

2<sup>nd</sup> International Conference on

# ARTIFICIAL INTELLIGENCE AND SUSTAINABLE COMPUTING



AISC 2025

## Programme Schedule

July 24-26, 2025



Organized by

Department of Information Technology

**B. P. Poddar Institute of Management and Technology**

&

**A. K. Choudhury School of Information Technology**

**University of Calcutta**



**INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND SUSTAINABLE COMPUTING**

**137, V.I.P. Road, Kolkata-700052 | JD-2, Sector 3, Salt Lake, Kolkata -700106**

**Website: [www.bppimt.ac.in/AISC2025](http://www.bppimt.ac.in/AISC2025)**

**Email: [aisc2025@bppimt.ac.in](mailto:aisc2025@bppimt.ac.in)**



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INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND SUSTAINABLE COMPUTING

## Program Schedule AISC 2025

Day 1 (24.07.2025)
<b>Inauguration (09:30 am-10:30 am)</b>
<b>Tutorial Session-1 (10:30 am-11:30 pm)</b> Speaker 1: Prof. Ansuman Banerjee, ISI, Kolkata Title: A look inside the DeepSeek reasoning LLM Session chair: Dr. Jayeeta Chanda, BPPIMT
<b>Breakfast (11:30 am-11:45 pm)</b>
<b>Tutorial Session-2 11:45 am-12:45 pm</b> Speaker 2: Mr. Sourabh Mukherjee, Accenture Title: Enterprise Digital Brain Session chair: Dr. Jayeeta Chanda, BPPIMT
<b>Lunch (12:45 pm – 02:00 pm)</b>
<b>Tutorial Session-3 2:00 pm-03:00 pm</b> Speaker 3: Dr. Anwasha Khasnobish, Scientist at TCS, Research and Innovation Laboratory, Kolkata Title: Unobtrusive Intelligent Sensing for Physiological Insights Session chair: Dr. Bikramaditya Mandal, BPPIMT
<b>Tea (03:00 pm -03:15 pm)</b>



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## INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND SUSTAINABLE COMPUTING

### Program Schedule

### AISC 2025

Day 2 (25.07.2025)		
<b>Inauguration (09:30 am -10:30 am)</b> <b>Chief guest:</b> Prof. Tapas Chakraborty, Vice Chancellor, Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal.		
<b>Guests of honour</b> Shri Vijay Bharti, IAS, Secretary, Department of Science and Technology and Biotechnology, Government of West Bengal Prof. Swapan Bhattacharya, Former Director, NIT Suratkal, NIT Durgapur, Jadavpur University Prof. Bimal Roy, ISI, Kolkata Mr. Aditya Kr. Sinha, Executive Director, C-DAC Mumbai & Centre Head, C-DAC Patna Mr. Manjeet Nayek, Director, STPI, Kolkata Prof. Nabendu Chaki, Dean, Faculty of Engineering and Technology, University of Calcutta Prof. Amlan Chakrabarti, Professor and Director, AKCSIT, University of Calcutta Prof. (Dr.) Sutapa Mukherjee, Principal, BPPIMT Prof. Suparna Kar Chowdhury, Professor, Electrical engineering, Jadavpur University, Chair IEEE- Kolkata Section		
<b>10:30 am - 11:15 noon (Hall 1)</b> Keynote: 1. Prof. Bimal Roy, Professor, Applied Statistics Unit, Indian Statistical Institute Title: AI for Cyber Security Session Chair: Prof. Amlan Chakrabarti, University of Calcutta		
<b>Tea break (11:15 am -11:30 am)</b>		
<b>11:30 am – 01:30 pm Track 1: Machine Learning and Sustainable Computing</b>		
<b>Session I (Hall 1) 7 papers</b> Session Chair: Dr. Anirban Sarkar NIT Durgapur	<b>Session II (Hall 2) 7 papers</b> Session Chair: Dr. Animesh Dutta NIT Durgapur	<b>Session III (Hall 3) 6 papers</b> Session Chair: Prof. Nabendu Chaki, University of Calcutta, India
<b>Lunch (01:30 pm – 02:30 pm)</b>		
<b>02:30 pm –03:15 pm (Hall 1)</b> Keynote: 2. Prof. Kamaljeet Sandhu, AI Hub / University of New England, Australia Title: Quantum AI Innovations Adoption for Global Reserve Banks in CBDC Governance: Opportunities & Challenges of Fintech & Cybersecurity for the US Federal Reserve System & the Reserve Bank of India. Session Chair: Prof. Shila Ghosh, Principal, St. Thomas' College of Engineering & Technology		
<b>03:15 pm – 04:00 pm (Hall 1)</b> Invited Talk 1: Prof. Subhadip Basu, Professor, Jadavpur University Title: Bioimage Informatics and AI-Driven Neuroimage Analysis: From Dendritic Spines to Synaptic Plasticity Session Chair: Prof. Sabnam Sengupta, BPPIMT, Kolkata		
<b>04:00 pm – 05:45 pm</b> Track 1: Machine Learning and Sustainable Computing	<b>04:00 pm – 05:45 pm</b> Track 2 Artificial Intelligence and Cyber Physical System	
<b>Session IV (Hall 1) 7 papers</b> Session Chair: Dr. Saptarshi Goswami, Bangabashi Morning College, University of Calcutta	<b>Session V (Hall 2) 6 papers</b> Session Chair: Dr. Punyasha Chatterjee, Jadavpur University	<b>Session VI (Hall 3) 6 papers</b> Session Chair: Prof. Chandan Mazumdar, Jadavpur University
<b>Session VII (04:00 pm – 05:45 pm) 6 papers</b> <b>Poster Session</b> Session Chair: Prof. Sheli Sinha Chaudhuri, Chairperson, WIE (Women in Engineering), IEEE Kolkata Prof. Amlan Chakraborty, University of Calcutta, India		
<b>Tea break (05:45 pm-06:00 pm)</b>		
(06:00 PM-07:00PM) Cultural Programme (07:00 PM onwards) Conference Dinner		



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## Program Schedule

### AISC 2025

Day 3 (26.07. 2025)		
<b>09:30 am – 10: 15 am (Hall 1)</b>		
Invited Talk 2: Ms. Usha Rengaraju, Chief Data Scientist  Corporate Trainer   Founder NeuroAI   Autism Advocate head of data science research at Exa Protocol and the world's first female triple Kaggle Grandmaster Title: Implementing Multi Agent AI Systems Session Chair: Dr. Ananya Kanjilal, BPPIMT, Kolkata		
<b>Tea break (10:15 am -10:30 am)</b>		
<b>10:30 am – 11:15 am (Hall 1)</b>		
Keynote: 3. Prof. Indranil SenGupta, City University of New York (CUNY) - Hunter College Title: From pixels to profits: an image-based determination of rare fluctuations in finance Session Chair: Prof. Kamaljeet Sandhu, AI Hub / University of New England, Australia		
<b>11:15 am – 12:00 noon (Hall 1)</b>		
Keynote 4: Prof. Sudip Mishra, IIT KGP Session Chair: Prof. Dipankar Sarkar, BPPIMT, Kolkata		
<b>12:00 noon – 1:30 pm</b>		<b>12:00 noon – 1:30 pm</b>
Track 3: Emerging Technology: Blockchain, Quantum Computing, Cognitive Computing, Robotics and Automation/ Artificial Intelligence for Health Informatics/NLP/Signal Processing/ Artificial Intelligence for Security		<b>Online Session</b>
<b>Session VIII (Hall 1) 6 papers</b> Session Chair: Prof. Anirban Mukhopadhyay, University of Kalyani		<b>Session X (Hall 3) 7 papers</b> Session Chair: Prof. Nandita Sanyal Principal, BPPIMT Saltlake campus
<b>Session IX (Hall 2) 6 papers</b> Session Chair: Dr. Suparna Biswas (Saha), MAKAUT, India		
<b>Lunch (01:30 pm – 02:15 pm)</b>		
<b>02:15 pm – 03: 00 pm (Hall 1)</b>		<b>02:15 PM – 03: 00 PM</b>
Invited Talk 3: Dr. Hena Ray, Joint Director, CDAC, Kolkata Title: Applied AI: Innovations from Concept to Deployment Session Chair: Dr. Himadri Nath Saha, University of Calcutta		<b>Online Session</b>
		<b>Session XI (Hall 3) 7 papers</b> Session Chair: Dr. Sunirmal Khatua, University of Calcutta
<b>03:00 pm – 03:45 pm (Hall 1)</b>		
Invited Talk 4: Dr. Ritajit Majumdar, Research Scientist at IBM Quantum, IBM India Research Lab Title: Quantum-centric supercomputing: A new perspective on computing Session Chair: Dr. Soumya Sen, University of Calcutta		
<b>Valedictory Session (03:45 pm – 04:30 pm)</b>		
<b>Tea (04:30 pm – 05:00 pm)</b>		



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## Contributory Paper Presentation

July 25, 2025

### Track 1: Machine Learning and Sustainable Computing

#### Session I

**Time: 11:30 AM to 01:30 PM**

**Hall: 1**

**Session Chair: Dr. Anirban Sarkar, NIT Durgapur**

Paper Title	Registered Author
<b>AgentTrustEval: A Framework for Evaluating Trustworthiness in Agentic System</b>	Joyita Chakraborty
<b>Enhancing Brain Tumor Diagnosis with Ensemble Deep Learning Technique for Improved Accuracy</b>	Tista Mukherjee
<b>A federated attention-driven machine for classification of chest radiographs across distributed datasets</b>	Tapomoy Koley
<b>Attendance Management System using Fingerprint based Identification</b>	Debashish Barman
<b>An improved Alzheimer's disease identification from FastSurfer, contour detection based ROI extraction and MRI scan images</b>	Soumya Chowdhury
<b>A Psychological Perspective on Non-Functional Testing: Enhancing Automation with Machine Learning Algorithms</b>	Anirban Bhar
<b>Proof of Fair-Chance: An Unbiased Approach to Internet Voting using Fair Chance in Proof of Stake</b>	Ashmita Bhattacharjee



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## Contributory Paper Presentation

July 25, 2025

### Track 1: Machine Learning and Sustainable Computing

#### Session II

**Time: 11:30 AM to 01:30 PM**

**Hall: 2**

**Session Chair: Prof. Sankhayan Choudhury, University of Calcutta, India**

Paper Title	Registered Author
A Comparative Study of Machine Learning Models for Mushroom Classification	Rinkle Rani
Simulating Attacks and Evaluating Machine Learning Models for Intrusion Detection Systems	Swawon Mondal
TinyFL for Predictive Maintenance and Predicting the Remaining Useful Life in Industry 5.0	Katakam Sai Ananya
A Machine Learning Framework for Understanding the Link between Parental Education, Socioeconomic Status, and Student Performance	Abhijit Pasari
Personality Trait Prediction from Handwritten Text Using Deep Feature Engineering and Ensemble Learning	Dipankar Basu
Sectoral Stock Analysis for Bullish and Bearish Market Conditions Based on Time Series Analysis Approaches	Tamoghna Mukherjee
User-Driven Multimodal Sentiment Analysis: Enhancing Emotion Recognition through Audio-Text Integration in Clinical Contexts	Ahona Bhattacharyya



INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND SUSTAINABLE COMPUTING

## Contributory Paper Presentation

July 25, 2025

### Track 1: Machine Learning and Sustainable Computing

#### Session III

**Time: 11:30 AM to 01:30 PM**

**Hall: 3**

**Session Chair: Prof. Nabendu Chaki, University of Calcutta, India**

Paper Title	Registered Author
Modified ResNet-50-Based Deep Learning Approach for Oral Cancer Diagnosis	Indranil Banerjee
Real-Time Elephant Monitoring Using YOLOv8 and Swin Transformers: A Deep Learning Framework for Wildlife Conservation	Promita Chakraborty
SPAM SMS Classification Using Deep Neural Networks	Ronit Das
Entropy-Enhanced Memory Dump Classification for Fileless Malware Detection via AGCWD, GIF, and Various Machine Learning Models	Soham Paul
Unveiling Security Vulnerabilities in Multi Exit Networks: A Sponge Attack Approach	CH.Dhanavardhana
Novel Approach for Early Detection of Oral Cancer using Deep Learning Techniques	Kandunuru Keerthi





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## Contributory Paper Presentation

July 25, 2025

### Track 1: Machine Learning and Sustainable Computing

#### Session IV

**Time: 04:00 PM to 05:45 PM**

**Hall: 1**

**Session Chair: Dr. Saptarshi Goswami, Bangabashi Morning College, University of Calcutta**

Paper Title	Registered Author
Resume Analyzer: An AI-Powered Approach to Job Matching and ATS Optimization	Debangshu Chatterjee
DeepSeek vs OpenAI: for Breast Cancer Prediction	Anjali Agarwal
Enhancing Visionless Object Recognition on Grasp Using Unsupervised Learning Methods	Simran Gupta
Intelligent Fall Detection with Optical Flow and LSTM: Ensuring Safety Through Vision-based AI	Kuheli Banik
A Comparative Discussion on Critical System Design and Verification Using Formal Methods	Shubha Chakraborty
Intelligent Crop Monitoring: An IoT and Machine Learning Approach to Disease Detection and Remediation	Navoneel Dey
Prediction of Diabetes Using Machine Learning	Sreejitava





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## **Contributory Paper Presentation**

**July 25, 2025**

### **Track 1: Machine Learning and Sustainable Computing**

#### **Session V**

**Time: 04:00 PM to 05:45 PM**

**Hall: 2**

**Session Chair: Dr. Punyasha Chatterjee, Jadavpur University**

<b>Paper Title</b>	<b>Registered Author</b>
<b>Brain Tumor Detection Using Image Classification in Google Teachable Machine</b>	Arunthathi B
<b>A Dynamic Framework for Performance Analysis of Players in T20 Cricket Matches using Neo4j</b>	Dr. Partha Ghosh
<b>Real-Time Anxiety Detection Using Emotion Echo: A Multi-Modal and Embedded Approach</b>	Ishika Rana
<b>A LLM based test script generation framework for Acceptance Testing of mobile applications</b>	Archak Nath
<b>DeepSign: A Robust Signature Verification Framework Leveraging Transfer Learning using VGG16 and MobileNetV2</b>	Piyali Datta
<b>Macroeconomic-Driven Crash Forecasting with Transparent Machine Learning Models</b>	Aratrika Banerjee



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## **Contributory Paper Presentation**

**July 25, 2025**

**Track 2: Artificial Intelligence and Cyber Physical System**

**Session VI**

**Time: 04:00 PM to 05:45 PM**

**Hall: 3**

**Session Chair: Prof. Chandan Mazumdar, Jadavpur University**

<b>Paper Title</b>	<b>Registered Author</b>
<b>Advancing Healthcare with Machine Learning: Predictive Models for Neurological and Chronic Diseases</b>	Anusri nag
<b>Towards Sustainable Farming in India through AI-Based Crop Recommendation and Smart Irrigation with NeerVaani</b>	Prithiraj Ghosh
<b>CropWise: Crop Recommendation App Using Machine Learning</b>	Eshanee Ghosh
<b>AI-Powered Project Risk Management System</b>	Priti Kumari Gupta
<b>Design and Implementation of a Prototype Smart Energy Meter using STM32 Microcontroller for Monitoring Single-Phase Loads</b>	Rimi paul
<b>MOCKVIEWER: A Real-time Multimodal System for Interview Practice with Continuous Verification and Feedback</b>	Sourabh Dey



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**July 25, 2025**

**Session VII**

**Time: 04:00 PM to 05:45 PM**

**Poster Session**

**Session Chair: Prof. Sheli Sinha Chaudhuri, Chairperson, WIE (Women in Engineering), IEEE Kolkata**

**Prof. Amlan Chakraborty, University of Calcutta, India**

<b>Paper Title</b>	<b>Registered Author</b>
<b>Autism Spectrum Disorder Detection from Facial Image Using Hybrid Model</b>	Jaydev Mishra
<b>GlaucNet: A Novel and Computationally Sustainable Glaucoma Detection System</b>	Snigdha Chandra
<b>Integrative Analysis of Differentially Expressed Genes Reveal Hub Genes and Potential Therapeutic Targets through Molecular Docking for Dengue Disease</b>	Epsita Das
<b>HospiTech: A Smart Sustainable Healthcare App</b>	Rumela Ganguly
<b>Breast Cancer Detection: A Comparative Study and Future Directions (Online)</b>	Laxman Singh
<b>In Silico identification of high affinity PARP1 inhibitors for improved therapeutic targeting in Triple-Negative Breast Cancer (Online)</b>	Aayush Ratna Bajpai



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## **Contributory Paper Presentation**

**July 26, 2025**

**Track 3: Emerging Technology: Blockchain, Quantum Computing, Cognitive Computing, Robotics and Automation/ Artificial Intelligence for Health Informatics/NLP/Signal Processing/ Artificial Intelligence for Security**

**Session VIII**

**Time: 12:00 NOON to 01:30 PM**

**Hall: 1**

**Session Chair: Prof. Anirban Mukhopadhyay, University of Kalyani**

<b>Paper Title</b>	<b>Registered Author</b>
<b>GreenNet: A Low-Cost Solution for Plant Disease Detection</b>	Sayandip Bhattacharyya
<b>Face Recognition Analysis using Haar Cascade with Textural patterns for student attendance system</b>	Ms. Kakoli Dey
<b>Deep Learning for Genome Sequencing: A Review of Methods for Predicting Genetic Mutation and Variants</b>	Sachin Soni
<b>MedBus: A Ubiquitous Online Ambulance Service</b>	Prateeti Paul
<b>A Resource and Latency-aware Task Offloading Framework in Fog Computing for Multi-Cloudlet environment</b>	Siparna Rabi Das
<b>FundsCrowd: A Blockchain-Based Crowdfunding DApp</b>	Adhishthatri Singh



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## Contributory Paper Presentation

July 26, 2025

**Track 3: Emerging Technology: Blockchain, Quantum Computing, Cognitive Computing, Robotics and Automation/ Artificial Intelligence for Health Informatics/NLP/Signal Processing/ Artificial Intelligence for Security**

### Session IX

**Time: 12:00 NOON to 01:30 PM**

**Hall: 2**

**Session Chair: Dr. Suparna Biswas (Saha), MAKAUT, India**

Paper Title	Registered Author
Identifying Suspicious Activity Through WAF Logs: Enhancing Web Application Security	Sucheta Chandra
Unveiling Systematicity in Transformer-Based Natural Language Understanding	Chintan Pamnani
VioLENS : Real Time Violence Detection System	Debshankar Dey
SQL and NoSQL Optimization Techniques: A Performance-Oriented Comparative Study	Agnisha De
ChikitsaSpace: A Decentralized Patient-Doctor Consultation Ecosystem Using Blockchain and IoT	Swaraj Lahiri
Study of Sustainable Circuits for Quantum Information Processing Using Photonic Components	Sudipta Dutta



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## Contributory Paper Presentation

July 26, 2025

**Session X**

**Online Session**

**Time: 12:00 NOON to 01:30 PM**

**Hall: 3**

**Session Chair: Prof. Nandita Sanyal, Principal, BPPIMT Saltlake campus**

Paper Title	Registered Author
Efficient Brain Tumor Classification And Detection Using CNN Model For MRI Imaging	Sanasultana Alagur
EEG Signal Analysis for the Detection of Epilepsy	Aruna Pant
Ghost Writer: AI-Powered Writing Assistant	Durgesh Deore
AI-Powered Lane Detection: Integrating Digital Image Processing and Deep Learning for Robust Autonomous Navigation	Purushottam Mahajan
VisionNet: A Hybrid CNN-ViT Approach for Detecting AI-Generated Images	Hitartha Saikia
Job Scheduling In Big Data Analytics Using Reinforcement Learning	Raghunandhan S
Seedscan: AI-Powered Classification Of Soyabean Seed Categories	Srilakshmi A



INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND SUSTAINABLE COMPUTING

## Contributory Paper Presentation

### Session XI

### Online Session

Time: 02:15 PM – 03: 00 PM

Hall: 3

Session Chair: Dr. Sunirmal Khatua, University of Calcutta

Paper Title	Registered Author
In-Silico Analysis Of Phytochemicals Of The Plant Carthamus Tinctoris Against Disease Insulin Resistance	Shikha Mishra
Comparative Study of AI Approaches for Predicting Blood-Brain Barrier Permeability	Shiv Naresh Shivhare
Keyword Spotting of Odia Language in Iot Device Using Pruning For Model Compression	Bikash Ranjan Bag
Design Of Proposed Reversible Multiplexer Using QCA With Lower Energy Dissipation For Arithmetic Processor	Dr. R. Manoj Kumar
Comprehensive Review of AI and Machine Learning Approaches for Prediction of Epigenetic Modifications in Autoimmune Disorders	Shreya Kohli
AI-Driven Machine Learning Techniques For EMG Signal-Based Gesture Classification For Upper Limb Prosthetics: A Comparative Review	Archita Chaudhary
AI-Based Automated Detection Of Furcation Radiolucency In Dental Radiographs Via Efficientnet And Classical ML Classifiers	Priyanka Roy