

ACSS 2026 - Tentative Technical Program

Day 1: July 02, 2026 Thursday

09:30-10:00	Registration and Inauguration by Prof. Ashutosh Ghosh, Honourable Vice Chancellor, University of Calcutta
10:00-10.45	Prof. A. K. Choudhury Memorial Lecture (Keynote Lecture I): Artificial Intelligence and Machine Learning Algorithms in Life Sciences
	Speaker: Sanghamitra Bandyopadhyay, Professor, Indian Statistical Institute, Kolkata
	Session Chair: Bhabani P. Sinha, Former Professor, Indian Statistical Institute, Kolkata
10:45-11:00	TEA BREAK
11:00-12:15	Technical Session I: 5G and Beyond
	Session Chair: Pradip K Das, Former Professor, Jadavpur University, Kolkata
I-1	<i>Improvement of an Overall Latency in Bluetooth Low Energy Networks: A Survey and Experimentation</i> by Vibha Vyas, Akhilesh Kumar, Ashwini Kulkarni
I-2	<i>An Adaptive CNN–BiLSTM Based Approach for Intelligent Spectrum Sensing in 6G Cognitive Networks</i> by Prachi Kamble
I-3	<i>An Optimized Latency Aware Routing for FANETs in 6G Space–Air–Ground Integrated UAV Networks</i> by Shourjya Bhattacharya, Subhradip Kar, Mousumi Bhattacharyya , Asmita Roy , Sadip Midya, Sounak Ghosh, Raj Dey
I-4	<i>Exploring the Potential of De Bruijn Graph Topology to Serve Next-Generation Data Centres</i> by Monjistha Naskar, Alapan Das
12:15-13:00	Technical Session II: Security and Systems Engineering
	Session Chair: Samiran Chattopadhyay, Former Professor, Jadavpur University, Kolkata
II-5	<i>VSID-BERT: A Lightweight SLM Framework for Unmasking VSI-DDoS Attacks in Serverless Cloud-Edge Continuum</i> by Deepanjan Mitra, Chanh Nguyen, Monowar Bhuyan
II-6	<i>A Hybrid Text–Emoji Based Multimodal Sarcasm Detection</i> by Asmita Roy, Mousumi Bhattacharyya, Sadip Midya, Anupam Ghosh
II-7	<i>Control Your Fund Flow: Detecting Smart Contract Rug Pulls via Contrastive Graph Representation Learning</i> by Kartik Kaushik, Moulik Jain, Samrat Mondal, Raju Halder
13:00-14:00	LUNCH BREAK
14:00-15:00	Technical Session III: Algorithms and Computational Biology
	Session Chair: Sarmistha Neogy, Jadavpur University, Kolkata
III-8	<i>An Analysis of a Frequency-Based Heuristic Algorithm for Solving the Wordle Puzzle</i> by Uttaya Pal, Rishov Nag, Deepanjan Mitra
III-9	<i>Microbial Adherence in Various Suture Materials in Patients of Eastern India undergoing Tooth Extraction: A Prospective Validation using ML Model</i> by Supriya Chakraborty
III-10	<i>ECO-ADD: Environment Conscious Optimization for Alzheimer’s Disease Diagnosis</i> by Dhruvi Thakkar, Novarun Deb
III-11	<i>A Multi-Level Cardiovascular Risk Prediction Framework Using Clinical Data</i> by Subrata Sarkar, Arinjoy Pramanik, Rajib Sarkar, Sanjoy Kumar Saha
15:00-15:15	TEA BREAK
15:15-15:30	<i>Dissemination on Project EcoDigify: Green Digital Transformation in Higher Education</i> by <i>Mandira Roy, Researcher, Ca’ Foscari University of Venice, Italy</i>
15:30-16:30	Technical Session IV: AI in Software Engineering
	Session Chair: Susmita Ghosh, Jadavpur University, Kolkata
IV-12	<i>An Explainable Graph-RAG Framework for Automated Psychosocial Risk Assessment and Root-Cause–Based Mitigation Planning</i> by Sunita Roy, Susanta Podder, Ranjan Mehera, Rajat Kumar Pal
IV-13	<i>ViMSUIT: Vision-Metadata Inferences for Software UI Testing</i> by Pragati Kumari, Arnab Dey, Novarun Deb
IV-14	<i>How Prompts Manipulate Models: Measuring Cognitive Bias Vulnerability in Commercial LLMs Across Languages</i> by Koushik Deb, Imon Mukherjee, Debarshi Kumar Sanyal
IV-15	<i>A Modular, Retrieval-Augmented Information Extraction Framework for Clinical Decision Support</i> by Rudranil Chowdhury, Sudip Kumar Naskar, Sanjoy Kumar Saha

16.30-17.30	Technical Session V: Robotics and Systems Engineering Session Chair: Sanjoy Kumar Saha, Jadavpur University, Kolkata
V-16	<i>Real-Time Vision-Only Collision Avoidance on Resource-Constrained Embedded Systems</i> by Suraj Mule, Vaibhavi Raut, Shubhangee Varma, Vibha Vyas, Akhilesh Kumar
V-17	<i>LLM-Assisted NFR Adherence in Behavior Trees for Domestic Robots</i> by Raunak Bag
V-18	<i>A Large Language Model Framework for Predicting Significant Equity Index Fluctuations</i> by Rishov Nag, Sankhayan Choudhury
17:00-18:00	Panel Discussion: Is AI the 'HOLY GRAIL' for Healthcare? Eminent Panelists: Prof. Dr. Satadal Saha, Dr. Tanushyam Chattopadhyay; Prof. Debatosh Guha
19:00-21:00	Dinner (Venue: Haka, City Centre 1)

Day 2: July 03, 2026 Friday	
10:00-10:45	Keynote Lecture II: Sensitivity Analysis as an XAI Method for Neural Network Analysis and Pruning
	Speaker: Piotr A. Kowalski, AGH University, Krakow, Poland
	Session Chair: Aditya Bagchi, Former Professor, Indian Statistical Institute, Kolkata
10:45-11:00	TEA BREAK
11:00-12:00	Technical Session VI: Machine Learning
	Session Chair: Rituparna Chaki, University of Calcutta
VI-19	<i>What Architectural Inductive Biases Matter For Passive THz Concealed-Object Classification?</i> by Debasmita Saha, Parama Bagchi, Olga S. Sushkova, Alexei A. Morozov, Debotosh Bhattacharjee
VI-20	<i>A Linguistic Framework for Sleep Stage Classification Using Bengali Textual Data</i> by Taniya Seal, Debapratim Das Dawn, Pallab Sardar, Kishan Mallick, Sabyasachi Hazra, Abhinandan Khan, Sanjit Kumar Setua, Rajat Kumar Pal
VI-21	<i>Target Influence Maximization in a Competitive Environment: A Particle Swarm Optimization-based Approach</i> by Soumi Tokdar, Rishav Chanda, Kastur Sengupta, Ananya Kanjilal, Sankhayan Choudhury
12:00-13:00	Technical Session VII: Urban Traffic Management
	Session Chair: Nandini Mukherjee, Jadavpur University
VII-22	<i>TME-Net: An Ensemble Temporal Model for Traffic Flow Prediction</i> by Nirupam Mondal, Md Ashifuddin Mondal, Papri Ghosh, Subhram Das
VII-23	<i>Lightweight YOLOv5n-Based Helmet Detection for Traffic Safety Applications</i> by Afzal Bade, Vibha Vyas
VII-24	<i>Prediction of Crime Zones to Improve Urban Transportation Planning Using Machine Learning</i> by Sharmistha Ghosh, Rituparna Chaki, Soumyabrata Saha, Suparna DasGupta
13:00-14:00	LUNCH BREAK
14:00-14:45	Technical Session VIII: Quantum Computing
	Session Chair: Sankhayan Choudhury, University of Calcutta
VIII-25	<i>Quine-McCluskey Optimized NEQR for Resource-Efficient Quantum Image Representation</i> by Pradipto Chatterjee, Arnab Maji
VIII-26	<i>Hybrid Quantum Clustering for Unsupervised PCOS Phenotype Classification</i> by Shirsha Nag, Ishani Das, Tuli Bakshi
14:45-15:30	Technical Session IX: IoT and Smart Systems
	Session Chair: Chandan Mazumdar, Former Professor, Jadavpur University
IX-27	<i>Secured and Decentralized Access Control using Dynamic MUD Profile</i> by Amit Mandal, Chouhan Kumar Rath, Anirban Sarkar
IX-28	<i>Smart Care: Patient Care With Automated Bed For Health Monitoring</i> by Sarah Hasware, Vibha Vyas
15:30-15:45	TEA BREAK
15:45-16:30	Valedictory and Group photo