



1st International Conference on Recent Advances in Computing, AI and Data Science (CAIDS-2023)



Program Schedule

November 23-24, 2023
Riphah International University, Islamabad.

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Introduction

The Institute of Computer Science and Information Technology (ICS&IT), University of Science and Technology Bannu (UST Bannu), Faculty of Computing (FC), Riphah International University Islamabad (RIU Islamabad) and Multimedia University Malaysia (MMU Malaysia) are hosting a two-day International Conference on Recent Advances in Computing, AI and Data Science (CAIDS - 2023) at Riphah International University Islamabad on November 23-24, 2023. CAIDS-2023 provides an excellent platform for researchers and scholars from all around the world to share their research findings on recent advances in the fields of Computing, AI and Data Science. This joint venture by UST Bannu, RIU Islamabad, MMU Malaysia, Gomal University DI Khan and Brains Institute Peshawar will help promote communication and collaboration among the academia, industry and government. This conference is financially supported by the Higher Education Commission of Pakistan.

This conference aims to provide an excellent platform for scholars who are interested in the most recent advancements in Computing, AI and Data Science to share their discoveries and achievements. This initiative aims to promote improved communication and collaboration among researchers. It provides a platform for academia, industry and government to explore different dimensions of these exciting concepts with an emphasis on practical steps taken in Pakistan.

We welcome you and hope that you enjoy this two-day conference fruitful and entertaining at Islamabad.

Prof. Dr. Aurangzeb Khan
Dean of the Faculty of Computing and IT,
UST Bannu.

Prof. Dr. Muhammad Zubair
Dean of the Faculty of Computing,
RIU, Islamabad.



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Dean, Faculty of Computing and IT, UST Bannu.

Prof. Dr. Muhammad Zubair,
Dean, Faculty of Computing, RIU Islamabad.

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Mr. Sadiq Khan

RIU Islamabad

Mr. Sultan Mehmood
Mr. Shahid Khan
Mr. Waqar
Mr. Abul Alah
Mr. Jahangir
Mr. Muhammad Shahzad

TENTATIVE PROGRAMME

DAY-1: THURSDAY NOVEMBER 23, 2023

08:00AM - 10:00AM Registration

Time Slot	09:00AM – 11:00AM
Session	Opening Ceremony
09:00AM - 09:15AM	Guests to be seated
09:15AM - 09:20AM	Recitation from the Holy Quran
09:20AM – 09:30AM	Welcome Address: Prof. Dr. Anis Ahmad (Sitara-e-Imtiaz) - Vice Chancellor (RIU, Islamabad)
09:30AM - 09:40AM	Conference Introduction: Prof. Dr. Aurangzeb Khan – Dean, Faculty of Computing and IT (UST Bannu) Chief Organizer (CAIDS - 2023)
09:40AM - 10:00AM	Addresses of the Patrons: Prof. Dr. Khair Uz Zaman - Vice Chancellor (UST Bannu) Prof. Dr. Mazliham Mohd Su'ud - President (MMU, Malaysia) Mr. Zafarullah Khan – Rector (BRAINS Institute Peshawar)
10:00AM - 10:40AM	Keynote Speech: Mitigating Challenges in Data Science Projects Prof. Dr. Choo-Yee Ting Multimedia University Malaysia.
10:40AM - 10:55AM	Chief Guest Address
10:55AM – 11:00AM	Vote of Thanks: Prof. Dr. Muhammad Zubair – Dean, Faculty of Computing (RIU Islamabad) Co-Chief Organizer (CAIDS - 2023)

11:00AM - 11:30AM Tea Break

Time Slot	11:30AM – 01:00PM
Session	Session-I: Invited Talks and Selected Technical Papers - I
Venue	Main Hall
Chair	Dr. Umar Farooq (UST Bannu) Potential Impact of Digital Twins in Pakistan
Invited Talks	Prof. Dr. Muhammad Tariq FAST NUCES, Islamabad. Software Engineering Landscape in the last Decade Prof. Dr. Sajid Anwar IMSciences, Peshawar. Beyond Traditional Learning: How AI is Reshaping Resilient Educational Practices Dr. Rehman Ullah Khan, Universiti of Malaysia Sarawak, Malaysia.
Technical Paper	35: Vision Horizon – A Voyage from Computer Vision to Robot Vision Saima Sultana (MIIT, University of Kuala Lumpur, Malaysia & SZABIST Gharo Campus), Sadia Nazim(MIIT, University of Kuala Lumpur, Malaysia & Bahria University Karachi Campus), Hira Beenish (Karachi Institute of Economics and Technology Karachi), Mazliham Mohd Su'ud (Multimedia University, Malaysia)

01:00PM - 02:00PM Lunch and Prayer Break

Time Slot	02:00PM – 03:30PM	
Session	Session – II: Image Processing	Session-III: Security and Privacy - I
Venue	Computer Lab	Conference Room
Chair(s)	Dr. Sajid Ullah Khan, University of Lakki Marwat and Dr. Anees Khan, Bahria University Islamabad.	Dr. Musharraf Ahmed, Riphah International University Islamabad.
Technical Papers	23: Olive Leaves Disease detection and classification using Deep Learning Sohail Akhtar, Dr. Muhammad Munwar Iqbal and Muhammad Altaf (University of Engineering and Technology Taxila)	13: Importance of Assembly Language in Cyber Security and Reverse Engineering Muhammad Talha Attari (Air University Islamabad), Muhammad Ahmad Nawaz, Mubariz Rehman (Riphah International Islamabad)
	37: Emotion predictions through EGG using spectrogram Umar Sultan (Riphah International Islamabad), Shahbaz Hassan (FAST NUCES Islamabad), Musharraf Ahmed (Riphah International Islamabad)	14: Problems in Genomic Data Privacy in a Distribution Network M. Ahmad Nawaz, Shahzad Ahmed Khan and Mubariz Rehman (Riphah International Islamabad)
	25: Mind Care Solution through Human Facial Expression Ali Asghar, Muhammad Awais, Syed Hassan Raza Naqvi, Muhammad Umar Mehboob, Reqad Ali (Capital University of Science and Technology Islamabad) and Jawaid Iqbal (Riphah International Islamabad)	16: Analyzing Instant Messaging Applications for Digital Forensics and Criminal Investigations Muhammad Ahmad Nawaz (Riphah International Islamabad), Haider Sajjad, Yasir Hussain, Azhar Ghafoor, Hameed Ali (COMSATS Islamabad)
	31: Hybrid Crow Search and RBFNN: A Novel Approach to Medical Data Classification Maria Ali, Faisal Khan, Muhammad Nouman Atta, Abdullah Khan, Asfandyar Khan (ICS&IT, The University of Agriculture Peshawar)	15: Unveiling the Efficacy of AI-based Algorithms in Phishing Attack Detection Tajamul Shahzad (Riphah International Islamabad)
	42: Enhancing Face Mask Detection in Public Places with Improved Yolov4 for Covid-19 Transmission Reduction Muhammad Ayaz, Dr. Said Khalid Shah, Adnan Hameed (ICS&IT, UST Bannu)	39: Ensemble Learning-Powered URL Phishing Detection: A Performance Driven Approach Shougfta Mushtaq (Multimedia University Malaysia), Tabassum Javed (Riphah International University Islamabad), Mazliham Mohd Su'ud (Multimedia University Malaysia)
	55: Comparative Analysis of Motor Imagery Classification of EEG Data using Transfer Learning Muhammad Talha Jahangir, Ali Hassan, Afaq Ahmad Khan (NUST College of EME, Rawalpindi)	45: Bridging the Gap: Enhancing Security Awareness, Management, and Employee Behaviors in InfoSec Policies and Standards Hamza, Jawaid Iqbal and Salman Ali (Riphah International Islamabad)

03:30PM – 03:45PM Tea Break

Time Slot	03:45PM – 05:15PM	
Session	Session – IV: Machine Learning	Session - V: Security and Privacy - II
Venue	Computer Lab	Conference Room
Chair	Prof. Dr. Muhammad Mansoor Alam, Riphah International University, Islamabad.	Dr. Asfandyar Khan, Agriculture University Peshawar.
Technical Papers	38: Classification of Malware Using Distributed Convolutional Neural Networks (DCNN) Khawaja Daim Asif Ansari, Abid Ali and Muhammad Waseem Minhas (Riphah International Islamabad)	24: Security and Privacy Challenges of Big Data, Solutions and Recommendations Azhar Ghafoor (COMSATS Islamabad), Mubariz Rehman, Muhammad Islam, Tabassum Javed, Muhammad Ahmad Nawaz (RIU, Islamabad)
	8: A Cutting-Edge Hybrid Approach for Precise COVID-19 Detection using Deep Learning Muhammad Hamza, Safdar Abbas (NUST Islamabad), Umar Hayat (Bahria University Islamabad), Muhammad Hamad and Addel Hashmi (NUST Islamabad)	12: Empirical Investigation of Security Awareness and Training for Distributed Team to Safe from Cyber Attacks Jamshaid Ahmad and Abdul Wahid Khan (ICS&IT, UST Bannu)
	3: Intelligent Algorithm for Automatic Runtime Selection of Scheduling Algorithm using Pattern Recognition Techniques Salman Khan (Riphah International Islamabad), Abrar Ahmad (NUST Islamabad), Hasnat Raza, Muhammad Mansoor Alam (Riphah International Islamabad)	6: From Signatures to AI: A Comprehensive Study of DDoS Detection Strategies in IoT & SDN Shehroze Ahmed Khan, Syed Ihtesham Hussain and Jawaid Iqbal (Riphah International Islamabad)
	27: Sine Cosine Algorithm for Enhancing Convergence Rates of Artificial Neural Network: A Comparative Study Maria Ali, Fatima Pervez, Muhammad Nouman Atta, Abdullah Khan, Asfandyar Khan (ICS&IT, The University of Agriculture, Peshawar)	44: Comprehensive Review of CAN Bus Security: Vulnerabilities, Cryptographic and IDS Approaches, and Countermeasures Omer Fayyaz Khan, Muhammad Mubashir and Dr. Jawaid Iqbal (Riphah International Islamabad)
	64: DNA MethPred: Identifying DNA Methylation Sites Using Position Specific One Hot Encoding Technique Khalid Usman, Khairullah Khan, Wahab Khan (ICS&IT, UST Bannu)	46: Secure Room-Sharing Decentralized App Development on Ethereum Block Chain Using Smart Contracts Hasnain Raza (IMSciences, Peshawar), Reqad Ali (Capital University of Science and Technology, Islamabad), Jawaid Iqbal (Riphah International Islamabad), Muhammad Awais (Capital University of Science and Technology, Islamabad)
	65: Knowledge-based Word Tokenization System for Urdu Asif Ullah Khan, Sadiq Nawaz Khan, Khairullah Khan, Wahab Khan (ICS&IT, UST Bannu) and Rafiqul Haq (Tianjin University China)	67: Energy Efficient Protocol for Wireless Body Area Sensor Networks Abdul Hameed and Muhammad Javed (ICS&IT, UST Bannu)

07:00PM Dinner (for guests only)

DAY-2: FRIDAY NOVEMBER 24, 2023

08:30AM - 10:30AM Registration

Time Slot	09:30AM – 10:30AM	
Session	Session-VI: Invited Talks and Selected Technical Papers - II	
Venue	Main Hall	
Chairs	Dr. Nawaz Khan, IMSciences Peshawar and Dr. Muhammad Jahangir, Abdul Wali Khan University Mardan.	
Invited Talk	The Fourth Industrial Revolution: A Global Revolution on Recent Advances in Science, Technology, and Society Prof. Dr. Md Shohel Sayeed Multimedia University Malaysia.	
	26: LoRA Technology: A Review Muhammad Ayoub Kamal (MIIT, Kuala Lumpur, Malaysia and DHA Suffa University Karachi), Aznida Abu Bakar Sajak (MIIT, Kuala Lumpur, Malaysia), Laiq Muhammad Khan (IBM, Karachi) and Mazliham Mohd Su'ud (Multimedia University, Malaysia)	
Technical Papers	20: A Novel Hybrid Approach to Facilitate Patients by Measuring Vital Health Signs Utilizing IoT Burhan Ullah, Aurangzeb Khan (ICS&IT, UST Bannu), Muhammad Fahad (Tianjin University, China), Muhammad Sadiq and Rafi Ullah (ICS&IT, UST Bannu)	

10:30AM – 11:00AM Tea Break

Time Slot	11:00AM – 12:15PM	
Session	Session – VII: Software Development - I	Session-VIII: Technology in Learning
Venue	Computer Lab	Conference Room
Chair	Prof. Dr. Naveed Ikram, Riphah International University, Islamabad.	Dr. Fazli Subhan, NUML, Islamabad.
Technical Papers	9: Quality Requirement challenges in software development for quantum computing Sana Latif and Abdul Wahid Khan (ICS&IT, UST Bannu)	21: Model for Distance learning System due to the Digital Transformation in Covid-19. Lahba and Abdul Wahid Khan (ICS&IT, UST Bannu)
	10: A Model for Deciding Adoption of DevOps Approach in Global Software Development from vendors' perspective Saad Ullah Khan and Abdul Wahid Khan (ICS&IT, UST Bannu)	33: A Bilingual Immersive Environment for Kids Learning Tufail Ahmad, Arifa Niazi, Umar Farooq and Ihsan Rabbi (ICS&IT, UST Bannu)
	5: Empirical investigation of quantum computing for integration with existing software architecture process Fahad Rehman and Abdul Wahid Khan (ICS&IT, UST Bannu)	66: Impact of Online Learning on Students Self Concept Motivation at University Level in Khyber Pakhtunkhwa Irfan Ullah Khan (Department of Education and Research, University of Lakki Marwat) and Muhammad Bilal Qureshi (Department of CS&IT, University of Lakki Marwat)
	7: Empirical investigation of challenges of Data privacy and security in Quantum computing in software development Muhammad Jawad and Abdul Wahid Khan (ICS&IT, UST Bannu)	56: The Impact of Educational Leadership on Entrepreneurship Development and Economic Growth in Southern Districts in KP: A Multifaceted Analysis Wresham Gul and Parveen Ishaq (University of Peshawar)
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Time Slot	12:15PM – 01:15PM	
Session	Session – IX: Software Development - II	Session-X: Latest Trends in Computing and Intelligent Transportation
Venue	Computer Lab	Conference Room
Chair	Dr. Rizwan Bin Faiz Riphah International University, Islamabad.	Dr. Amjad Khan, Abasyn University Islamabad.
Technical Papers	30: Case Study Protocol for Software Outsourcing Quality Requirement Change Management Model Jamshed Ahmad and Abdul Wahid Khan (ICS&IT, UST Bannu)	57: A Comprehensive Analysis of Realistic Environment for Cloud and Mobile Cloud Computing Muhammad Asim Shahid (Universiti Kuala Lumpur, Malaysia and IBM Karachi) and M.S. Mazliham (Multimedia University, Malaysia)
	22: Software Development Readiness Model for Quantum Computing Faheem Ahmed and Abdul Wahid Khan (ICS&IT, UST Bannu)	17: Revisiting Security and Privacy in Modern Cloud Computing Muhammad Ahmad Nawaz (Riphah International Islamabad), Haider Sajjad, Yasir Hussain, Hameed Ali (COMSATS Islamabad)
	11: Exploring Factors for a Framework Deciding Adoption of DevOps in Global Software Development from vendors' perspective: a Protocol for a Systematic Literature Review Saad Ullah Khan and Abdul Wahid Khan (ICS&IT, UST Bannu)	28: Comparative Analysis of Traffic Density Estimation Techniques in Intelligent Transportation Hira Beenish (Karachi Institute of Economics and Technology, Karachi), Tariq Javid (Hamdard University, Karachi), Muhammad Fahad (Karachi Institute of Economics and Technology, Karachi), Saima Sultana (SZABIST Karachi) and Sadia Nazim (Bahria University Karachi Campus)
	47: Team Interaction in Agile Development: A Comparative Analysis Muhammad Fahad, Hira Beenish (Karachi Institute of Economics and Technology Karachi) and Muhammad Shahzad (Bahria University Karachi Campus)	50: Traffic rules Violation Detection in Smart Cities using Internet of Things: A Systematic Literature Review Protocol Asad Hussain, Ihsan Rabbi and Umar Farooq (ICS&IT, UST Bannu)

01:15PM – 02:00PM Prayer & Lunch Break

Time Slot	02:00PM – 02:50PM	
Session	Closing Ceremony	
02:00PM - 02:15PM	Guests to be seated	
02:15PM - 02:20PM	Recitation from the Holy Quran	
02:20PM - 02:35PM	Certificates/Shields Distribution	
02:35PM - 02:45PM	Chief Guest Address	
02:45PM - 02:50PM	Summary and Vote of Thanks	
02:50PM	Group Photo, Tea and Departure	

