1st International Symposium on Artificial Intelligence and Internet of Things (AIIoT-2025), IIEST Shibpur, India January 1-2, 2025			
Program Schedule			
Start	**End**	**Duration**	**1st Jan 2025 (Venue: IIEST, SHIBPUR)**
9:00 AM	10:00 AM	01:00	**Registration**
10:00 AM	10:30 AM	00:30	**Talk Title:** Experiences with AI/Ml **Speaker:** Trinanjan Chatterjee, Ex R&D Group Director, Synopsys, and India Head, Konfer.ai **Session Chair:** Prof. Hafizur Rahaman, IIEST, Shibpur
10:30 AM	11:00 AM	00:30	**Talk Title:** Optical Probing on Chips: Layout Level Countermeasures, Simulation, and Future Prospectives **Speaker:** Sajjad Parvin, University of Bremen/ Universität Bremen **Session Chair:** Dr. Sukanta Das, IIEST, Shibpur
11:00 AM	11:15 AM	00:15	**Tea Break**
11:15 AM	11:45 AM	00:30	**Talk Title:** Internet of Drone Things **Speaker:** Prof. Debashis De, WBUT, WB, India **Session Chair:** Dr. Tamal Ghosh, IIEST, Shibpur
11:45 AM	12:15 PM	00:30	**Talk Title:** Hardware Security through Lens of Dr ML **Speaker:** Prof. Debdeep Mukhopadhyay, IEEE Fellow, CSE, IIT, Kharagpur **Session Chair:** Prof. Bhargab B. Bhattacharya, ISI, Kolkata
12:15 PM	1:00 PM	00:45	**Technical Session (Track 1)** **Session Chair:** Dr. Sudip Ghosh, IIEST, Shibpur<hr>**Paper ID: 1** **Paper Title:** Building a Raspberry Pi-Based Bramble Cluster for Educational and Experimental Use **Author:** Amal Barman<hr>**Paper ID: 2** **Paper Title:** DDT-SegNet: Hybrid Video Deepfake Detection Approach using Diffusion and Temporal Convolution **Authors:** Shovon Raul and Tamal Pal<hr>**Paper ID: 10** **Paper Title:** Cure-Net: A Deep Learning Framework for the Proactive Detection of Parkinson's Disease via Automated Handwriting Analysis **Authors:** Pradeep Kumar, Rajdeep Das and Dr. Indrajit Banerjee
1:00 PM	2:00 PM	01:00	**Lunch Break**
2:00 PM	2:30 PM	00:30	**Talk Title:** Fault-Tolerance, Anomaly Detection, and Predictive Maintenance in Industry: AI Meets IIoT **Speaker:** Prof. Bhargab B. Bhattacharya, IEEE Fellow, ISI, Kolkata **Session Chair:** Prof. Debdeep Mukhopadhyay, CSE, IIT, Kharagpur
2:30 PM	3:00 PM	00:30	**Talk Title:** Multilayered deep learning for plant disease prediction **Speaker:** Prof. Arindam Biswas, IIEST Shibpur **Session Chair:** Dr. Indrajit Banerjee, IIEST, Shibpur

Start	End	Duration	
3:00 PM	3:30 PM	00:30	**Talk Title:** Certifying Learning-Enabled Autonomous Cyber Physical Systems - A Deployment Perspective **Speaker:** Prof. Soumyajit Dey, CSE, IIT Kharagpur **Session Chair:** Dr. Malay Kule, IIEST, Shibpur
3:30 PM	4:00 PM	00:30	**Talk Title:** Machine Learning for IoT Communications in Some Applications **Speaker:** Prof. Santi Prasad Maity, IT, IIEST, Shibpur **Session Chair:** Dr. Debasis Mitra, IIEST, Shibpur
4:00 PM	4:15 PM	00:15	**Tea Break**
4:15 PM	4:45 PM	00:30	**Talk Title:** LLM-Driven Dynamic Analysis for IoT-Based Monitoring and Prediction **Speaker:** Prof. Amlan Chakrabarti, IT, University of Calcutta **Session Chair:** Dr. Nirnay Ghosh, IIEST, Shibpur
4:45 PM	6:00 PM	01:15	**Technical Session (Track 2)** **Session Chair:** Dr. Shyamalendu Kandar, IIEST, Shibpur **Paper ID: 6** **Paper Title:** A Framework For Video Based SignLanguage Interpretation Using Machine Learning And Statistical Methods **Authors:** D Swathi, K Susmetha and S Sreeji **Paper ID: 12** **Paper Title:** A new Hardware Trojan Detection Approach using Skip Connection based Multilayer Perceptron Network **Authors:** Banalata Bhunia, Malay Kule and Hafizur Rahaman **Paper ID: 7** **Paper Title:** A Human-in-the-Loop AI Tool for Enhancing Model-Based Software Engineering Through Stakeholder Preference Learning **Author:** Nilesh Jain **Paper ID: 3** **Paper Title:** SemPix3D: Hybrid approach to generalised 3D aware image Synthesis and Generation using Conditionl GAN **Authors:** Souvik Bandyopadhyay and Tamal Pal
6:00 PM	6:30 PM	00:30	**Networking/Break**
6:30 PM	9:00 PM	02:30	**Instrumental Sarod Performance by Debanjan Bhattacharjee followed by** **Banquet Dinner**
Start	**End**	**Duration**	**2nd Jan 2025 (Venue: IIEST, SHIBPUR)**
9:00 AM	10:00 AM	01:00	**Registration**
10:00 AM	10:30 AM	00:30	**Talk Title:** Intelligent CPS Design for Edge-Cloud Computing **Speaker:** Samarjit Chakraborty, University of North Carolina at Chapel Hill, USA **Session Chair:** Prof. Hafizur Rahaman, IIEST, Shibpur
10:30 AM	11:00 AM	00:30	**Talk Title:** Scan Chain based attack on ML Hardware and its Counter Measures **Speaker:** Prof. Chandan Karfa, CSE, IIT Guwahati **Session Chair:** Dr. Surajeet Ghosh, IIEST, Shibpur
11:00 AM	11:30 AM	00:30	**Talk Title:** AI Managed Vector Database for Intelligent IoT Applications **Speaker:** Dr. Prabuddha Chakraborty, University of Maine, USA **Session Chair:** Dr. Surajit Kumar Roy, IIEST, Shibpur

11:30 AM	11:50 AM	00:20	**Tea Break**
11:50 AM	12:30 PM	00:40	**Talk Title:** Error Correction and Fault Tolerance in ReRAM-Based AI Accelerators **Speaker:** Prof. Krishnendu Chakrabarty, Fulton Professor of Microelectronics in the School of Electrical, Computer and Energy Engineering, Arizona State University (ASU). **Session Chair:** Prof. Susmita Sur-Kolay, ISI Calcutta, Kolkata
12:30 PM	1:00 PM	00:30	**Talk Title:** Design of Secure IoT based Health Monitoring Systems **Speaker:** Prof. Susmita Sur-Kolay, ISI Calcutta, Kolkata **Session Chair:** Prof. Krishnendu Chakrabarty, Fulton Professor of Microelectronics in the School of Electrical, Computer and Energy Engineering, Arizona State University (ASU).
1:00 PM	2:00 PM	01:00	**Lunch Break**
2:00 PM	2:30 PM	00:30	**Talk Title:** Hardware Security 2.0 (and the Unmistakable Role of Generative AI) **Speaker:** Prof. Swarup Bhunia, IEEE Fellow, ECE-University of Florida, USA **Session Chair:** Dr. Indrajit Banerjee, IIEST, Shibpur
2:30 PM	3:00 PM	00:30	**Talk Title:** Towards Polynomial Formal Verification of Neuromorphic Architectures **Speaker:** Prof. Rolf Drechsler, IEEE Fellow, University of Bremen, Germany **Session Chair:** Dr. Ruchira Naskar, IIEST, Shibpur
3:00 PM	3:30 PM	00:30	**Technical Session (Track 3)** **Session Chair:** Dr. Binanda Sengupta, IIEST, Shibpur **Paper ID: 8** **Paper Title:** A Two-Stage Authentication and Anomaly Detection for Securing IIoT Systems **Authors:** Tithi Ghosh, Chandan Giri and Surajit Kumar Roy **Paper ID: 11** **Paper Title:** Hybrid Diagonal PVD and LBP-Based Blind Feature Steganography Technique **Authors:** Minakshi Sarkar, Jagannath Dutta, Bidesh Chakroborty and Indrajit Banerjee **Paper ID: 9** **Paper Title:** Blockchain-Based Machine Learning Techniques for Attack Detection in Industrial IoT **Authors:** Pradeep Kumar, Suvrajit Mullick, Rajdeep Das and Dr. Indrajit Banerjee
3:30 PM	3:45 PM	00:15	**Tea Break**
3:45 PM	4:15 PM	00:30	**Talk Title:** Tooling & Eco Systems towards Reliable Edge AI Integration by Data-driven Accelerator Technologies **Speaker:** Prof. Juergen Becker, KIT, Germany **Session Chair:** Dr. Tuhina Samanta, IIEST, Shibpur
4:15 PM	4:45 PM	00:30	**Talk Title:** Democratizing AI in India: Innovations for Inclusive Growth **Speaker:** Dr. Biswajit Patra, VP (Technology), Krutrim Semiconductors **Session Chair:** Dr. Sudip Ghosh, IIEST, Shibpur
4:45 PM	5:00 PM	00:15	**Closing Ceremony**