Session	Paper ID	Paper Title	Authors
Technical Session 1(Auditorium)(2 Jan 2026)(4pm-5.30pm) Session Chair: Dr. Mausumi Maitra, Dr. Chandreyee Chowdhury, Dr. Zeenat Rehana	31	**Decentralized and Trustworthy Heart Disease Prediction with Blockchain-enabled Federated Learning**	Sima Ghosh, Nurnawaz Middya, Nisa Das, Sudakshina Dasgupta
	8	**Adaptive User Profiling for E-Commerce via Tracking Temporal Dynamics of User Activity**	Saikat Pahari, Paramita Dey
	100	**ARGUS: Adaptive Residual GeoSpatial UNet System with Custom Loss for Imbalanced Land Cover Segmentation**	Manab Bairagi, Snigdha Paul, Sambit Mallick, Anurag Barma, Anurina Tarafdar
	20	**Spatio-spectral identification of leaf disease regions by fusing optical and microwave imaging using machine learning**	Pintu Das
	45	**Age-Aware Multi-Task Learning for Thoracic Abnormality Detection and Localization Across Adult and Pediatric Chest X-rays**	Manik Mondal, Souvik Sengupta
	47	**Driver Condition Prediction via Physiological Parameters and AI Technique**	MEHEZABIN BEGUM, SHRABANA SAHA, ZEENAT REHENA
Technical Session 2(Hall 1)(2 Jan 2026)(4pm-5.30pm) Session Chair: Dr. Shantanu Halder, Dr. Indrajit Bhattachariya, Dr. Kalpana Saha, Dr. Paramita Dey	120	**Capturing Users' Requirement through Large Language Model for an Effective Journal Recommendation System**	Soumyajit Chakraborty, Aviroop Mitra, Ayan Kumar Panja, Chandreyee Chowdhury
	132	**Distilling Knowledge for WiFi Indoor Localization in Edge Environments**	Dipannyta Nandi, Soujatya Chowdhury,Chandreyee Chowdhury

	5	**Graph Coloring Problem Optimization using ACO**	Soumadittya Ghosh, Sutirtha Guha
	32	**Parallel mining of frequent patterns with automated assignment of dynamic minimum support**	Subrata Datta, Sudipto Kumar Mondal, Subhajit Ghosh,Sudipta Sahana
	36	**A Lightweight Deep Learning Framework with Otsu-Based Sparse Representation for High-Accuracy Brain Tumor Classification**	Pallab Paul, Kalpana Saha
	76	**Comparative Analysis of State-of-the-Art AI Image Generation Tools**	UNMESH MANDAL, Ayush Kumar Shukla, Sanjit Kumar Setua, Sayan Sen Sarma
Technical Session 3(Online)(Hall 2)(2 Jan 2026)(4pm-5.30pm) Session Chair: Dr. Kingshuk Chatterjee, Dr. Jayeeta Saha, Dr. Ryan Saptarshi Ray, Dr. Soumit Chowdhury	140	**Transforming Higher Education: The Role of Generative AI in Revolutionizing Teaching and Learning**	Yash Varshney, Ragini Karwayun
	156	**Explainable AI Framework for Arrhythmia Detection from Multi-Patient ECG Datasets**	Sreya Mynampati, Manasa Ganesh, Poornima S
	150	**Smart Tourist Safety Monitoring and Incident Response System using AI and Geo-Fencing**	Biplab Das
	192	**Disaster Identification Based on Federated Learning and Unmanned Aerial Vehicles**	ARPITA SEN, Jayanta Poray,Tanmay Bhattacharya
	43	**Multimodal Explainable Machine Learning for Recovery Profiling and Decision Support in Postoperative Care**	Akanksha Agrahari, Alweena Fatima, Ashna Singh, Avanti Verma, Anjali Lathwal

	11	**A Triple-Stream Forensic Framework for Image Forgery Detection and Retrieval**	MAITREYEE GANGULY, PARAMITA DEY, SOUMIK PAL
Technical Session 4(Hall 1)(3 Jan 2026)(11am-12 noon) Session Chair: Dr. Bishwajit Debnath, Dr. Zeenat Rehana, Dr. Debashish De	46	**An AI-Powered Analysis of the Effect of Flood on Agriculture in the State of West Bengal, India**	Rohit Ghosal, Md Shoel Hossain, Asif Iqbal Middya, Sarbani Roy
	44	**An Efficient Clustering Algorithm for Text Classification**	Rehana Mullick
	65	**Sentiment-Driven Sales Forecasting: A Robust and Generic Framework Using Time Series Data Analysis**	Leena Jana Ghosh, Arha Banerjee, Partha Ghosh, Takaaki Goto, Moumita Chatterjee, Soumya Sen
Technical Session 5(Hall 2)(3 Jan 2026)(11am-12 noon) Session Chair: Dr. Punyasha Chatterjee, Dr. Benay Ray, Dr. Indrajit Bhattachariya	145	**A Novel Heart Disease Prediction Framework using Hybrid Metaheuristic Approach**	Soumik Pal, Soumyadeep De
	164	**Hybrid Apple Leaf Disease Detection Model: A Compact CNN-ViT Approach for In-Field Apple Disease Detection**	KRISHNA KUMAR JHA, Hemant Singh, Aniket Sewag, Mithun Sharma, Anurag Singh, Arnab Saha, Ashish Kumar Jha
	19	**A Machine Learning Framework for CME Prediction from L1 Solar Wind Observations**	KRISHNA KUMAR JHA, Karan Singh, Biplab Kanti Das, Bappa Ditya Biswas
Technical Session 6(Hall 1)(3 Jan 2026)(3pm-4.15 pm) Session Chair: Dr. Mausumi Maitra, Dr. Bishwajit Debnath, Dr. Benay Ray	28	**Energy Efficient Wireless Charging Schedule for Rechargeable Wireless Sensor Networks**	Saurav Ghosh, Sagnika Chatterjee, Piyali Bagchi Khatua,Utpal Biswas
	42	**Efficient Passenger Allocation Towards Shuttle Services in a Smart City**	Ankan Kumar Mitra, Gaurav Ginodia, Sourashis Das, Pritha Banerjee, Sunirmal Khatua, Rajib Kumar Das
	161	**IoT-enabled Solution Framework for E-waste**	ankita das, Abhijit Das,

		Management in Sustainable Smart City: A Case Study of Rajarhat, Kolkata	Paramita Dey
	23	**Decomposing Complete Graphs into Edge-disjoint Trees for Edge Fault-tolerant Communication**	Antika Sinha, Sanjoy Saha, Partha Basuchowdhuri
	66	**Multivariate Risk-Constrained Guardrail Optimization for Safe Prompt-Response Alignment in Clinical LLMs**	Susmita Ganguly, Amit Chakraborty, Chirantana Mallick, Saptarshi Das
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	54	**Comparative Study on Image Encryption based on Chaotic Map Cryptosystem**	PUBALI MAITI, Shivananda Biswas, Meenakshi Acharya, Atanu Kumar Paul, Ryan Saptarshi Ray
	12	**Comparative Study of Transfer Learning Approaches in Enhancing Plant Disease Classification**	kalyan mahata, Shilpi Saha
	137	**Formal Verification Driven Optimization for Collision Avoidance in Satellite Systems**	Shubha Chakraborty, Rahul Karmakar
	107	**Microstructural Evaluation of Alumina Ceramics by Advanced Image Analysis and Machine Learning techniques**	Mahuya Roy
Technical Session 8(Online) (Auditorium)(3 Jan 2026)(3pm-4.15 pm) Session Chair: Dr. Chandreyee Chowdhury, Dr. Kingshuk Chatterjee, Dr. Shantanu Halder,	39	**Automated Ontology Construction from Unstructured Text Using Large Language Models**	Rafi Chowdhury,Takaaki Goto, Yasunori Shiono, Kensei Tsuchida
	195	**DAFFLENet: Decomposition-Aware Feature Fusion Network for High-Fidelity Low-**	Ayanabha Ghosh, Sayan Sen Sarma

Dr. Debashish De	172	**Light Enhancement** **Adaptive Feature Reduction for IoT based intrusion detection system Using Bio-Inspired Algorithms**	Rupali Banerjee, Ratul Chowdhury, Arpan Goswami, Khokan Mondal
	194	**Retrieval-Augmented Information Generation for Academic Recommendation**	Anjana Vijay, Raji Gopalakrishnan Nair, Rabeena T M, Anuraj Mohan
	41	**Comparative Study of AI-generated tweet Detection using LLM**	Subhayan Bhattacharya, Sarbani Roy
Technical Session 9(Online)(Hall 1)(3 Jan 2026)(4.15pm-5.15pm) Session Chair: Dr. Kingshuk Chatterjee, Dr. Ryan Saptarshi Ray, Dr. Shantanu Halder	162	**Explainable AI (XAI) - Based Deep Learning for Alzheimer's Diagnosis Using MRI Scans**	Alhuda Khan
	163	**Samriddha Drishti: AI-Powered Glasses for the Visually Impaired**	Biplab Das
	121	**Development of Autonomous Wheel Chair Using Li-ion battery and L293D motor**	Lakshmi Anusha Narayanam
	187	**Anomaly Detection for Fraud and Crime Analysis**	Vigneshwaran S, Mohamed Fatin Nafzer A, Monish S, Poornima S
Technical Session 10 (Hall 2)(3 Jan 2026)(4.15pm-5.15pm) Session Chair: Dr. Kalpana Saha, Dr. Zeenat Rehana, Dr. Chandreyee Chowdhury	51	**An Automated Framework for NPTEL Course Recommendation Using TF–IDF and Heuristic Mapping**	Deepayan Das, Masud Hasan, Archana Mondal, Ryan Saptarshi Ray, Atanu Kumar Paul
	144	**DistilBERT Extractive Summarizer: A Superior Approach in Comparative Benchmarking with PEGASUS and Hybrid Models**	Rahul Karmakar, Souvik Raja, Sujit Kumar Mondal, SAYAN PAL