



**1st International Conference on Computing Technologies,
Tools and Applications (ICTAPP-23)**
Institute of Computer Sciences and IT (ICS/IT), FMCS
The University of Agriculture, Peshawar, Pakistan
Email: ictapp-23@aup.edu.pk Web: www.ictapp-23.aup.edu.pk



Prof. Dr. Dawood Jan
Chief Organizer/Convener

Dr. Javed Iqbal Bangash
Conference Secretary

Opening Ceremony

Date: 09th May, 2023 **Time:** 09:00 AM – 12:00 Noon **Venue:** Main Auditorium Hall

Time	Activity
09:00 AM	Registration
09:30 AM	Guests to be seated
10:00 AM	Recitation of Holy Quran
10:10 AM	National Anthem
10:20 AM	Overview of the Conference (Chief Organizer: Prof. Dr. Dawood Jan)
10:30 AM	Welcome Address (Patron-in-Chief: Prof. Dr. Jehan Bakht)
10:40 AM	Keynote Talk (Prof. Dr. Jamil Ahmed)
11:00 AM	Address by Chief Guest
11:15 AM	Presentation of Shields + Group Photo
11:30 AM	Refreshments

Session: 1st

Date: 09th May, 2023

Time: 11:45 AM – 01:30 PM

Venue: Video Conference Room (VCR)

Session Chair: Dr. Salman Ahmed, UET Peshawar

Time	Ref. No.	Title	Presenter
11:45 AM	Invited Talk	Pakistan the Next Frontier in Cyber Security	Prof. Dr. Muazzam Ali Khan Khattak Quaid-i-Azam University, Islamabad
12:15 PM	ICTAPP-23-100	Dimensionality Reduction using Principal Component Analysis and Autoencoder based on Convolutional Neural Network	Mr. Kamran Ullah (Physical)
12:30 PM	ICTAPP-23-29	MIDS: Multiple Intrusion Detection System for Wireless Sensor Network (WSN)	Mr. Muhammad Tariq (Physical)
12:45 PM	ICTAPP-23-75	Facial Detection and Recognition using Efficient Features for Enhanced Security Systems	Ms. Sana Zahir (Physical)
01:00 PM	ICTAPP-23-98	Speech Emotion Recognition using Diffusion Map- Based Machine Learning with Classification Technique	Ms. Munazzah Siddique (Physical)
01:15 PM	Certificates Distribution		

Session: 2nd

Date: 09th May, 2023

Time: 02:00 PM – 04:00 PM

Venue: Video Conference Room (VCR)

Session Chair: Dr. Aisha Shabbir, NUST Islamabad

Time	Ref. No.	Title	Presenter
02:00 PM	Invited Talk	Architecting a Quantum Software System: A New Genre of Computing	Dr. Arif Ali Khan University of Oulu, Finland
02:30 PM	ICTAPP-23-40	Analysis and Implementation of Honeypot Framework for Enhancing Network Security	Mr. Ilham Hamid (Online)
02:50 PM	ICTAPP-23-43	Liquid/Fluid Usage Control using Machine Learning for Smart City and Industries	Engr. Saad Hafeez (Online)
03:10 PM	ICTAPP-23-52	Signet Ring Cell detection from Histological Images	Mr. Muhammad Faheem Saleem (Online)
03:30 PM	ICTAPP-23-53	Classification of Hand-written digits using Deep-learning technique	Mr. Awais Mehmood (Online)
03:50 PM	Certificates Distribution		

Session: 3rd

Date: 09th May, 2023

Time: 02:00 PM – 04:00 PM

Venue: Computer Programming Lab. 1

Session Chair: Dr. Atif Khan, ICP

Time	Ref. No.	Title	Presenter
02:00 PM	Invited Talk	Smart Application of Wireless Communication Techniques in the Modern Era	Dr. Muhammad Asim ICS/IT, Uni. of Agr. Peshawar
02:30 PM	ICTAPP-23-28	IoT based Indoor Monitoring Framework to Reduce the Effects of Passive Smoking	Mr. Hidayat Ullah (Physical)
02:50 PM	ICTAPP-23-34	Temperature Aware and Energy-Efficient Routing for Wireless Body Area Network	Mr. Riaz Uddin (Physical)
03:10 PM	ICTAPP-23-36	IoT for Smart Industrial Workplaces: Assessment and Improvement of Occupational Safety and Health Culture in the Textile Industry of Pakistan	Mr. Mubasher Ullah (Physical)
03:30 PM	ICTAPP-23-56	A Comparative Model To Analyze Various Web Application Penetration Testing Tools For Different Vulnerabilities	Mr. Muhammad Tariq (Physical)
03:50 PM	Certificates Distribution		

Session: 4th

Date: 10th May, 2023

Time: 09:00 AM – 11:00 AM

Venue: Video Conference Room (VCR)

Session Chair: Dr. Shames Ur Rehman, IBMS

Time	Ref. No.	Title	Presenter
09:00 AM	Invited Talk	Future Technology: Cybersecurity, Industry 4.0 and Internet of Things	Dr. Kashif Nisar VIT, South Australia
09:30 AM	ICTAPP-23-39	Recent Advances in Deepfake Detection- A Survey	Mr. Muhammad Haseeb Akbar (Online)
09:50 AM	ICTAPP-23-60	SNE-UNET: An Efficient and Accurate Model for Skin Lesion Segmentation	Ms. Anum Khurshid (Online)
10:10 AM	ICTAPP-23-61	Deep Learning Model for the detection and classification of Diabetic Retinopathy	Ms. Samra Nawazish (Online)
10:30 AM	ICTAPP-23-66	A Novel Lung Tumor Classification Framework Using Deep Feature Fusion	Ms. Syeda Irum Gillani (Online)
10:50 AM	Certificates Distribution		

Session: 5th**Date:** 10th May, 2023**Time:** 09:00 AM – 11:00 AM**Venue:** Computer Programming Lab. 1**Session Chair:** Dr. Naushad Khan, IDS

Time	Ref. No.	Title	Presenter
09:00 AM	Invited Talk	Containerization: The Future of Modern Application Development and Deployment	Dr. Muhammad Imran ICS/IT, Uni. of Agr. Peshawar
09:30 AM	ICTAPP-23-26	A Deep Learning based COVID19 Detection and Classification Framework	Ms. Iram Abdullah (Physical)
09:50 AM	ICTAPP-23-31	Performance evaluation of secured virtual private network based on Dynamic Multipoint Virtual Private Network	Mr. Muhammad Yasir (Physical)
10:10 AM	ICTAPP-23-32	Android Based Application for Finding the Nearest Mosques and Prayer Times in a New Area Using Mobile GPS	Mr. Ihtisham Ul Haq (Physical)
10:30 AM	ICTAPP-23-33	Disease Classification of Tomato Plant Leaves Using Image Processing and Machine Learning Techniques	Mr. Ebtihaj Abdullah (Physical)
10:50 AM	Certificates Distribution		

Session: 6th**Date:** 10th May, 2023**Time:** 09:00 AM – 11:00 AM**Venue:** Computer Programming Lab. 2**Session Chair:** Dr. Muhammad Idrees

Time	Ref. No.	Title	Presenter
09:00 AM	Invited Talk	Grand-Tour for Framework Development of Internet of Things in Security Perspective	Dr. Arbab Waseem Abbas ICS/IT, Uni. of Agr. Peshawar
09:30 AM	ICTAPP-23-48	Cyber Physical System for Roadside Vehicular Emission Monitoring	Engr. Noor Habib (Physical)
09:50 AM	ICTAPP-23-57	Development of Cost-Effective Orthotic Insoles by Integrating Microsoft Kinect Sensor for 3D Scanning & Modeling	Mr. Wajahat Ali Khan (Physical)
10:10 AM	ICTAPP-23-84	Author Age and Gender Identification using Query Likelihood and Vector Space Models	Ms. Lala Rukh (Physical)
10:30 AM	ICTAPP-23-85	Disease Detection in Black Sesame Leaf Using Digital Image Processing	Ms. Nida Gul (Physical)
10:50 AM	Certificates Distribution		

Session: 7th

Date: 10th May, 2023

Time: 11:00 AM – 01:00 PM

Venue: Video Conference Room (VCR)

Session Chair: Dr. Fazli Subhan, NUML Isamabad

Time	Ref. No.	Title	Presenter
11:00 AM	Invited Talk	Cyber Threat Intelligence and Social Engineering Attacks	Prof. Dr. Kashif Naseer Qureshi University of Limerick, Ireland
11:30 AM	ICTAPP-23-70	ResSwishNet-50 model for detection of COVID-19 using ECG-based images	Ms. Tanees Riaz (Online)
11:50 AM	ICTAPP-23-79	Text Classification Using Natural Language Processing and Deep Learning	Mr. Muhammad Zeeshan (Online)
12:10 PM	ICTAPP-23-88	Machine Learning based Approach for Predicting Future Purchases in E-Commerce	Engr. Ayaz Khan (Online)
12:30 PM	ICTAPP-23-44	gStab: An R Package for Measuring Stability of Feature Selection Methods	Dr. Abdul Wahid (Online)
12:50 PM	Certificates Distribution		

Session: 8th

Date: 10th May, 2023

Time: 11:00 AM – 01:00 PM

Venue: Computer Programming Lab. 1

Session Chair: Dr. Fasee Ullah, Sarhad University, Peshawar

Time	Ref. No.	Title	Presenter
11:00 AM	Invited Talk	Adaptive Customer Churn Prediction	Prof. Dr. Sajid Anwar IMSciences, Peshawar
11:30 AM	ICTAPP-23-37	A Deep Learning-based Framework for Monocular Depth Estimation	Ms. Iram Abdullah (Physical)
11:50 AM	ICTAPP-23-38	Effective Detection of Cybersecurity Attacks in IoT Networks using Random Forest Classifier integrated with mRMR Feature Selection	Mr. Sami Ur Rehman (Physical)
12:10 PM	ICTAPP-23-42	Enhanced Datagram Transport Layer Security Protocol for IoT Environment	Mr. Noor Ul Arfeen (Physical)
12:30 PM	ICTAPP-23-45	Takhreej e Hadith Through Different Computer Software	Ms. Maryam Hamid (Physical)
12:50 PM	Certificates Distribution		

Session: 9th

Date: 10th May, 2023

Time: 11:00 AM – 01:00 PM

Venue: Computer Programming Lab. 2

Session Chair: Dr. Sajid Rehman, IBMS

Time	Ref. No.	Title	Presenter
11:00 AM	Invited Talk	Current Challenges in IT Industry	Dr. Rafiullah Khan ICS/IT, Uni. of Agr. Peshawar
11:30 AM	ICTAPP-23-71	ENTC-Crow-ANN: An Efficient Network Traffic Classification using Crow Search based Artificial Neural Network Algorithm	Mr. Noor Ul Arfeen (Physical)
11:50 AM	ICTAPP-23-72	Designing a Cost-efficient Model for Replicating Data in Cloud Storage	Mr. Syed Awais Ali (Physical)
12:10 PM	ICTAPP-23-74	Proposed method for Cheating Detection in Examination using Digital Image Processing in Public Sector Universities in Pakistan: Review	Mr. Farooq Faisal (Physical)
12:30 PM	ICTAPP-23-104	A Multi Dynamic Intelligence Algorithm and Its Application to Engineering Problems	Dr. Shafiullah Khan (Physical)
12:50 PM	Certificates Distribution		

Session: 10th

Date: 10th May, 2023

Time: 02:00 PM – 04:00 PM

Venue: Video Conference Room (VCR)

Session Chair: Dr. Syed Irfan Ullah, Abasyn University Peshawar

Time	Ref. No.	Title	Presenter
02:00 PM	Invited Talk	On Fast and Secure Communications for IoT Networks	Prof. Dr. Marco Martalo University of Cagliari, Italy
02:30 PM	ICTAPP-23-41	Smart Irrigation Management System For Water Channels Using IoT	Mr. Muhammad Ibrar (Physical)
02:50 PM	ICTAPP-23-49	Development of the Smart Drainage Recognition System using Industrial Internet of Thing	Mr. Abdullah Khan (Online)
03:10 PM	ICTAPP-23-103	Texture Image Retrieval Using Systematic CBIR Technique	Ms. Sana Qammar (Online)
03:30 PM	ICTAPP-23-105	Enhancing Speech-to-Text Performance Using Few Shots Learning and Usecase in Pandemic	Mr. Sajid Ali Khan (Online)
03:50 PM	Certificates Distribution		

Session: 11th**Date:** 10th May, 2023**Time:** 02:00 PM – 04:00 PM**Venue:** Computer Programming Lab. 1**Session Chair:** Dr. Muhammad Abdullah Khan Niazi, IBMS

Time	Ref. No.	Title	Presenter
02:00 PM	Invited Talk	Information Encoding Schemes for Synthetic DNA	Dr. Muhammad Ishaq ICS/IT, Uni. of Agr. Peshawar
02:30 PM	ICTAPP-23-46	A Novel Hybrid AI-Based System for Early Detection of Oral Squamous Cell Carcinoma via Histopathological Images	Mr. Mehran Ahmad (Physical)
02:50 PM	ICTAPP-23-47	Qualitative Analysis of Text Summarization Classification Techniques: A Systematic Approach	Dr. Imran Ihsan (Physical)
03:10 PM	ICTAPP-23-50	A Sustainable IoT Infrastructure Based Design of Green Cloud Computing: A Comprehensive Survey	Dr. Fasee Ullah (Physical)
03:30 PM	ICTAPP-23-51	An Intelligent Respiratory Tract Auscultation Audio Signal Classification Technique	Mr. Abdul Moaiz (Physical)
03:50 PM	Certificates Distribution		

Session: 12th**Date:** 10th May, 2023**Time:** 02:00 PM – 04:00 PM**Venue:** Computer Programming Lab. 2**Session Chair:** Dr. Sabeeh Ullah, IBMS

Time	Ref. No.	Title	Presenter
02:00 PM	Invited Talk	Distributed Web Search Privacy-Preserving Protocols: Current Trends and Future Directions	Dr. Mohib Ullah ICS/IT, Uni. of Agr. Peshawar
02:30 PM	ICTAPP-23-80	Analysis of Images Pre-Processing Techniques for Ophthalmic	Ms. Maria Ali (Physical)
02:50 PM	ICTAPP-23-87	Perils from Climate Change Mapped using Image Processing: Segmentation and Enhancement	Ms. Kanwal Lodhi (Physical)
03:10 PM	ICTAPP-23-89	Color Bands and Band Combinations in Remote Sensing using Image Processing	Ms. Maliha Tahir Butt (Physical)
03:30 PM	ICTAPP-23-91	Educational Data Mining: A Comparative Study to Predict Student Academic Performance Using Deep Neural Network and Other Machine Learning Techniques	Mr. Syed Amin Ullah (Physical)
03:50 PM	Certificates Distribution		

Session: 13th**Date:** 11th May, 2023**Time:** 09:00 AM – 11:00 AM**Venue:** Video Conference Room (VCR)**Session Chair:** Dr. Abdul Waheed Khan, PAF-IASST Haripur

Time	Ref. No.	Title	Presenter
09:00 AM	Invited Talk	Soft Computing using Artificial Neural Networks: An Overview of Current Trends	Prof. Dr. Nazri Bin Mohd Nawi, Uni. Tun Hussein Onn Malaysia
09:30 AM	ICTAPP-23-59	A Dialectical Analysis of Prediction Models for Food Demand Forecasting	Dr. Aftab Khan (Physical)
09:50 AM	ICTAPP-23-67	An Automated Plant Disease Detection Method Using Image Processing and Machine Learning	Mr. Bilal Ahmed Sheikh (Physical)
10:10 AM	ICTAPP-23-68	Evaluating the Use of Artificial Intelligence and Machine Learning in the Livestock Industry – A Review	Mr. Yasir Nawaz (Physical)
10:30 AM	ICTAPP-23-77	Content based Video Retrieval on Key Frames using Alenet-Deep Learning Model	Dr. Abullah (Physical)
10:50 AM	Certificates Distribution		

Session: 14th**Date:** 11th May, 2023**Time:** 11:00 AM – 01:00 PM**Venue:** Computer Programming Lab. 1**Session Chair:** Dr. Muhammad Nouman

Time	Ref. No.	Title	Presenter
11:00 AM	Invited Talk	The Latest Trends in Soft Computing and Future Challenges	Dr. Abdullah ICS/IT, Un. of Agr. Peshawar
11:30 AM	ICTAPP-23-94	Unveiling the Power of Deep Learning: A Trailblazing Review on Different Techniques used for Medical Image Segmentation Analysis	Mr. Syed Amin Ullah (Physical)
11:50 AM	ICTAPP-23-96	Diagnosing Lumpy Skin Disease: A Comparative Analysis of Machine Learning Algorithms	Ms. Mibah Daud (Physical)
12:10 PM	ICTAPP-23-97	Software Cost Estimation – A Comparative Study Of COCOMO-II, Halstead And IVR Models	Mr. Shah Nawaz (Physical)
12:30 PM			
12:50 PM	Certificates Distribution		

Session: 15th**Date:** 11th May, 2023**Time:** 11:00 AM – 01:00 PM

Venue: Video Conference Room (VCR)

Session Chair: Dr. Bashir Ahmad

Time	Ref. No.	Title	Presenter
11:00 AM	Invited Talk	Artificial Intelligence Enabled Software Defined Networking	Dr. Abdul Waheed Khan PAF-IAST Pakistan
11:30 AM	ICTAPP-23-30	Data Security in Smart Metering: A Blockchain based Approach	Mr. Ilham Hamid (Physical)
11:50 AM	ICTAPP-23-73	Multi-Focus Image Fusion using Unsharp Masking with Discrete Cosine Transform	Ms. Manahil Shah (Physical)
12:10 PM	ICTAPP-23-82	Getting to Know ChatGPT: An Introduction to Implementation and Working	Mr. Abdul Sami (Physical)
12:30 PM	ICTAPP-23-92	Speech Synthesis Based Image Captioning	Mr. Asim Shah (Physical)
12:50 PM	Certificates Distribution		

Closing Ceremony

Date: 11th May, 2023

Time: 02:00 PM – 04:00 PM

Venue: Video Conference Room

Time	Activity
02:00 PM	Guests to be seated
02:15 PM	Recitation of Holy Quran
02:20 PM	Conference Report (Chief Organizer: Prof. Dr. Dawood Jan)
02:35 PM	Closing Address (Patron-in-Chief: Prof. Dr. Jehan Bakht)
02:50 PM	Address by Chief Guest
03:10 PM	Shield Presentation & Certificate Distribution
03:30 PM	Refreshments