

Detailed schedule of the 12th Int. Conf. on Big Data and Artificial Intelligence
(BDA 2024), December 17-20, 2024. University of Hyderabad.

December 17 (Day - 1) - Workshop Day

08:30 – 09:00	Registration
09:00 – 17:00	Workshop – 1 “ Title: GenAI-Driven Big Data Innovations in the Edge-Cloud Continuum ”, G-9 (Ground floor), Zakir Hussain complex
09:00 – 17:00	Workshop – 2, “ Title: Secure, Reliable, and Ethical Generative AI Implementation ”, F-9 (First floor), Zakir Hussain complex

December 18 (Day - 2) - BDA 2024, Main Conference

G-9 (Ground floor), Zakir Hussain complex

08:30 – 09:00	Registration
09:00 – 09:45	Inaugural session – Welcoming participants by Satish Srirama (General Chair), Address by the VC, UoH, and Address by the IIITH Director
09:45 – 10:45	Keynote talk by Prof. Giuliano Casale (Imperial College London) on “ Optimizing Real-Time Data Processing: Balancing Resource Constraints and Quality-of-Service ”
10:45 – 11:00	Tea break
11:00 – 12:30	Session – 1 (Graph Analytics)
12:30 – 13:00	Invited talk by Sailesh Patra (AI Consultant, Cognida.ai) on “ AI in Procurement - Order Automation ”
13:00 – 14:00	Lunch break
14:00 – 15:30	Session – 2 (Image Classification)
15:30 – 15:45	Tea break
15:45 – 17:45	Session – 3 (Health-Care Analytics)

F-9 (First floor), Zakir Hussain complex

10:45 – 13:00	Tutorial 1 by Mayuri Mehta (Sarvajanik College of Engineering and Technology, Surat, Gujarat, India) on topic “ Self-Supervised Learning: A Next Step in AI to Learn Representations from Unlabeled Data Generating Implicit Labels ”
14:00 – 14:30	
14:30 – 17:30	Tutorial 2 by Vengadeswaran (IIIT Kottayam) and ShajulinBenedict (IIIT Kottayam) on topic “ Deploying a Scalable Cloud Infrastructure for Big data Management Challenges and Research Issues ”

Session – 1 (Graph Analytics)

Full papers

1. Paper id: 89, Monachary Kammari (University of Hyderabad)*; Durga Bhavani S (University of Hyderabad), “**Adaptive Temporal Random Walks for Graph Representation**”

2. Paper id: 29, Aditi Seetha (MNIT); Jitendra Parmar (VIT University)*; Satyendra singh chouhan (MNIT Jaipur); Emmanuel Shubhakar Pilli (MNIT Jaipur); Abhinav Jain (IIIT KOTA), **“DisEvD: A Benchmark Dataset for Disruptive Event Identification from Online Social Network”**
3. Paper id: 103, Sandhya Rani A (University of Hyderabad)*; Ashwitha G (University of Hyderabad); Swarupa K Rani (University of Hyderabad), **“SDG HHAG Framework: Homogeneous and Heterogeneous Attributed Graphs”**

Session – 2 (Image Classification)

Full papers

1. Paper id: 11, Bhupathi Vishva Pavani (Amrita Vishwa Vidyapeetham); Thanmai Gaddam (Amrita Vishwa Vidyapeetham); Rimjhim Dr. Singh (Amrita vishwa vidyapeetham)* **“Efficient Detection of Acute Lymphoblastic Leukemia in Microscopic Blood Cell Images”**
2. Paper id: 58, Avni Mishra (Jawaharlal Nehru University)*; Ramesh Kumar Agrawal (JAWAHARLAL NEHRU UNIVERSITY); Pinki Kumari (Jawaharlal Nehru University) **“Neutrosophic Clustering Method with Local Spatial Information for Dermoscopic Image Segmentation”**
3. Paper id: 111, Madhuri Gadwal (University of Hyderabad)*; Atul Negi (University of Hyderabad) **“DLMLP with elastic-net regularization for hyperspectral image classification”**

Session – 3 (Health-Care Analytics)

Full paper

1. Paper id: 104, Ravi Tiwari (Mahindra University); Shabnam Samima (Mahindra University)*; Tauheed Ahmed (Mahindra University) **“GCN-MLP Framework for EEG-Based Vigilance Estimation for Variable Data Length”**

Short papers

2. Paper id: 24, Purnanand Prasad (Silicon University); Prakash Sahu (International Institute Of Information Technology, Naya Raipur); Vishnu Prasad Verma (IIIT Naya Raipur)*; Santosh Kumar (Dr.S P Mukherjee International Institute of Information Technology) **“Deep Learning Framework for Early Diagnosis of COPD and Respiratory Diseases using Lung Sound Analysis”**
3. Paper id: 38, Sontaga Forane (North-West University); Absalom E Ezugwu (North-West University)*; Kevin Igwe (University of Johannesburg) **“Evaluating the Cultural Sensitivity of Large Language Models in Mental Health Support: A Framework Inspired by Ubuntu Values”**
4. Paper id: 72, Satansu Mohanty (Indian Institute of Information Technology, Sri City); Chandra Mohan Dasari (Indian Institute of Information Technology, Sricity)* **“Explainable Graph Neural Networks to identify potential atoms and chemical bonds of drug candidates from drug target interactions”**
5. Paper id: 94, Divyasri S R (Hindustan Institute of Technology and Science)*; Rama Prasath A (Hindustan Institute of Technology and Science) **“Enhancing Cardiovascular Disease Prediction Among Middle-Aged Individuals Using Reinforcement Learning Dynamic Ensemble Selection with Customizable Actions and Exploration-Exploitation Balance”**

December 19 (Day - 3)

G-9 (Ground floor), Zakir Hussain complex

08:30 – 09:00	Registration
09:00 – 10:00	Keynote talk by Prof. Rajkumar Buyya (University of Melbourne, Director CLOUDS lab) on “Neoteric Frontiers in Cloud, Edge, and Quantum Computing”
10:00 – 10:15	Tea break
10:15 – 11:45	Session – 4 (Big Data Analytics)
11:45 – 13:00	Panel talk on Title: How will our everyday lives change as Big Data unites with AI/ML? with 1. Prof. Chakravarthy Bhagvati (Moderator) 2. Dr. Rama Govindaraju (Director of Engineering at Google San Jose) 3. Dr. Srinivas Jandhyala (IBM) 4. Dr. J. V. R. Sagar (Sc-H, DRDO and former Director, ANURAG) 5. Dr. Srinivasa Chakravarthy (IIT Madras)
13:00 – 14:00	Lunch break
14:00 – 15:30	Session – 5 (Applications-1)
15:30 – 15:45	Tea break
15:45 – 16:30	Invited talk by Asoke Talukder (Co-Founder & CSO ARAI Solutions) on “AI, 6G, and Cognitive Graphs in Autonomous Smart World”
16:30 – 18:00	Session – 6 (eLearning)
18:30 – 19:30	Cultural program
19:30 – 22:00	Banquet dinner

F-9 (First floor), Zakir Hussain complex

10:15 – 18:00	Tutorial 3 by G. Victor Daniel (Anurag University, Hyderabad) on topic “Mastering ETL and Data Pipelines with Big Data from Basics to Advanced Techniques”
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Session – 4 (Big Data Analytics)

Full papers

1. Paper id: 32, Sreenivasu Mirampalli (University of Hyderabad); Rajeev Wankar (University of Hyderabad); Satish N Srirama (University of Hyderabad)* **“Dynamic Deployment of Serverless Data Pipeline on Fog Nodes”**
2. Paper id: 51, Prasad Bhavana (University of Hyderabad)*; Vineet Padmanabhan (University of Hyderabad); Wilson Naik Bhukya (University of Hyderabad) **“Matrix factorization of large scale data using block based approach and GPU acceleration”**
3. Paper id: 106, Bhagirath K (CDAC Noida)*; Dheeraj Pant (CDAC Noida); Abhishek Tiwari (CDAC Noida); Vivek Khaneja (CDAC Noida) **“Advanced HLS for Reconfigurable Image Processing in Big Data Systems”**

Session – 5 (Applications-1)

Full papers

1. Paper id: 49, Sharia Arfin Tanim (American International University-Bangladesh(AIUB)); Rubaba Binte Rahman (American International University-Bangladesh); Kazi Tanvir (Vellore Institute of Technology); Md. Sayem Kabir (American International University-Bangladesh); Tasnim Sultana Sintheia (American International University-Bangladesh); Md Saef Ullah Miah (AIUB)* **“Explainable Detection and Analysis of Cauliflower Leaf Diseases”**
2. Paper id: 93, Zsófia Katona (University of Amsterdam); Seyed Sahand Mohammadi Ziabari (University of Amsterdam)*; Fatemeh Karimi Najadasl (University of Amsterdam) **“MARINE: A Computer Vision Model for Detecting Rare Predator-Prey Interactions in Animal Videos”**
3. Paper id: 121, Charan Marrimanu Teja (Madanapalle Institute of Technology and Science)*; Arjun Chakravarthi Pogaku (Madanapalle Institute of Technology and Science) **“A Novel Multi-Task Learning Framework for Predicting Traffic Congestion”**

Session – 6 (eLearning)

Short papers

1. Paper id: 13, Praveen Singh Thakur (Malaviya National Institute of Technology Jaipur)*; Mahipal Jadeja (Malaviya National Institute of Technology Jaipur); Satyendra singh chouhan (MNIT Jaipur); Santosh Singh Rathore (ABV-IIITM Gwalior) **“Evaluating Deep Learning Embedding Techniques for Code Smell Detection”**
2. Paper id: 66, Binu John (SCMS SCHOOL OF ENGINEERING & TECHNOLOGY KARUKUTTY)*; Varun G Menon (SCMS SCHOOL OR ENGINEERING AND TECHNOLOGY); Mainak Adhikari (Indian Institute of Science Education and Research Thriuvanthapuram) **“FedNorm: Optimised Federated Learning Strategy using Hybrid Regularisation Norm”**
3. Paper id: 90, Yash Kumar Sharma (University of Hyderabad)*; Akshay Badola (University of Hyderabad); Vineet Padmanabhan (University of Hyderabad); Wilson Naik (University of Hyderabad); Abdul Sattar (Griffith University) **“Efficient Self-Supervised Contrastive Learning with Representation Mixing”**
4. Paper id: 120, Tilottama Goswami (Vasavi College of Engineering)*; Gummalla Bhavana (S&P Global); Anirudh (Capital Quant Solutions); Leena Reddy (Vasavi College of Engineering); K Ram Mohan Rao (Vasavi College of Engineering) **“Smart E-learning Development Tool using Generative AI and Retrieval-Augmented Approach”**

December 20 (Day - 4)

G-9 (Ground floor), Zakir Hussain complex

08:30 – 09:00	Registration
09:00 – 10:00	Keynote talk by Prof. Santanu Chaudhury (IIT Delhi) on “Document AI: Perspectives & Future”
10:00 – 10:15	Tea break
10:15 – 11:45	Session – 7 (Data Science)
11:45 – 13:00	Invited talk by Rajeew Gupta (Principal Applied Researcher, Microsoft)
13:00 – 14:00	Lunch break
14:00 – 15:30	Session – 8 (Prediction and Forecasting)

15:30 – 15:45	Tea break
16:00 – 16:30	Closing session

F-9 (First floor), Zakir Hussain complex

10:15 – 13:00	Tutorial 4 by Vishnu S. Pendyala (San Jose State University, California, USA) on topic “Social and Environmental Implications of the AI boom”
14:00 – 16:00	Tutorial 5 by Kamalakar Karlapalem (IIIT-Hyderabad), P. Radha Krishna (NIT Warangal) and Satyanarayana R Valluri (Databrics Inc., California, USA on topic “Data Fabric: Enabling Technologies and Applications”

Session – 7 (Data Science)

Full papers

1. Paper id: 14, Amey Shinde (The University of Texas at Arlington); Viraj Sabhaya (The University of Texas at Arlington); Kevin Farokhrouz (The University of Texas at Arlington); Fariba Irany (University of North Texas); Ali Khan (University of North Texas); Sanjukta Bhowmick (University of North Texas); Abhishek Santra (The Department of Computer Science and Engineering, University of Texas at Arlington)*; Sharma Chakravarthy (University of Texas at Arlington) **“MLN-geeWhiz: Supporting Complex Data Analysis Including Visualization”**
2. Paper id: 50, Adamyia Shyam (University of Delhi); Kavita Kanwar (National Institute of Technology, Warangal); Vikas Kumar (University of Delhi)*; Venkateswara R Kagita (NIT Warangal) **“gCDR: A group aided cross-domain recommendation framework”**
3. Paper id: 101, Navpreet (Thapar institute of engineering and technology)*; Rajendra Kumar Roul (Thapar Institute of Engineering and Technology); Dr. Rinkle Rani (Thapar University) **“CKELM: Unified Approach to Parking Space Classification for All Weather Types”**

Session – 8 (Prediction and Forecasting)

Short papers

1. Paper id: 25, Navadersh S (Indian Institute of Information Technology Kottayam); Vengadeswaran Shanmugasundaram (Indian Institute of Information Technology Kottayam)* **“An Efficient Predictive Big Data Analytics for Supply Chain Demand Forecasting through Ensemble Learning”**
2. Paper id: 31, Jayanth Talabathula (VIT-AP University); Manimaran A (VIT-AP UNIVERSITY)* **“Enhanced Stock Price Prediction with DES-ED-Bi-GRU Using Smooth Maximum Unit Activation Function”**
3. Paper id: 52, Leelavathy B (Vasavi College of Engineering)*; Krm rao (Vasavi college of engineering); Khateeb Mohammed Zahid Parvez (Vasavi college of engineering); Bathini Ajay Goud (Vasavi college of engineering) **“Real-Time Pothole Detection System: A Deep Learning Approach with Single Shot Detector”**
4. Paper id: 60, Akansha Singh (IIIT-Lucknow)*; Dr. Soumendu Chakraborty (IIIT Lucknow); Mainak Adhikari (Indian Institute of Science Education and Research Thriuvanthapuram) **“Data Analysis with Model Explainability for Air Quality and Pollution Prediction of Urban Areas in Edge Networks”**