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	*Improvement of an Overall Latency in Bluetooth Low Energy Networks: A Survey and Experimentation* by Vibha Vyas, Akhilesh Kumar, Ashwini Kulkarni
I-2	*An Adaptive CNN–BiLSTM Based Approach for Intelligent Spectrum Sensing in 6G Cognitive Networks* by Prachi Kamble
I-3	*An Optimized Latency Aware Routing for FANETs in 6G Space–Air–Ground Integrated UAV Networks* by Shourjya Bhattacharya, Subhradip Kar, Mousumi Bhattacharyya, Asmita Roy, Sadip Midya, Sounak Ghosh, Raj Dey, Koushik Sinha
I-4	*Exploring the Potential of De Bruijn Graph Topology to Serve Next-Generation Data Centres* by Alapan Das, Monjistha Naskar, Rituparna Chaki, Pradosh Datta
12:15-13:00	**Technical Session II: Security and Systems Engineering**
	Session Chair: Rituparna Chaki, University of Calcutta, Kolkata
II-5	*VSID-BERT: A Lightweight SLM Framework for Unmasking VSI-DDoS Attacks in Serverless Cloud-Edge Continuum* by Deepanjan Mitra, Chanh Nguyen, Monowar Bhuyan
II-6	*A Hybrid Text–Emoji Based Multimodal Sarcasm Detection* by Asmita Roy, Mousumi Bhattacharyya, Sadip Midya, Anupam Ghosh
II-7	*Control Your Fund Flow: Detecting Smart Contract Rug Pulls via Contrastive Graph Representation Learning* by Kartik Kaushik, Moulik Jain, Samrat Mondal, Raju Halder
13:00-14:00	**LUNCH BREAK**
14:00-15:00	**Technical Session III: IoT-enabled Smart Systems and Quantum Computing**
	Session Chair: Sarmistha Neogy, Jadavpur University, Kolkata
III-8	*Secured and Decentralized Access Control using Dynamic MUD Profile* by Amit Mandal, Chouhan Kumar Rath, Anirban Sarkar
III-9	*Quine-McCluskey Optimized NEQR for Resource-Efficient Quantum Image Representation* by Pradipto Chatterjee, Arnab Maji
III-10	*Hybrid Quantum Clustering for Unsupervised PCOS Phenotype Classification* by Shirsha Nag, Ishani Das, Tuli Bakshi
III-11	*Smart Care: Patient Care With Automated Bed For Health Monitoring* by Sarah Hasware, Vibha Vyas
15:00-15:15	**TEA BREAK**
15:15-15:30	Dissemination on **Project EcoDigify**: Green Digital Transformation in Higher Education by *Mandira Roy, Researcher, Ca' Foscari University of Venice, Italy*
15:30-16:30	**Technical Session IV: AI in Software Engineering**
	Session Chair: Susmita Ghosh, Jadavpur University, Kolkata
IV-12	*An Explainable Graph-RAG Framework for Automated Psychosocial Risk Assessment and Root-Cause–Based Mitigation Planning* by Sunita Roy, Susanta Podder, Ranjan Mehera, Rajat Kumar Pal
IV-13	*ViMSUIT: Vision-Metadata Inferences for Software UI Testing* by Pragati Kumari, Arnab Dey, Novarun Deb
IV-14	*How Prompts Manipulate Models: Measuring Cognitive Bias Vulnerability in Commercial LLMs Across Languages* by Koushik Deb, Imon Mukherjee, Debarshi Kumar Sanyal
IV-15	*A Modular, Retrieval-Augmented Information Extraction Framework for Clinical Decision Support* 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	*LLM-Assisted NFR Adherence in Behavior Trees for Domestic Robots* by Raunak Bag
V-17	*A Large Language Model Framework for Predicting Significant Equity Index Fluctuations* by Rishov Nag, Sankhayan Choudhury
V-18	*Real-Time Vision-Only Collision Avoidance on Resource-Constrained Embedded Systems* by Suraj Mule, Vaibhavi Raut, Shubhangee Varma, Vibha Vyas, Akhilesh Kumar
17:30-18:30	**Panel Discussion: Is AI the 'HOLY GRAIL' of Healthcare?**
	Eminent Panelists: Prof. Dr. Satadal Saha, Dr. Tanushyam Chattopadhyay, Prof. Debatosh Guha, Prof. Piotr A. Kowalski
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: Samiran Chattopadhyay, Former Professor, Jadavpur University
VI-19	*What Architectural Inductive Biases Matter For Passive THz Concealed-Object Classification?* by Debasmita Saha, Parama Bagchi, Olga S. Sushkova, Alexei A. Morozov, Debotosh Bhattacharjee
VI-20	*A Linguistic Framework for Sleep Stage Classification Using Bengali Textual Data* by Taniya Seal, Debapratim Das Dawn, Pallab Sardar, Kishan Mallick, Sabyasachi Hazra, Abhinandan Khan, Sanjit Kumar Setua, Rajat Kumar Pal
VI-21	*Target Influence Maximization in a Competitive Environment: A Particle Swarm Optimization-based Approach* 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	*TME-Net: An Ensemble Temporal Model for Traffic Flow Prediction* by Nirupam Mondal, Md Ashifuddin Mondal, Papri Ghosh, Subhram Das
VII-23	*Prediction of Crime Zones to Improve Urban Transportation Planning Using Machine Learning* by Sharmistha Ghosh, Rituparna Chaki, Soumyabrata Saha, Suparna Das Gupta
VII-24	*Lightweight YOLOv5n-Based Helmet Detection for Traffic Safety Applications* by Afzal Bade, Vibha Vyas
13:00-14:00	**LUNCH BREAK**
14:00-15:00	**Technical Session VIII: Algorithms and Computational Biology**
	Session Chair: Chandan Majumder, Former Professor, Jadavpur University
VIII-25	*An Analysis of a Frequency-Based Heuristic Algorithm for Solving the Wordle Puzzle* by Utteya Pal, Rishov Nag, Deepanjan Mitra
VIII-26	*Microbial Adherence in Various Suture Materials in Patients of Eastern India undergoing Tooth Extraction: A Prospective Validation using ML Model* by Supriya Chakraborty
VIII-27	*A Multi-Level Cardiovascular Risk Prediction Framework Using Clinical Data* by Subrata Sarkar, Arinjoy Pramanik, Rajib Sarkar, Sanjoy Kumar Saha
VIII-28	*ECO-ADD: Environment Conscious Optimization for Alzheimer's Disease Diagnosis* by Dhruvi Thakkar, Novarun Deb
15:00-15:15	**TEA BREAK**
15:15-16:00	**Valedictory and Group photo**