Mehmood		
[11:20-11:35]	P_ID:88- Hierarchal Optimization of FP Algorithm for Solar Photovoltaic Systems	[11:05-11:20]	P_ID:51- Infodemic Vs Pandemic: Covid-19 Crisis in Pakistan Due To Rumors on Twitter		
	Naeem Arif, Muhammad Mateen Afzal Awan, and Aun Haider		Hafsa Naveed, Rabia Younas, Hafiz Burhan Ul Haq*, Sabir Abbas, Sidra Aslam and Muhammad Zunnurain Hassan		
Tea & Exhibition Visit (35 Minutes)					
Session Chair: Dr. Khawaja Fahad Iqbal (NUST) ,Co-Chair: Dr. Imran Arshad (UCP)		Session Chair: Prof. Dr. Amjad Hussain (Fast-NU), Co-Chair: Dr. Ali Saeed (UCP)			
Time	Track Tile: Artificial Intelligence, and Data Science Track	Time	Track Tile:Deep Learning Track		
Session-7	Venue: UCP - Conference Hall, A Building	Session-8	Venue: UCP - Board Room, A Building		
[11:55-12:35]	Talk-9: Gamification Tool for Social Engineering Attack Awareness	[11:55-12:35]	Talk-10: Deep Learning – Past, Present and Future		
40 Minutes	Dr. Vasaki Ponnusamy	40 Minutes	Prof. Dr. Ayyaz Hussain		
	Higher Colleges of Technology UAE		Quaid-i-Azam University Islamabad		
[12:35-12:50]	P_ID:59- Neurocognitive Approach for Assessing Visual Engagement in Neuromarketing	[12:35-12:50]	P_ID:92- Next-Generation Healthcare: Design and Implementation of a Smart Medicine Vending System		
	Amjid Hussain, Sanay Muhammad, Umar Saeed, Sheharyar Khan, Sadam Hussain Noorani, Noshina Ishaque and Muhammad Hashir		Muhammad Zubair, Aashir Waleed, Ans Rehman, Farhan Ahmad, Mohammad Islam and Saqib Javed		
[12:50-13:05]	P_ID:70- Robust Federated Learning : Defence against Model Poisoning using Mean Filtering	[12:50-13:05]	P_ID:99- Interpretable Deep Learning Classifier Using explainable AI For Non-Small Cell Lung Cancer		
	Abdul Rehman Omer, Shahid Khan, and Abdullah Yousafzai		Arooj Shabbir and Muhammad Zubair		
[13:05-13:20]	P_ID:72- Multiclass Classification of Retinal Disorders Using Optical Coherence Tomography Images	[13:05-13:20]	P_ID:100- Anticancer Drug Response Prediction using Deep Learning		
	Zahra Shahzadi and Muhammad Zubair		Awais Raza Zaidi, Abdul Majid and Muhammad Bilal		
[13:20-13:35]	P_ID:90- Machine Learning Insights into Retail Sales Prediction: A Comparative Analysis of Algorithms	[13:20-13:35]	P_ID:110-Autism Detection in Children by Features Extraction and Classification Using a Deep Learning Model		
	Muhammad Zubair, Ans Rehman, Aashir Waleed, Farhan Ahmad, Mohammad Islam and Saqib Javed		Daniyal Ahmed, Muhammad Ammar Hassan and Muhammad Zubair		
[13:35-15:35]	Namaz & Lunch Break				
Venue: UCP Auditorium					
[15:35-16:10]	Keynote-III - The Rise of Things that can Think - Internets of Intelligent Things (IoT) by Dr Stefan Poslad (Queen Mary University of London)				
[16:10-16:45]	Keynote-IV - Post-Quantum Cryptography (Pqc) Algorithms for a Secured Quantum Key Distribution (Qkd) Authentication by Prof. Dr. Zuriati Ahmad Zukamain (Universiti Putra Malaysia)				
Conference Closing Ceremony					