		International Conference On		

Harnessing Artificial Intelligence for Healthcare & Climate Resilience : Path to Sustainable Future (HACER 2025)
December 19-20, 2025, IIIT Vadodara - ICD, Diu

Supported by: ANRF-PAIR Scheme

Program Schedule

Date	Time	Day1	Activity/ Theme	Session Chair	Session Co-Chair
Dec. 19, 2025	10:00 am - 0:05am	Inauguration Session	Arrival and welcome of dignitaries		Dr. Dhirendra Sinha
	10:05am -10:15am		Lighting of lamp by dignitaries and Institute Kulgeet		
	10:15 am-10:20am		Address by program chair, Dr. Jignesh Bhatt		
	10:20am -10:25am		Address by TPC chair, Dr. Kamal K. Jha		
	10:25am -10:35am		Address by Prof. Dharmendra Singh, Director, IIIT Vadodara		
	10:35am-10:45 am		Address by Dr. Girish K. Goswami Project Director, Regional Science Centre, Bhavnagar (Distinguished Guest)		
	10:45am-10:55 am		Address by Prof. Rajiv Prakash, Director IIT Bhilai (Distinguished Guest)		
	10:55am-11:00 am		Felicitation		
	11:00 am - 11:05 am		Vote of Thanks by Convener, Dr. Pratik Shah		
	11:05 am - 11:10 am		National Anthem		
	11:10 am - 11:30 am	**High Tea**			
	11:30 am-11:50am	Keynote Talk	Prof. Richi Nayak, Queensland University of Technology, Australia Title: Advancing Deep Learning for Real-world Data: From Sequential Models to Multimodal Intelligence		Dr. Ajay Nath
	11:50 am-12:10pm		Dr. Jasjit S Suri, (FIEEE Fellow) Chairman AtheroPoint, United States of America Title: Personalized Medicine in Artificial Intelligence Framework		
	12:10pm-12:30pm		Dr. Bozsó István, HUN-REN Institute of Earth Physics and Space Science, Hungary Title: Beyond Discovery: Leveraging LLMs for Robust Scientific Practices		

12:30pm-12:50pm		Dr. Shogo Isayama, Kyushu University Japan Title: Reconstructing Magnetohydrodynamic Reconnection Dynamics Using Physics-Informed Neural Networks (PINNs)		
12:50pm-01:10pm		Dr. Shubham Dubey, St. Jude Children Research Hospital, Memphis, TN, USA Title: Deciphering Bacterial Molecular Machineries: Foundation for Next-GenerationTherapeutic Interventions		
01:10pm-01:30pm		Speaker: TBD Title: TBD		
01:30 pm-02:30 pm	**Lunch**			
02:30pm-02:45pm	Track1	Author Name: Nivedita Singh Title: AI-Enabled Mapping of Protein Conformational States in Living Cells		Dr. Gaurav Pareek
02:45pm-03:00pm		Author Name: Khemraj Sharma Title: The Development of Innovation & Startups in Agriculture Sector of India: Policy & Prospectives		
03:00pm-03:15pm		Author Name: Trushit Upadhyaya Title: Static Malware Detection: An Experimental Study on Embedded Feature Selection and Machine Learning Models		
03:15pm-03:30pm		Author Name: G. Ramesh Title: Optimizing Decision Trees for Solar Insolation Classification: A Hyperparameter Tuning Study		
03:30pm-03:45pm		Author Name: Rakesh Bhalla Title: Analysis of correlation between Acoustic and Seismic signatures of Multicopter UAV		
03:45pm-04:00pm		Author Name: Manoj Panchal Title: Pothole Detection and Rule-Based Maintenance Prioritization Using YOLOv8		
04:00pm-04:30pm	**High Tea**			
04:30pm-04:45pm	Track1	Author Name: Hemlata Karne Title: Development of an Intelligent Decision Support System for Dermatological Cancer		Dr. Deepika Gupta
04:45pm-05:00pm		Author Name: Mohmadishak Sheikh Title: Cyber Security and Anomaly Detection in Smart Grids: Trends, Challenges, and Future Prospects		

	05:00pm-05:15pm		Author Name: Alka Thakur Title: Cybersecurity of Battery Energy Storage Systems in Grid: Necessity and Challenges		
	05:15pm-05:30pm		Author Name: Nandhini Title: Enhancing Hierarchical Federated Learning Security Through Blockchain and Cybersecurity Techniques		
	05:30pm-05:45pm		Author Name: Meher Soni Title: Construction of Knowledge Graphs from Review-Based Conversational Data		
	05:45pm-06:00pm		Author Name: Vinod Title: Design and Implementation to Enhance Security: AI-Powered Cyber Defense for Industrial Robots		
	06:00pm-06:15pm		Author Name: Rakesh Bhalla Title: Seismic Modality Based CNN-BiLSTM Algorithm for Gait Classification		
	Parallel Session				
	02:30pm-02:45pm		Author Name: Sanjay M. Title: Medical image encryption using generated key based on facial biometrics		
	02:45pm-03:00pm		Author Name: Sanjeev Mani Yadav Title: Dual-Core Al2O3/Au Optical Fiber SPR Sensor for Clinical Ethanol Quantification: Design and Simulation		
	03:00pm-03:15pm	Track2	Author Name: Anshita Dhoot Title: QSBF-Net: Quantum-Safe Cryptography and Quantum Machine Learning Integration for Securing Blockchain Networks	Dr. Sanjay Saxena	
	03:15pm-03:30pm		Author Name: Hanuman Tivari Title: A Predictive Mathematical Approach for Tensile Strength Estimation in Hybrid Braided Ropes Using Curve Fitting Techniques		
	03:30pm-03:45pm		Author Name: Praveena Rao Title: Harnessing Artificial Intelligence for Climate Extremes Forecasting		
	03:45pm-04:00pm		Author Name: Anshul Sharma Title: A Hybrid Deep Learning Based Approach for Landslide Detection		
	04:00pm-04:30pm		**High Tea**		

Date	Time	Day2	Activity/ Theme	Session Chair	Session Co-Chair
	04:30pm-04:45pm	Track2	Author Name: Avinash Kumar Title: A Hybrid Metaheuristic Based Approach For Intrusion Detection in Cloud Environment		Dr. Payal Wadhwa
	04:45pm-05:00pm		Author Name: Kundan Rathore Title: Machine Learning for Classifying Mixed Crop Classes using Multiple Vegetation Indices		
	05:00pm-05:15pm		Author Name: Jay N. Chaudhari Title: UAVface-YOLO: Aleatoric Uncertainty-Aware Lightweight YOLO for Face Detection		
	05:15pm-05:30pm		Author Name: Vanshika Mishra Title: Comprehensive Skin Cancer Classification Using CNN with Soft Attention and Demographic Analysis		
	05:30pm-05:45pm		Author Name: Disha Shimpi Title: A vision-based approach for road quality estimation in satellite imagery		
	05:45pm-06:00pm		Author Name: Mandadi Sriya Reddy Title: Privacy Preserving Malware Detection Framework Using Differential Privacy		
	06:00pm-06:15pm		Buffer Slot		
	07:00 pm onwards		**Cultural Event and Conference Dinner**		
Date	**Time**	**Day2**	**Activity/ Theme**	**Session Chair**	**Session Co-Chair**
Dec. 20, 2025	09:30 am-09:50 am	Invited Talk	Dr. Shobhana Singh, IIT Jodhpur Title: Smart Water Grid: Building Resilience and Operational Efficiency in Water Infrastructures		Dr. Ashish Singh
	09:50 am-10:10 am		Prof. Sumantra Dutta Roy, IIT Delhi Title: An Introduction to GANs		
	10:10 am-10:30 am		Dr. Ashish Kalkal, Heriot-Watt University, UK Title: Electrochemical Nanoengineered biosensing Devices: Development & Healthcare		
	10:30 am-10:50 am		Dr. Rahul Thakur, IIT Roorkee Title: Building the Connected Future: Practical IoT Innovations in Healthcare, Agriculture, and Smart Cities		
	10:50 am-11:10 am		Mr.Tushar Singh, Senior Developer, Walmart Title: Building Scalable, Responsible and Sustainable AI		

11:10 am-11:30 am		Dr. Neetesh Kumar, IIT Roorkee Title: Reinforcement Learning in Autonomous Driving		
11:30 am-11:45 am	**High Tea**			
11:45 am-12:00 pm	Invited Talk	Dr. Gopal Singh Phartiyal, CSIS, BITS Pilani, Pilani Campus Title: TBD		
12:00 pm-12:15 pm	Track3	Author Name: Kavya Bonyal Title: CNN-Based Fusion of SAR and Optical Data for Improved Land Cover Classification		
12:15 pm-12:30 pm		Author Name:Samit Kumar Singh Title: Analysis and Comparison of Machine Learning Methods for Crime Hotspot Detection		
12:30 pm-12:45 pm		Author Name: Illa Mahesh Kumar Swamy Title: A Deep learning model for detecting respiratory disease using X-Ray images		
12:45 pm-01:00 pm		Author Name: Jinal Purohit Title: AI Chatbots and Linguistic Diversity: Comparative Analysis of Feedback on Code-Mixed English and Cultural Nuances in ESL Output.		
01:00 pm-01:15 pm		Author Name: Laxman Singh Khangarot Title: Adapting Crowd Density Map Regression for Drone-Based Dense Two-Wheeler and Car Parking		
01:15 pm-01:30 pm		Author Name: Ankit Tripathi Title: Multilingual Hate Speech Detection with Machine Learning and Deep Learning Approaches		Dr. Navin Kumar Dwivedi
01:30 pm-02:30 pm	**Lunch**			
02:30 pm-02:45pm	Track3	Author Name: Sourabh Borchate Title: The Role of Cybersecurity in Protecting Digital Infrastructure - Challenges, Threats, and Modern Defense Mechanisms		
02:45 pm-03:00pm		Author Name: Ajay Prajapati Title: Personality Classification from Handwriting Using Pretrained CNN Architectures		
03:00 pm-03:15pm		Author Name: Dharti Sharma Title: Simulated Harm, Real Consequences: AI, Violence, and the Digital Female Body		

03:15 pm-03:30pm		Author Name: Sakshi Somani Title: Adaptive Queue Optimization for H2H and M2M Traffic Using Deep Q-Learning		
Parallel Session				
11:45 am-12:00 pm	Invited Talk	Prof. Neeraj Sharma, IIT BHU Title: Quantum Neural Network and their applications for Medical Image Processing		
12:00 pm-12:15 pm	Track4	Author Name: Laxman Singh Khangarot Title: A CoAtNet-Based Hybrid Convolution–Attention Framework for Automated Retinal Disease Classification Using OCT Images		
12:15 pm-12:30 pm		Author Name: Jitu Sharma Title: An Efficient Hybrid Architecture for CNN Accelerator		
12:30 pm-12:45 pm		Author Name: Vikas Vaghasiya Title: Unsupervised Hierarchical Similarity-Driven Hyperbolic Metric Learning for Face Presentation Attack Detection		
12:45 pm-01:00 pm		Author Name: Yamini Parashar Title: Role of Women-Led Tech Startups in Driving Inclusive Development of India		
01:00 pm-01:15 pm		Author Name: Alpesh Thaker Title: Analysis of Social Media Post for Detection and Recognition of Mental Health Issues		
01:15 pm-01:30 pm		Author Name: Patel Priyanshu Kiritbhai Title: Safe Ship Navigation Service with Weather Aware Graph Search		Dr. Naveen Kumar
01:30 pm-02:30 pm	**Lunch**			
02:30 pm-02:45pm	Track4	Author Name: Meet Amitbhai Modi Title: Detection of Terrestrial Bow Shock Crossings in MMS Data and Region Classification Using Neural Network		
02:45 pm-03:00pm		Author Name: Ayush Sharma Title: A Unified Model for Balancing Data Utility and (k,l,t) Privacy		
03:00 pm-03:15pm		Author Name: Tejas Patil Title: ClozeMaker: Adaptive NLP-Driven Cloze Test Generation for Indian ESL Learners		
03:15 pm-03:30pm		Author Name: Chetan Kumar Title: Student Performance Prediction Using Progressive Feature Fusion Neural Network		Dr. Swapnil Lokhnade
03:30 pm-04:00pm	**Valedictory Ceremony**			