



13th International Conference on
Soft Computing for Problem Solving
(SocProS 2025)
Artificial Intelligence for Viksit Bharat

February 24th -26th, 2025

Department of Applied Mathematics and Scientific Computing
Indian Institute of Technology Roorkee, India



Detailed Schedule for the SocProS 2025

Day 1(24 February 2025)			
Venue: MAC Auditorium, IITR			
08:30 Onwards	Registration		
10:00 - 11:00	Inauguration		
11:00 - 11:45	High Tea		
11:45 - 12:30	Plenary Talk 1 (Prof. Andries Engelbrecht) Session Chair: Prof. Rajan Arora Volunteers- Hrishikesh, Shubham		
12:30 - 1:15	Plenary Talk 2 (Prof. Christian Blum) Session Chair: Prof. Jaydev Volunteers- Om Tripathi, Shubham		
1:15 - 2:30	Lunch		
2:30 - 3:15	Plenary Talk 3 (Prof. David L Blunck) Session Chair: Prof. Pankaj Gautam Volunteers- Rohit Sharma, Shubham		
3:15-3:30	Tea		
Keynote Talk: Prof. A.K. Verma Time: 3:30 PM – 4:00 PM Session Chair: Prof. Kusum Deep, IITR Volunteers- Rutvij, Aditi Venue: CEC			
Day 1: 24 February 2025 Parallel Sessions (4 Sessions) and Poster Presentation (4:00 PM Onwards) 4:00 PM - 5:30 PM (8 Minutes Per Presentation) Venue: CEC			
Session 1 (8 Papers)	Session 2 (6 Papers)	Session 3 (6 Papers)	Session 4 (7 Papers)
Chairs- Dr. Sachin Kumar, DU, Prof. Ompal, DU Volunteers – Riya, Jyant	Chairs- Dr. Radha Gupta, DSCE Prof. SP Yadav, IITR Volunteers – Akhilesh, Aashu	Dr. Abhishek Tandon, DU (I. Talk) Dr. Gurjeet Kaur, DU (I. Talk) Chair- Prof. S K Gupta, IITR Volunteers – Dr. Mittu Walia, Anshika	Dr. Anu Gupta, DU (I. Talk) Dr. Sameer Anand, DU(I. Talk) Chair- Prof. Ameeya K. Nayak, IITR Volunteers – Abhishek Gupta, Shivam
58, 138, 341, 262, 242, 137, 183, 62	177, 144, 145, 185, 340, 46	322, 323, 70, 326, 172, 143	132, 265, 57, 119, 197, 298, 306
7:00 - 8:30	Cultural event (Venue- MAC)		
8:30 Onwards	Conference Dinner (Venue- MAC)		

Day 2 (25 February 2025)

Venue: CEC, IITR

Plenary Talk – Prof. Xin Yao

Time – 10 AM to 10:45 AM

Session Chair: Prof. Rajan Arora, IITR

Volunteers- Rutvij, Shivam

Tea Break (10:45-11:00)

Parallel Sessions (4 Sessions)

Time: 11:00 AM to 12:30 AM (8 Minutes Per Presentation)

Venue: CEC

Session 5 (7 Papers)	Session 6 (8 Papers)	Session 7 (7 Papers)	Session 8 (8 Papers)
Chairs- Prof. Chaman Kumar, IITR Prof. Xin Yao, Lingnan University Volunteers – Sumit, Saurabh	Chairs- Prof. SP Yadav, IITR Prof. Engelbrecht Stellenbosch Uni., RSA Volunteers- Atul, Rajkumar	Chairs- Dr. Sushil Kumar, NITKKR Prof. Christian Blum, SNRC Spain Volunteers- Aarti, Divyanshu	Chairs- Prof. Rajan Arora, IITR Dr. Kuldeep Kumar, NITKKR Volunteers- Om, Arindam
150, 218, 86, 82,156, 277, 307	348, 282, 318, 78, 228, 231, 107, 272	168, 173, 38, 142, 241, 195, 336	327, 335, 311, 135, 210, 165, 97

Lunch Break

Parallel Sessions (4 Sessions)

Time: 2:00 PM to 3:30 AM (8 Minutes Per Presentation)

Venue: CEC

Session 9 (7 Papers)	Session 10 (5 Papers)	Session 11 (6 Papers)	Session 12 (6 Papers)
Chairs- Prof. Madhu Jain, IITR Dr. Richa, MSU, SRE Volunteers – Akshita, Apurba	Chairs- Prof. Sumit Yadav, IITR Dr KC Lachhwani NITTTR Chandigarh Volunteers – Princy, Prakhar	Chairs- Prof. Manu Gupta, IITR Mr. Manish Kumar, DU Volunteers – Rutvij, Mansi	Chairs- Prof. Pankaj Gautam, IITR Mr. Abhishek Gupta, GBPIET Volunteers – Aashu, Rajesh
152, 286, 66, 83, 88, 50, 171	65, 266, 154, 276, 278	43, 163, 40, 249, 93, 147	337, 159, 16, 104, 338, 352

Tea Break

Parallel Sessions (4 Sessions)

Time: 3:45 PM to 5:15 PM (8 Minutes Per Presentation)

Venue: CEC

Session 13 (8 Papers)	Session 14 (8 Papers)	Session 15 (6 Papers)	Session 16 (7 Papers)
Chairs- Prof. Jaydev, IITR Dr. Awadh Pratap Singh, UPES Dehradun Volunteers – Yogesh, Pawan	Chairs- Prof. R. Balasubramanian, IITR Dr. Prince Solanki, IILM University Volunteers – Ashish, Aditi	Chairs- Prof. Ankik Giri, IITR Dr. Hira Zaheer, GNIOT Volunteers – Hrishikesh, Siddhartha	Chairs- Prof. SS Sanga, SVNIT Prof. Uday Singh, IITR Volunteers – Urvashi, Akshata
84, 297, 18, 45, 89, 221, 87, 32	202, 139, 319, 283, 116, 60, 51	273, 328, 312, 114, 315, 151	324, 275, 44, 229, 256, 334, 254

Dinner- 8 PM Onwards

Day 3 (26 February 2025)	
Venue: Saharanpur Campus (IITR)	
Parallel Sessions (2 Sessions) Time: 10:00 AM to 11:00 AM (8 Minutes Per Presentation) Venue: Lecture Hall, Department of Applied Mathematics & Scientific Computing	
Session 17 (7 Papers)	Session 18 (5 Papers)
Chairs- Dr. Pravesh Kumar, REC Bijnor Dr. Karuna, IITR Volunteers – Aniruddha, Debabrata	Chairs- Prof. V P Singh, Retd. Faculty IITR Dr. Meenu Singh, Czech Rep. Volunteers – Aarti, Vineet
200, 220, 213, 264, 251, 299, 258	310, 252, 295, 174, 349
Plenary Talk – Prof. Vaclav Snasel Time – 11:15 AM to 12:00 PM Venue- Committee Hall, IIT Roorkee Saharanpur Campus Session Chair: Prof. Rajan Arora, IITR Volunteer- Aditi, Shubham	
Valedictory Session	12:00 PM Onwards
Lunch	
End of The Conference	

List of Paper ID with Title and Author Details

Paper Id	Title of Manuscript	Authors with Affiliation
16	Optimal Defense Strategies for Security Agencies: A Dual Hesitant Fuzzy Matrix Game Approach	Sandeep Kumar (Ch. Charan Singh University, Meerut, Uttar Pradesh (India)); Aashish . (Ch. Charan Singh University, Meerut, Uttar Pradesh (India))*
18	Fooling A Deep Learning-based Facial Expression Recognition System using its Class Activation Map and Differential Evolution	Pramod Kumar (PDPM IIITDM Jabalpur); Gayatri Gamini (PDPM IIITDM Jabalpur); Dr.Ayan Seal (IIIT Jabalpur)*; Dr.Sraban Kumar Mohanty (IIIT Jabalpur); Haibo Zhang (Kyushu Institute of Technology); Kouichi Sakurai (Kyushu University)
32	Assessing Students' Emotions in Learning Environment: Integrating Deep Learning with Statistical Learning	Tushar Tripathi (Prin L.N. Welingkar Institute of Management Development and Research (WeSchool)); Tripti Mahara (L.N.Welingkar Institute of Management Development and Research (WeSchool))*; Madhumita Guha Majumder (Prin L.N. Welingkar Institute of Management Development and Research (WeSchool))
38	MediAI: A Specialized Medical LLM for Accurate Diagnosis and Clinical Documentation	Chitra Jain (Coer University); Aryan Kaushik (COER University, Roorkee); Abhishek Saini (COER University, Roorkee); Maitri Vashistha (COER University, Roorkee); Kamal Kumar Gola (COER University, Roorkee)*
40	AI-Powered Custom Emoji Generator: Enhancing Digital Expression and Engagement	kushagra sharma (chandigarh university)*; Jatinder Saini (Chandigarh University)
43	MSD-YOLOViT10: Optimized Underwater Marine Species Detector	Mouleek Kapoor (DTU); Aditi Shetkar (IIT GOA); Shitala Prasad (IIT Goa)*
44	Analysis of CNN models with Transfer learning in Mango Diseases Detection	Mukesh Singh (Dr. A.P.J. Abdul Kalam Technical University Lucknow)*; Natthan Singh (IET Lucknow); Dr. Vishnu Sharma (ITS Greater Noida)
45	Leveraging Machine Learning to Optimize Financial Markets	Chirag - (Chandigarh University)*; Sonia - (Chandigarh University)

46	Evaluating Machine Learning Techniques for Student Performance Prediction in Higher Education	Punam - (Chandigarh University)*; HARISH NAGAR (CHANDIGARH UNIVERSITY)
50	An Innovative Deep Neural Network-Based Method for Automated Cough Recognition and Diagnosis	swati Hira (Indian Institute of Information Technology)*
51	Development of a Robust Multispectrum Surveillance System Using Geman McClure Norm Based Fractional Order Variational Optical Flow Model	Ankit Kumar (Maulana Azad National Institute of Technology Bhopal)*; PUSHPENDRA KUMAR (Maulana Azad National Institute of Technology Bhopal)
57	A Comparative Analysis of Classification with Explainability of Customer Churn Prediction	Sujoy Chatterjee (Amity University); Suvra Choudhury (Iiit Nagpur)*
58	Predicting Maternal Health Risks using Ensemble Model, Multilayer Perceptron, and PCA Features	R Girija (Manav Rachna International Institute of Research and Studies)*; N Deepa (Manav Rachna International Institute of Research and Studies)
60	Analysis for an unreliable retrieval queueing system under threshold-based recovery using ANFIS approach	Nidhi . (NIT Surat)*; Sudeep Singh Sanga (NIT Surat)
62	Review of Recent Advancements in Smart Clinical Surgery	Rudra Singh (Indian Institute of Information Technology, Nagpur)*; Shrirang P Savale (Indian Institute of Information Technology, Nagpur); Harsh Goud (IIIT NAGPUR); Akshat Singh Chauhan (Indian Institute of Information Technology, Nagpur)
65	Adaptive Learning EJAYA for Constrained Optimization Problem	Sandeep Mogha (Chandigarh University); Sonal Deshwal (Chandigarh University)*; Pravesh Kumar (Rajkiya Engineering College Bijnor, India)
66	Performance Evaluation of Deep Learning Models using Transfer Learning on Ultrasound Images for Breast Cancer Detection	Laxmi Yadav (Institute of Engineering and Technology, Lucknow)*; Girish Chandra (Institute of Engineering and Technology, Lucknow); Divakar Yadav (National Institute of Information Technology, Hamirpur(HP), India)
70	Efficient Multi-Objective Particle Swarm Optimization for Noisy Environments	HIRA ZAHEER (GNIOT Group of Institutions, Greater Noida); sushil kumar (NIT KURUKSHETRA)*

78	Precision Strontium Detection in Water: A Machine Learning Augmented Flame Photometric Approach	Prarthana Madhusoodanan (VELLORE INSTITUTE OF TECHNOLOGY, VELLORE); Sivakumar Rajagopal (Vellore Institute of Technology)*
82	Identification of Severity of Chronic Obstructive Pulmonary Disease (COPD) Using Machine Learning Models based on Spirometry Data	Pavan Reddy Chirra (Vellore Institute of Technology); Adarsh Komaragunta (Vellore Institute of Technology)*; Sivakumar Rajagopal (Vellore Institute of Technology)
83	Real-time Healthcare Environment Monitoring Through Deep Learning: A Multi-Modal Sensor Fusion Implementation	Gokul Nittin A (Vellore Institute of Technology); Sivakumar Rajagopal (Vellore Institute of Technology)*
84	Comparative Analysis of Random Forest and SVM for EMG-Based Gesture Recognition	Sarthak Krishak (Vit Vellore); Sivakumar Rajagopal (Vellore Institute of Technology)*
86	EMG Signal Classification in Lower Limbs using Machine Learning Techniques	Vivek Saha (Vellore Institute of Technology); Sivakumar Rajagopal (Vellore Institute of Technology)*
87	Real-Time Virtual Meeting Architecture for Deaf People: Audio Transcription, Noise Processing, and Sign Language Translation Using LSTM Neural Networks	Sivakumar Rajagopal (Vellore Institute of Technology)*; Aaryan Chaurasia (VIT VELLORE)
88	Comparative study of CNN and LSTM deep learning models for EMG signals for gesture recognition	ISHAAN DIGHE (VIT Vellore); Sivakumar Rajagopal (Vellore Institute of Technology)*
89	Data-Driven Insights from High-Dimensional Time-Series Signals: A Comprehensive Analysis Approach	AYUSHMAAN PANDA (VIT)*; Sivakumar Rajagopal (Vellore Institute of Technology)
93	Predictive Modeling of Sepsis Risk: Leveraging Clinical Parameters for Early Detection and Intervention	Mohit Jagwani (Vellore Institute of technology, Vellore); Sivakumar Rajagopal (Vellore Institute of Technology)*
97	Defending NLPP Solution Approaches: A Rebuttal to Bhatia et al. (2022) "Mehar approach to solve neutrosophic linear programming problems using possibilistic mean"	KAILASH LACHHWANI (NITTTR Chandigarh)*
104	An Intuitionistic Fuzzy Differential Equation Approach to Economic Production Inventory Model	Rashmi Yadav (Department of Mathematics Vardaman College Bijnor); Dharmendra Yadav (Department of Mathematics Vardaman College Bijnor); Shrestha Pundir (Thapar Institute of Engineering and Technology, Deemed to be University, Patiala India); Dipti Singh (Department of Mathematics C.C.S. University Meerut)*

107	Threshold-Optimized Ensemble Learning for Accurate and Secure Android Malware Detection	Abhay Singh (COER University, Roorkee); Kashish Bhardwaj (COER University, Roorkee); Kamal Kumar Gola (COER University, Roorkee)*; Kapil Kumar (COER University)
114	Affective DDoS attack detection in EV charging station using DL autoencoder model	Bhupendra sahu (NIT Raipur)*; Mithilesh atulkar (NIT Raipur); Ravindra kumar Chauhan (NIT Raipur)
116	Generalized probabilistic hesitant fuzzy aggregation operator based MCDM method to evaluate water quality	Rohit . (Amity University haryana)*; Gagandeep Kaur (Amity University Haryana); Kamal Kumar (Amity University Haryana)
119	Multi-Item Substitutable Inventory Model for Green and Regular Products with Environmental Sustainability under Inflationary Environment	Ummeferva Zaidi (CCS UNIVERSITY MEERUT)*; S R SINGH (CCS UNIVERSITY MEERUT)
132	A Green Supply Chain Approach under Market Displacement Factor for Novel and Refurbished Inventory	Dr. Sunil Kumar (Chandigarh University, Mohali, Punjab)*; Varuna Bhardwaj (ABES Institute of Technology, Ghaziabad, U.P., India); Vikash - (PNG Govt (PG) College Ramnagar (Nainital)Uttarakhand); Dharendra Singh (SSSTS Govt Degree College Nainidanda Pauri Garhwal Uttarakhand); Sandeep Kumar Mogha (Chandigarh University, Mohali, Punjab)
135	Solvability of Abstract Second-Order Differential Systems with State-Driven Delays	Sandeep Kumar (Ch. Charan Singh University, Meerut); TAJINDER SANGROHA (Ch. Charan Singh University, Meerut)*
137	An Efficient Model to Detect Power Fluctuations in Solar Power Plant Using Machine Learning	Rajesh Eswarawaka (RNS Institute of Technology Bengaluru)*
138	Cardio care-heart attack prediction model Using Haar Cascade Algorithm	Rajesh Eswarawaka (RNS Institute of Technology Bengaluru)*
139	Benefits of Hybrid Demand in a Sustainable Inventory Model with	Shiv Raj Singh (Chaudhary Charan Singh University, Meerut, Uttar Pradesh, India); Vaishali Singh (Chaudhary Charan Singh University Meerut)*; Aastha Chauhan (Chaudhary Charan Singh University, Meerut, Uttar Pradesh, India)

142	AI based plant health monitoring under stress conditions	Dr. Ashok Mondal (Vellore Institute of Technology Chennai)*; Piyush Arora (Vellore Institute of Technology Chennai); Ashis Tripathy (Vellore Institute of Technology Chennai); Bishnu Maya Bashyal (ICAR-Indian Agricultural Research Institute)
143	Reducing Operational Costs with Cost-Sensitive XG-Boost-Based Failure Prediction	Sandeep Mogha (Chandigarh University)*; Vikas Jangid (Chandigarh University); Muskan Ara (Chandigarh University)
144	Enhanced Hybrid DEA Approach for Predicting Hotel Efficiency: Probabilistic and Neural Network Approaches	Sandeep Mogha (Chandigarh University)*; Kiran Sheoran (Chandigarh University); Pravesh Kumar (Rajkeya Engineering College Bijnor, U.P., India)
145	Enhanced Weather Forecasting Using Random Forest, LSTM, Gradient Boosting and Ensemble Learning (RF+GB)	Sandeep Mogha (Chandigarh University)*; Aman Singh (Chandigarh University)
147	Spatio-Temporal Analysis and Severity Prediction of Weather Events Using Machine Learning Models	Rahul Singh (MANIT Bhopal)*; Bholanath Roy (MANIT Bhopal)
150	A Targeted Study of Lightweight Machine Learning Techniques for Cardiac Arrhythmia Risk Prediction	SANYAM BHARDWAJ (AMRITA VISHWA VIDYAPEETHAM)*; Krishna Priya R (University of Technology and Applied Sciences, Musandam); Anju S Pillai (Amrita School of Engineering, Coimbatore, Amrita Vishwa Vidyapeetham)
151	Development of Smart ECG Monitoring System Using IoT and ML	Swapnil Bisht (Graphic Era Deemed to be University); Parul Madan (Graphic Era Deemed to be University)*; Gaurav Singh Bhakuni (Graphic Era Deemed to be University); Ankit Vishnoi (Graphic Era Deemed to be University); Varun Sapra (UPES); Devesh Pratap Singh (Graphic Era Deemed to be University)
152	AI-Driven Pneumonia Diagnosis: Harnessing Custom CNNs for Chest X-ray analysis	Sandeep Mogha (Chandigarh University)*; Muskan Ara (Chandigarh University); Vikas Jangid (Chandigarh University)
154	Improved TLBO: A Novel Approach for Solving Complex Optimization Problems	ANUPMA MISHRA (Rajkiya Engineering College Kannauj Uttar Pradesh)*; SHIMPI SINGH JADON (Rajkiya

		Engineering College Kannauj Uttar Pradesh)
156	Triple-head Spatial Attention based Deep Learning Approach for Plant Disease Identification	Vanshika Pundir (Graphic Era deemed to be university); Palak Bhandari (Graphic Era deemed to be university); VIDIT KUMAR (Graphic Era Deemed to be University)*
159	Enhancing Web-Based Healthcare with Serverless Cloud Computing: A Geospatial Perspective	samanyu gaddam (IIRS ISRO)*; samanyu gaddam2 (IIRS ISRO)
163	A non-local weighted optical flow based CNN model for smoke detection using static and dynamic features	Nitish Kumar Mahala (Maulana Azad National Institute of technology bhopal)*; Muzammil Khan (University of Twente); Bhavana Singh (Maulana Azad National Institute of Technology Bhopal); Pushpendra Kumar (Maulana Azad National Institute of Technology Bhopal)
165	Set pair analysis based algorithm for IVIF decision-making with mean and variance	Reshu Tyagi (Chaudhary Charan Singh University, Meerut)*
168	Machine Learning-Based Diabetic Prediction on Indigenous Shakti Processor for Edge Health Monitoring	Muhammed Raees PC (Dept. of Electronics and Communication Engineering, National Institute of Technology - NIT, Tiruchirappalli)*; Akshayraj MR (Dept. of Electronics and Communication Engineering, National Institute of Technology - NIT, Tiruchirappalli); Dr.G. Lakshminarayanan (Dept. of Electronics and Communication Engineering, National Institute of Technology - NIT, Tiruchirappalli); Dr.Varun P Gopi (Dept. of Electronics and Communication Engineering, National Institute of Technology - NIT, Tiruchirappalli); Dr.G.R. Gangadharan (Dept. of Computer Application, National Institute of Technology - NIT, Tiruchirappalli)
171	Skin Lesion Segmentation using UNet-based architectures.	Narender Singh (National Institute of

		Technology,Kurukshetra)*; Sushil Kumar (National Institute of Technology, Kurukshetra)
172	AGENT BASED ANALYSIS FOR SMART TRAFFIC MANAGEMENT	Ayushi Banga (Soban Singh Jeena University)*; Ashutosh Kumar Jha (Indian Institute of Remote Sensing)
173	Smart Solutions in Veterinary and Animal Sciences: Applications of AI, ML and Soft Computing	Kuldeep Kumar Tyagi (Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut)*; Surbhi Kuldeep Tyagi (Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut); Devesh Kumar Yadav (Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut); Atul Gupta (Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut)
174	Granular Ball Random Forest for Robust Classification	Mohd Aquib (Indian Institute of Technology Kanpur, India)*; Nishchal K. Verma (Indian Institute of Technology Kanpur, India); M. Jaleel Akhtar (Indian Institute of Technology Kanpur, India)
177	Tolerance based feature selection of an incomplete interval-valued data	Shivani Dubey (Harcourt Butler Technical University, Kanpur, Uttar Pradesh, India)*; Shivam Shreevastava (Harcourt Butler Technical University, Kanpur, Uttar Pradesh)
183	Adaptive Music Recommender with Gesture- Based Sound Control :A Human Centric AI Approach	Rajesh Eswarawaka (RNS Institute of Technology Bengaluru)*
185	Bridging Molecular Features & Solubility Towards Drug Design: A Machine Learning Framework for Solubility Prediction	Akhilesh Pandey (NIT Hamirpur); Aadil Mudasir (IUST); Mahroosh Banday (IIT Delhi); Asif Ali Banka (IUST); Mohammad khalid Pandit (NIT Hamirpur)*
195	Hybrid Deep Learning Model for Fall Detection in Healthy Elderly Using CNN-BiLSTM: CNBiLS	Harshi Jain (Mastek)*; Vijay Semwal Bhaskar (Maulana Azad National Institute of Technology, Bhopal)
197	ANFIS Simulation and Particle Swarm Optimization for Finite-Capacity Two-Stage Service Queueing Model	KHUSHBU S. ANTALA (SVNIT- Surat)*; Sudeep Singh Sanga (SVNIT-Surat)
200	Helmet Mounted IoT based Physiological Health Monitoring System for Soldiers	Ghousiya Begum K (SASTRA University)*; Adalarasu K (SASTRA University);

		Vikramkarthik J (SASTRA University)
202	A Supply Chain Inventory Model with Fuzzy Environment in Circular Economy	Sandeep Mogha (Chandigarh University)*; Sonia Dua (Chandigarh University); Vikash . (Department Mathematics, Vardhaman College Bijnor (U.P.), 246701, India); Dhirender Singh (, S.S.S.T.S.R. Government Degree College Nainidanda Pauri Garhwal Uttarakhand, 246161, India)
210	Controllability of third-order delayed integrodifferential systems: a fixed-point theorem based result	Sandeep Kumar (Ch. Charan Singh University, Meerut); TAJINDER SANGROHA (Ch. Charan Singh University, Meerut)*
213	Advanced Price Forecasting for food commodities	mangalapriya Sakthivel (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE)*; dillibabu r (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE)
218	EARLY-STAGE DETECTION FOR ALZHEIMER DISEASE USING MACHINE LEARNING AND DEEP LEARNING ALGORITHM	Vishank Agrohi (AMITY UNIVERSITY NOIDA CAMPUS)*; Sanjeev Thakur (Amity University Noida Campus)
220	AGRI CONNECT - A DIGITAL PLATFORM FOR LINKING FARMERS	mangalapriya Sakthivel (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE)*
221	Advanced Machine Learning Framework for Early Detection of Cardiac Disease Using Statistical Analysis and Feature Engineering	Dr. Snehal Shinde (IIIT Nagpur)*; Yash Joshi (IIIT Nagpur); Dev Goyal (IIIT Nagpur); Yuvraj Singh (IIIT Nagpur); Aditya Bakki (IIIT Nagpur); Sayan Majhi (IIIT Nagpur)
228	Towards a more competent healthcare system: A methodological approach for Quantizing reliable detection of concealed depression using Ensemble learning	Mamta singh (JIIT)*
229	Fake News Detection Using Machine Learning with Particle Swarm Optimization-Based Feature Selection	Nikita Garg (HNB Garhwal Central University)*; Dr. Pritam Negi (HNB Garhwal Central University, Srinagar Uttarakhand)

231	University Course Timetabling Planning using Hybrid Gazelle Algorithms	Rekha Rani (Rekha Rani)*; Vanita Garg (Amity University Noida); Sarika Jain (Amity University Haryana)
241	Alzheimer's Disease Prediction using Convolutional Neural Network	Vishank Agrohi (AMITY UNIVERSITY NOIDA CAMPUS)*
242	Optimizing Test Case Selection Using Reinforcement Learning in Regression Testing	DHANASHREE KEDARE (PARUL UNIVERSITY)*
249	Enhanced Sentiment Analysis Using the RoBERTa-GRU Hybrid Model for Noisy Social Media Data	Chandan Vishwakarma (IET LUCKNOW)*; Natthan singh (IET LUCKNOW); Sonam Srivastava (IET LUCKNOW)
251	AIRCAST PREDICTIVE MODEL USING SUPERVISED MACHINE LEARNING	mangalapriya Sakthivel (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE)*; malleswari M (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE); KAMALANABAN E (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE)
252	Detection and Classification of Cassava Diseases using Concatenate Model	Anand jain (MNIT jaipur)*; Anand Jain (MNIT Jaipur); Neeta Nain (MNIT Jaipur)
254	Multi-Modal Hybrid Model for Depression Detection on Social Media and Clinical Datasets (MADD-Net)	Harshit Tuli (Christ University)*
256	Unraveling Plasticity Loss in Deep Neural Networks Under Non-Stationary Objectives	Rishi Dutta (NIT HAMIRPUR)*; Udit Sehra (NIT Hamirpur); Rajeev Kumar (NIT Hamirpur); Mohammad Pandit (NIT Hamirpur)
258	Approximate Analytical Solution of (1+1)-dimensional Kaup system and Sawada-Kotera-Ito Seventh-order KdV equation by RDTM	Amit Tomar (Bennett University)*
262	Design of an Improved Method for PET Scan Analysis Using ConvTransformers and SHAP-Guided Ensembles for Oral Cancer Diagnosis	KAMINI SHARMA (INDUS UNIVERSITY)*; KAUSHAL JANI (INDUS UNIVERSITY, AHMEDABAD)
264	AI-BASED SOLUTION FOR SMART TRAFFIC MANAGEMENT	mangalapriya Sakthivel (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE)*; KAMALANABAN E (VELTECH HIGHTECH DR.RANGARAJAN DR.SAKUNTHALA ENGINEERING COLLEGE); MALLESWARI M (VELTECH HIGHTECH DR.RANGARAJAN

		DR.SAKUNTHALA ENGINEERING COLLEGE)
265	Optimizing Inventory in Alternate Markets: Balancing Sustainability, Energy Efficiency and Inflation with Stock and Price-Dependent Demand	Divya Bharti (Meerut College Meerut)*
266	Optimizing EOQ model for Time-Deteriorating Items under Carbon Emission and Learning Effect with Partial Backlogging	Mohit Rastogi (ABES Engineering College, Ghaziabad)*; Himanshu Gupta (ABES Engineering College, Ghaziabad); Arti Bansal (ABES Engineering College, Ghaziabad); S.R. Singh (Ch. Charan Singh University, Meerut); Shilpy Tayal (Graphic Era Hill University, Dehradun)
272	Mapping SDG Goals with ESG Strategies using Topic Modeling: An Analysis of FMCG Sector	Saharsh Sadabhartia (Welingkar Institute of Management, Bengaluru)*; Rajeshwari Hiremath (Prin. L.N. Welingkar Institute of Management Development and Research, Bengaluru)
273	Effective Visualization Approaches for Distributed Denial of Service Threat Prediction in Large-Scale Networks Using Interpretable Machine Learning	R Srivats (Vellore Institute of Technology, Chennai); Kalyanasundaram V (Vellore Institute of Technology, Chennai); Deepika Roselind Johnson (Vellore Institute of Technology, Chennai)*; Abhiram Sharma (Vellore Institute of Technology, Chennai); KRISHNA PRIYADARSHAN BEHARA (Vellore Institute of Technology, Chennai); Logeswari G (Vellore Institute of Technology, Chennai)
275	A Novel approach to integrate AI into Judicial Systems	Ruchira Goel (Ajay Kumar Garg Engineering College); Khushi Bansal (Ajay Kumar Garg Engineering College)*
276	Energy Efficiency in Software-Defined Wireless Network	Dr Asif Khan (Uestc)*; Rajeev Shah (ISMT)
277	Transforming Healthcare with AI: A Comprehensive Review of Innovations in Tropical Disease Management and Cancer Therapy	Anand Kumar (Bharati Vidyapeeth's College of Engineering, New Delhi)*; Vasu . (Deen Dayal Upadhyaya College, New Delhi 110078)
278	Enhanced Detection of Distributed Denial-of-Service (DDoS) Attacks in Cloud Computing Using Transfer Learning, DBSCAN, and Entropy Analysis	SASWATI CHATTERJEE (Parul University)*; Rinkal Dharmesh Sarvaiya (Parul University)

282	Optimal Systems, Conservation Laws, and Invariance Analysis of the (2+1) extended Boiti-Leon-Manna-Pempinelli equation via the Lie Symmetry approach	Akshita Bhardwaj (IIT ROORKEE)*; Shalini Yadav (University of Delhi); Muhammad Junaid-U-Rehman (Lodz University of Technology, Lodz, Poland); Rajan Arora (IIT Roorkee)
283	On the Relationship between Strong p-Cesàro Summability and Convergence of Statistical Means	Sumit Goel (Chaudhary Charan Singh University, Meerut)*; Sandeep Gupta (Arya (P.G.) College, Panipat)
286	Brain Tumor Classification Using a CNN-Driven Deep Learning Framework Leveraging MRI Imaging	Divanshi . (Thapar Institute of Engineering and Technology, Patiala)*; Tarunpreet Bhatia (Thapar Institute of Engineering and Technology, Patiala); Neha . (University of Newcastle, University Dr, Callaghan NSW 2308, Australia)
295	Enhancing Interpretability and Diagnostic Accuracy in CNN-Based Mammography Analysis	Vedant Deshmukh (University of Mumbai)*; Yash Vaskar (University of Mumbai); Dr. Ujwala Bharambe (University of Mumbai); Dr. Pushkar Ingle (Fortis Hospital)
297	Coral Classification and Detection: Advancing Underwater Imaging for Biodiversity Monitoring	Ayushman Baghel (IIT Goa); Prakhar Gupta (IIT Goa); Shitala Prasad (NTU Singapore)*; Pankaj P Singh (CIT Kokrajhar)
298	Unconstrained Real-Life Problems Optimization using Revised Differential Evolution Algorithm	MANAJER RANA (Indira Gandhi National Tribal University, Amarkantak Madhya Pradesh (484886), India.)*; Raghav P. Parouha (Indira Gandhi National Tribal University, Amarkantak Madhya Pradesh (484886), India.); Kedar Nath Das (National Institute Of Technology Silchar, Assam)
299	Metaheuristic PSO variants in WSN: A Comparative Study	Sonam Srivastava (Department of Electronics and Communication, University of Allahabad, Prayagraj); Pooja Pooja (University of Allahabad)*; Vandana Rathore (Department of Electronics and Communication, University of Allahabad, Prayagraj); Richa Mishra (Department of Electronics and Communication,

		University of Allahabad, Prayagraj)
306	Commentary on: “A multi-objective transportation problem under quantity dependent credit period and cost structure policies in triangular intuitionistic fuzzy environment”	Parul Tomar (SR University Warangal)*; Amit Kumar (Thapar Institute of Engineering & Technology, Patiala)
307	Explainable Image Classification of Indian butterflies through post-hoc methods	Kunjan Kalita (Gauhati University); Saumyen Prateek Deka (Gauhati University); Manab Kalita (Gauhati University); Rupam Bhattacharyya (Gauhati University)*
310	Edge Detection in Medical imaging via Clustering: A Quantum Computing Approach for Lung Carcinoma and Brain Tumor	SAYAK KONAR (BRAINWARE UNIVERSITY)*
311	Evaluating cultural awareness of prominent Vision Language Models for Assamese Handloom Saree	Laxmi Mall (Gauhati University); Rupam Bhattacharyya (Gauhati University)*
312	The Metaverse: A Convergence of Emerging Technologies for an Immersive Digital Future	Monika Singh (ABESEC, Ghaziabad); Natthan Singh (IET, Lucknow); Pradeep Kumar Singh (Central University of Jammu District Samba, J&K)*
315	Innovative EV charging approach Implicating IoT A Smart and User Friendly Concept	Rani Chinnappa Naidu (VIT University)*; Parv Naresh (VIT); Saumya Shukla (VIT); shruti suresh Nair (VIT); joeljo evans (VIT); Rajeshkumar Muthu (VIT)
318	Portable, Low-Cost, Capacitor-Loaded On-Field I-V Curve Tracer for Solar Photovoltaic Modules with Low Power Rating	Rani Chinnappa Naidu (VIT University)*; awdesch fernando (VIT); lakshya T (VIT); Amit Kumar (VIT); Prakriti Dey (VIT); Rajeshkumar M (VIT)
319	Smart Home Automation With Optimized Energy Consumption Using Multi-Objective Optimization Algorithm	Rani Chinnappa Naidu (VIT University)*; Sambhav Parakh (VIT); Dhruv ray (VIT); shamil humam (VIT); Bhamini Bhujun (UdM); Rajeshkumar M (VIT)
322	Probabilistic Risk Analysis Using Monte Carlo Simulation for Metro Rail Construction	Dev Gheewala (Pandit Deendayal Energy University); Shobhit Chaturvedi (Pandit Deendayal Energy University)*
323	Investigating Barriers to Green Building Adoption in Gujarat, India- A Correlation-Graph Analysis Approach	Rahul Unjia (Pandit Deendayal Energy University); Shobhit Chaturvedi (Pandit Deendayal Energy University)*; Naimish Bhatt (Pandit Deendayal Energy University)
324	5G Antenna Design Using Machine Learning Algorithms	Mohit Pant (Mahakal Institute of Technology, Ujjain)*;

		Rashmi Pant (Mahakal Institute of Technology, Ujjain); Leeladhar Malviya (Shri G.S. Institute of Technology and Science, Indore); Bhupendra Kumar (Indian Institute of Information Technology, Vadodara, Gujarat)
326	Constrained Teaching Learning Algorithm for Economic Load Dispatch Problem	Vanita Garg (Indian Institute of Technology Roorkee)*; Hira Zaheer (GNIOT); Sushil Kumar (NIT Kurukshetra); Navpreet Kaur (Maharaja Ranjit Singh Punjab Technical University Bathinda)
327	Spatial and Temporal analysis of Tropical Indian Ocean Climate modes	Prerna Malik (Pandit Deendayal Energy University)*; Bhasha Vachharajani (Pandit Deendayal Energy University)
328	Robust Hybrid Cryptographic Method for Cloud Computing Information Security	Sudhanshu Dubey (Chandigarh University, Mohali, Punjab, India)*; Kamaljit Kaur Bhagwat (Chandigarh University)
334	Advancing Water Quality Prediction: Integrating Ensemble Learning and Explainable AI for Actionable Insights	Kavya Preksha (Chandigarh University); Kuldeep Tiwari (Chandigarh University)*
335	Approximate Equalities Based on Rough Neutrosophic Set with Their Analysis	Seema Singh (Starex University); Kuldeep Tiwari (Chandigarh University)*; Navjot Kaur (Chandigarh University)
336	IGNITION TIME PREDICTION OF LIVE SHRUBS USING MACHINE LEARNING	Deepak Sharma (Oregon State University)*; Ajay Singh (Oregon State University); David I. Blunck (Oregon State University)
337	ToMEto: A Fusion Cuisine Platform for Recipe Innovation and Ingredient Substitution	dishant tandel (mumbai university)*
338	Effect of variable thickness on the thermal buckling behavior of functionally graded circular plates	Aastha Tanwar (Netaji Subhas University of Technology)*
340	Evaluating YOLO Algorithms for Efficient Crowd Counting: A Comparative Study	Silky Goel (University of Petroleum and Energy Studies)*; Deepika Koundal (University of Petroleum and Energy Studies); Ambika Aggarwal (University of Petroleum and Energy Studies)
341	Alzheimer Disease Classification using Transfer Learning of Pre-trained Model	Soumyalatha Naveen (Manipal Institute of Technology Bangalore Manipal Academy

		of Higher Education (MAHE))*; Chiraag U (Chethana College)
348	Recent Five Years' Comprehensive Review for Green Supplier Selection with Advanced Decision Techniques	DEEPANSHU Nayak (IIT Roorkee)*
349	Assessing the Impact of FGSM Adversarial Attack on Convolutional Neural Networks in X-ray Images	Harshita - (NIT Kurukshetra); Kuldeep Kumar (NIT Kurukshetra)*; Sushil Kumar (NIT Kurukshetra)
352	Evaluation of Side Effects Associated with COVID-19 Vaccines in India	Divyansh Singhal (NIT Agartala); Karuna Panwar (IIT Roorkee); Kusum Deep (IIT Roorkee)*; Millie Pant (IIT Roorkee)