2nd International Conference on Smart Systems and Wireless Communication (SSWC-2025)

Organized by

Dept. of Information Technology

Venue: JIS College of Engineering, Kalyani, West Bengal, India

November 21-22, 2025

Program Schedule

November 21, 2025 [Friday]

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09:00 - 10:00	Registration and High Tea	
INAUGURAL SESSION: [Dr. B.C.Roy Auditorium]		
10:00 10:05	Lighting of Lamp and Saraswati Vandana	
10:05 – 10:15	Welcome Address by Prof. (Dr.) Partha Sarkar -Principal, JIS College of	
	Engineering	
10:15 – 10:25	Address by Sardar Taranjit Singh, Hon'ble Managing Director, JIS Group	
10:25 – 10:35	Address by Mr. Simarpreet Singh, Director, JIS Group	
10:35 – 10:45	Address by Prof. Niraj Saxena , Pro-Chancellor, JIS University, Chairman Board of Governors, JISCE, Former Adviser, AICTE	
10:45 – 10:55	Address by Prof. Rituparna Chaki , University of Calcutta, General Chair-SSWC 2025	
10:55 – 11:05	Address by Prof. Agostino Cortesi , Ca' Foscari University of Venice, Italy, General Chair-SSWC 2025	
11:05 – 11:15	Address by Dr. Andrew Fleming, British Deputy High Commissioner, Chief Guest, SSWC2025	
11:15 – 11:20	Vote of Thanks	
	KEYNOTE ADDRESS	
11:30 – 12:00	Keynote Address-I	
	Prof. Agostino Cortesi, Ca' Foscari University of Venice, Italy, General Chair-	
12.00 12.20	SSWC 2025	
12:00 – 12:30	Keynote Address-II Prof. Rituparna Chaki, University of Calcutta, General Chair-SSWC 2025	
12:30 – 13:00	Keynote Address-III	
	Dr. Debabrata Nayak, Director, Cyber Security of India, Price Waterhouse Coopers	
13:00 – 13:30	Keynote Address-IV	
	Prof. Nabendu Chaki, Dean of Engineering & Technology, University of Calcutta	
13:30 – 14:30	Networking Lunch	
TECHNICAL SESSION		

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Technical Session-IA: Smart System and Networks (Seminar Room-I)

Session Chair: Dr. Parama Bhaumik, Jadavpur University

Session Coordin	ator: Ms. Sharmistha Ghosh, Ms. Dipanjana Biswas
	AGROSENSE: A Real-Time IoT Based Environment Monitoring System For Smart
	Farming [SSWC:68]
	An Overview of Architecture in Cyber Physical Systems [SSWC:117]
	Adaptive Congestion Control in Smart Grids: A Multi-Objective RL-PSO Method
14:30 – 16:00	With Renewable Penetration [SSWC:139]
	ThirdEye – A Real-Time Smart System for Driver Drowsiness Detection of and
	Accident Prevention [SSWC:168]
	IoT-Enabled Rice Leaf Disease Detection Using Mobilenetv2: A Lightweight Deep
	Learning Approach [SSWC:178]
	Survey On a Portable IoT-Enabled Smart ECG System with Real-Time Deep
	Learning Diagnostics(Ecgenius) [SSWC:203]
Technical Sessio	n-IB: Security Solutions (Seminar Room- II)
Session Chair: D	Dr. Rituparna Chaki, University of Calcutta
Session Coordin	ator: Ms. Monali Sanyal, Ms. Tanima Saha
	Intrusion Detection in Higher Educational Institutions using Industrial Internet of
	Things through Software-Defined Network [SSWC:122]
	Blockchain Application Security Testing (BAST) Framework for Securing Enterprise
	Grade Blockchain Based Applications [SSWC:136]
	An Editable Blockchain Based Framework for Secure Student Evaluation
14:30 – 16:00	[SSWC:153]
	Employing Role-Based Adaptation for Insider Threat Detection with Sequential
	Features and Reinforcement Learning [SSWC:176]
	A 2-Layer Blockchain-Based Trust Enhancement Solution for Crowdfunding
	[SSWC:190]
	Real-Time ICS Attack Surface Monitoring and IP Firewall Enforcement in Scada
T. 1 1 1 0 1	HMIs [SSWC:226]
	n-IC: Machine Learning and Applications (Seminar Room - III)
	Or. Kaushik Roy, West Bengal State University
Session Coordin	ator: Dr. Annwesha Banerjee, Ms. Pratiksha Nandi
	Comparative Analysis of Different Machine Learning Techniques for the Diagnosis of Eye Diseases [SSWC:6]
	Decisions Making into Higher Education Systems Based on Decision Trees
	Algorithms [SSWC:11]
	Towards The Future of Data Protection and Privacy Enhancement - A Research
	Review [SSWC:12]
14:30 – 16:00	An Innovative Machine Learning Approach for Cervical Cancer Prediction
	Innovative Machine Learning Approach for Cervical Cancer Prediction [SSWC:53]
	Assessing Post Covid-19 Health Effects Using Hybrid Machine Learning for
	Predictive Health Analysis [Sswc:100]
	Multi-Modal Audiovisual Deepfake Detection Using CNN, LSTM & XGB
m 1 . 1 ~ .	[SSWC:116]
	n-ID: Machine Learning and Applications (Seminar Room- I)
Session Chair: P	rof. Paolo Ciancarini, Univ. of Bologna, Italy

Session Coordinator: Ms. Tanusree Saha, Ms. Tanima Saha	
	Decoding Tachygraphy Sentiments: A Comparative Analysis [SSWC:118]
	Ml-Based Price Prediction for Agri-Horticultural Commodities [SSWC:121]
	AI-Based Approach in Marine Life Conservation [SSWC:126]
16:15 – 17:30	AR Based Indoor Navigation Model for College Using Reinforcement Learning & AI
	Agent [SSWC:144]
	Machine Learning Ensemble Approaches for Blood-Brain Barrier Penetration
	Prediction for Drug Discovery [SSWC:152]
Technical Sessio	on-IE: Machine Learning and Applications (Seminar Room- II)
Session Chair: D	Or. Kaushik Roy, West Bengal State University
Session Coordin	ator: Dr. Annwesha Banerjee, Ms. Pratiksha Nandi
	Hope Speech Detection Using Machine Learning [SSWC:154]
	Integrating Biological Features with Machine Learning Approaches to Predict Driver
	Mutations in Glioblastoma [SSWC:170]
16:15 - 17:30	Prediction of Novel Target Proteins in the Human-Dengue Protein Interaction
	Network using Machine Learning Techniques [SSWC:185]
	Survey On Non-Invasive Glucose Monitoring System Using Nir Spectroscopy, IoT,
	And Machine Learning [SSWC:200]
	Performance Analysis of Supervised Learning Algorithms for Real-Time Weed
	Detection: A Comparative Study [SSWC:220]
Technical Sessio	n-IF: Algorithms (Seminar Room- III)
Session Chair: P	rof. Agostino Cortesi, Ca' Foscari University of Venice, Italy
Session Coordin	ator: Ms. Sharmistha Ghosh, Ms. Dipanjana Biswas
	COHORT Intelligence Optimized FOPID Controller for BLDC Motor with Dc-Dc
	Boost Converter [SSWC:146]
	Optimization of Demons Registration Using Hippopotamus Optimization Algorithm
16:15 - 17:30	[SSWC:210]
	A Hybrid Framework for Neurological Severity Assessment Via Keystroke
	Dynamics, CGAN Synthesis, And Android-Based Data Acquisition [SSWC:212]
	A Novel Approach to Performance Enhancement and State Estimation Analysis of
	Grid-Integrated Hybrid Renewable Energy System Using Soft Computing
	Techniques [SSWC:228]
18:30 – 20:30	Dinner
	22 nd November,2025 [Saturday]
10:00 - 10:45	Keynote Address-V
	Prof. Shuvra S. Bhattacharyya, Dept. of Electrical and Computer Engineering and
	Institute for Advanced Computer Studies, University of Maryland
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10:45 – 11:30	Keynote Address-VI
10:45 – 11:30	
10:45 – 11:30 11:30 – 12:15	Keynote Address-VI
	Keynote Address-VI Prof. Paolo Ciancarini, Department of Computer Science, Univ. of Bologna, Italy
	Keynote Address-VI Prof. Paolo Ciancarini, Department of Computer Science, Univ. of Bologna, Italy Keynote Address-VII
	Keynote Address-VI Prof. Paolo Ciancarini, Department of Computer Science, Univ. of Bologna, Italy Keynote Address-VII Prof. Nabarun Bhattacharyya, Director, School of Information Science &

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Technical Session-IIA: Image (Seminar Room - I)				
	Or. Imon Mukherjee, IIIT Kalyani			
Session Coordin	ator: Ms. Sharmistha Ghosh, Ms. Tanima Saha			
	Data Augmentation for Image Classification: A Survey [SSWC:104]			
	A Hybrid Edge Detection Technique for Enhanced Feature Extraction of Medical			
	Imaging [SSWC:106]			
	Captioning Of Images Using Resnet50 and MOBILENET: A Mixed Model Approach			
13:00 – 14:15	[SSWC:145]			
	A Pattern Recognition Perspective to analyze Dynamic Handwriting for the			
	Assessment of Parkinson's Diseases [SSWC:149]			
	Opportunistic Routing Methodology for Flying Ad-Hoc Networks: An Analytical			
	Perspective [SSWC:215]			
Technical Session	n-IIB: Deep Learning (Seminar Room - II)			
Session Chair: P	rof. Asit Kumar Das, IIEST			
Session Coordin	ator: Dr. Annwesha Banerjee, Ms. Dipanjana Biswas			
	A Novel Deep Learning Based Indian Sign Language Recognition System Using			
	Convolution Operation Reducing Redundant Features [SSWC:164]			
	A Regression Based Study on Optimized Batch Adsorption of Textile Dyes Using			
12.00 14.15	Luffa Cylindrica Sponge for Wastewater Remedy[SSWC:175]			
13:00 – 14:15	Emotional Ai-Driven Cardiovascular Disease Prediction Using Advanced Deep			
	Learning Methods [SSWC:183]			
	Deephar: A Centralized Deep Learning Framework for Human Activity Recognition			
	Using Smartphone Sensor Data [SSWC:197]			
14:15 - 15:00	Lunch Break			
Technical Session	n-IIC: Image (Seminar Room - I)			
	r. Imon Mukherjee, IIIT Kalyani			
	ator: Ms. Sharmistha Ghosh, Ms. Tanima Saha			
	Animal Footprint Detection With 3d Vision [SSWC:155]			
	Deepfakes in Synthetic Medical Imaging: Opportunities, Challenges, And Safeguards			
	[SSWC:166]			
	Spade-Attention Gan for Retinal Fundus Image Synthesis from Vessel Maps: A Deep			
15:00 – 16:15	Conditional Framework with Perceptual and Structural Constraints [SSWC:171]			
	Automated Deblurring of Motion Blurred Images [SSWC:189]			
	A Study on Multimodal Brain Tumor Segmentation Using Enhanced 2d U-Net			
	Architecture [SSWC:193]			
Technical Sessio	n-IID: Deep Learning (Seminar Room - II)			
	rof. Asit Kumar Das, IIEST			
	ator: Dr. Annwesha Banerjee, Ms. Dipanjana Biswas			
	Deep Learning with a Human Touch: Detecting Cyberbullying Through Empathy-			
	Informed Models [SSWC:17]			
	Lightweight Deep Learning Model for Optic Disc and Vessel Segmentation in Fundus			
15:00 – 16:15	Images [SSWC:138]			
	A Hybrid Convolutional Neural Network for Handwritten Bangla Character			
	Recognition [SSWC:158]			
	Recognition [55 if e.150]			

	BILSTM Based Deep Learning Model for Efficient Yoga Activity Recognition Using Kinect Sensor [SSWC:162]
16:45 – 17:15	Valedictory Session with Vote of Thanks