NEIAIS - 2025

**A THREE-DAY INTERNATIONAL CONFERENCE ON
NORTH EAST INDIA AI SUMMIT: UNRAVELLING TRENDS
(NEIAIS 2025)
10th -12th February, 2025**

Conference Program Schedule

DAY-1 (Monday): 10th February 2025

Time	Event	Duration (min)
09:00 AM	**Conference Breakfast and Registration**	**40**
09:40 AM	**Assemble of Invitees, Delegates and Participants**	**10**
09:50 AM	**Arrival of Chief Guest, Guests of Honour & President**	**10**
10:00AM	**Felicitation of Dignitaries**	**10**
10:10 AM	**Lighting of Ceremonial Lamp**	**5**
10:15 AM	**Welcome Address by Dr. Th. Tangkeshwar Singh Senior Asstt. Prof., Dept. of Computer Science, M.U.**	**5**
10:20 AM	**Welcome Address by Prof. Jyoti Sekhar Banerjee (General Chair, NEIAIS-2025) Series Editor, FIST, CRC press, USA**	**5**
10:25 AM	**Speech by Prof. Sumitra Phanjoubam (Guest of Honour) Dean School of SMPS, Manipur University**	**5**
10:30 AM	**Speech by Prof. Shikhar Kumar Sarma (Guest of Honour) Dean of Technology, Gauhati University**	**5**
10:35 AM	**Speech by Prof. W. Chandbabu Singh (Guest of Honour) Registrar, Manipur University**	**5**
10:40 AM	**Speech by Prof. N. Lokendra Singh (Chief Guest) Hon'ble Vice-Chancellor, Manipur University**	**10**
10:50 AM	**Speech by Dr. Khumukcham Robindro Singh (President) Head, Dept. of Computer Science, Manipur University**	**5**
10:55 AM	**Vote of Thanks by Dr. S. Somorjeet Singh Dept. of Computer Science, Manipur University**	**5**
11:00 AM	**High Tea**	**15**

11:15 AM	**Keynote Talk by @ Prof. Shikhar Kumar Sarma, Dean of Technology, Gauhati University**		**45**
12:00 PM	**Keynote Talk by @ Prof. Jyoti Sekhar Banerjee, Bengal Institute of Technology, West Bengal, India**		**45**
12:45 PM	**Lunch Break**		**60**
01:45 PM	**Keynote Talk by @ Prof. Y. Jayanta Singh, Executive Director, NIELIT Imphal, Manipur.**		**45**
02:30 PM	**Technical Sessions**		**90**
	TS-1 **16, 17, 23, 43, 44, 58, 64**	**TS-2** **10, 11, 18, 41, 42, 51, 63, 67**	**TS-3** **19, 32, 35, 38, 45, 60, 91, 114, 118**
04:00 PM	**High Tea**		**15**

	Session-1 (HYBRID): Foundations and Applications of Machine Learning			
	Session Chairs: Tejmani Sinam, Dr. Hanjabam Saratchandra Sharma			
	Meeting Link: https://meet.google.com/jov-haau-fhd			
	Sl. No.	**Paper ID**	**Paper Title**	
02:30 PM	**1.**	**43**	**Clustering of foods based on nutritional profile using principal component analysis and k-nearest neighbour classification (Offline)**	**90**
	2.	**44**	**Estimating Crop yields Using Machine Learning Algorithms (Offline)**	
	3.	**16**	**Comparative Analysis of Machine Learning based Specific Capacitance Prediction and Experimental Validation of Supercapacitive Performance in Cerium-based Electrodes**	
	4.	**17**	**Incremental Learning using CART and Genetic Programming for Handling Dynamic Training Data**	
	5.	**23**	**Machine Learning Methods for Improving Stock Price Prediction Accuracy**	
	6.	**58**	**A Novel Ensemble Rank Aggregation Feature Selection Algorithm for Classification**	
	7.	**64**	**A novel stacking ensemble machine learning approach for landslide susceptibility mapping**	

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.

	Session-2 (HYBRID): Deep Learning and Computer Vision		
	Session Chairs: Dr. Th. Tangkeshwar Singh, Dr. Rajeev Rajkumar		
	Meeting Link: https://meet.google.com/dzh-cwhs-ynn		
02:30 PM	**Sl. No.**	**Paper ID**	**Paper Title**
	1.	51	**Offline Handwritten Character Recognition of Manipuri Script Using Convolutional Neural Network (CNN) and Vision Transformer (ViT) (Offline)**
	2.	63	**Feature-Driven Classification of AI and Human Text: Insights from Traditional and Neural Models (Offline)**
	3.	10	**A Hybrid Approach for Accurate Fish Segmentation: Integrating Vision Transformer and MobileNetV2**
	4.	11	**Predictive Efficacy Assessment of Deep Learning Models for Apple Leaf Disease Detection and Classification**
	5.	18	**Exploring Deep Learning Approaches for Hate Speech Detection in Assamese social media Text**
	6.	41	**Localized Detection of Rice Diseases Using YOLO 11: An Advanced Approach for Precision Agriculture**
	7.	42	**Assamese Handwritten Script Segmentation Using Deep Learning Approach**
	8.	67	**Efficient Crack Classification through Transfer Learning with Pre-Trained Convolutional Neural Networks**

(Session-2 duration: 90)

	Session-3 (HYBRID): Natural Language Processing and Smart Systems		
	Session Chairs: Dr. Devarani Devi Ningombam, Dr. Ksh. Nareshkumar Singh		
	Meeting Link: https://meet.google.com/kfd-gsop-fyk		
02:30 PM	**Sl. No.**	**Paper ID**	**Paper Title**
	1.	45	**Detection of Sensitive Information using CRF in unstructured text (Offline)**
	2.	91	**Impact of Machine Translation Evaluation Metrics on Low Resource Languages (Offline)**
	3.	114	**Evaluating LLMs and Pre-trained Models for Text Summarization Across Diverse Datasets (Offline)**

(Session-3 duration: 90)

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.

4.	**60**	**Analyzing The Impact of Word2vec On Stance Detection in Low-Resource Languages: A Case Study on Manipuri Editorial Articles** (**Offline**)	
5.	**19**	**Using Sentiment Analysis to Enhance Digital Forensic Evidence Identification**	
6.	**32**	**Effect of stop words in Assamese Language for Identifying Toxic comments**	
7.	**35**	**Optimizing Low-Resource Khasi NER through Transfer Learning**	
8.	**38**	**Efficient Detection of Offensive Social Media Comments in Assamese Language Using LSTM**	
9.	**118**	**Sentiment Analysis on Code-Mixed Data: A Comprehensive, Qualitative and Quantitative Literature Survey**	

END OF DAY 1

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.

DAY-2 (Tuesday): 11th February 2025

Time	Session Details			Duration (min)
9:00 AM	Conference Breakfast and Registration			60
10:00 AM	Keynote Talk by @ Prof. Shahnawaz Khan, Head of Applied Research, Bahrain Polytechnic, Bahrain.			45
10:45 AM	Keynote Talk by @ Prof. Jemal H. Abawajy, PhD, DSc., SMIEEE, Deakin University, Waurn Ponds Campus, Locked Bag 20000, Geelong, VIC 3220			45
11:30 AM	Tea Break			15
11:45 AM	Keynote Talk by @ Prof. S. Ranbir Singh, Department of Computer Science and Engineering, IIT Guwahati.			45
12:30 PM	Lunch Break			60
01:30 PM	Technical Sessions			90
	TS-4 15, 49, 65, 100, 112	**TS-5** 12, 61, 66, 68, 70, 76, 105, 116	**TS-6** 8, 119, 4, 57, 79, 83, 86, 102, 106	
03:00 PM	High Tea			15
05:00 PM	Gala Dinner			60

	Session-4 (HYBRID): IoT Security and Network Technology			
	Session Chairs: Dr. Th. Rupachandra Singh, Dr. Nazrul Hoque			
	Meeting Link: https://meet.google.com/xvk-onzr-eqc			
	Sl. No.	Paper ID	Paper Title	
01:30 PM	1.	100	An extended SMOTE-based class balancing technique to improve classification accuracy on imbalanced datasets (**Offline**)	90
	2.	112	A Review on various IOT-based Cattle health monitoring Systems (**Offline**)	
	3.	15	Beyond Characters: A Machine Learning Approach to Password Strength Analysis	
	4.	49	A Home-based Skill Improvement Tool Utilizing Smartphone Sensors	

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.

	5.	65	Advancements in Network Security Threat Detection Systems for Wireless Sensor Networks: A Review of Machine Learning and Deep Learning Techniques	

	Session-5 (HYBRID): AI in Healthcare and Biomedical Applications			
	Session Chairs: Dr. Taiyenjam Romen Singh, Dr. Satyajit Sarmah			
	Meeting Link: https://meet.google.com/zre-envh-pzh			
	Sl. No.	**Paper ID**	**Paper Title**	
01:30 PM	1.	105	Detection of Diabetic Retinopathy Using Deep-Learning Based Image Classification (Offline)	**90**
	2.	12	An Investigation of Machine Learning Algorithms for Lung Disease Detection	
	3.	61	Robust MRI Brain Tumor Segmentation Using Integrated Mean Shift Clustering and Adaptive Thresholding	
	4.	68	Enhancing Medical Imaging Diagnostics with Federated Learning: Overcoming Data Heterogeneity	
	5.	100	A Hybrid Deep Learning Model for Accurate Brain Tumor Segmentation and Classification Using ResNet101 and U-Net	
	6.	76	Evaluating Machine Learning Models for Precision Disease Prediction	
	7.	116	Breast Cancer Classification using Machine Learning and Deep Learning: A Systematic Review of WBCD-Based Research and Future Directions	
	8.	66	Comparison of Machine Learning, Ensemble Learning, and Deep Learning Model for Predicting Ovarian Cancer: A Data-Driven Study	
	9.	70	A Hybrid Deep Learning Model for Accurate Brain Tumor Segmentation and Classification Using ResNet101 and U-Net	

	Session-6 (HYBRID): Emerging Trends in AI and Computational Techniques			
	Session Chairs: Dr. Pangambam Sendash Singh, Dr. Rubul Bania			
	Meeting Link: https://meet.google.com/ysj-wjti-rgt			
01:30 PM	**Sl. No.**	**Paper ID**	**Paper Title**	**90**
	1.	8	Investigation into a suitable voice pathology detection and classification using glottal inverse filtering (Offline)	

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.

| 2. | 79 | Artificial intelligence and entrepreneurship in the context of current socioeconomic growth. Review (**Offline**) | |

3.	106	**In Depth Comparative analysis of the combine effect of ML models and Feature Selection methods in Crop Yield Prediction (Offline)**	
4.	119	**Advanced Fraud Detection in Financial Transaction Using Machine Learning**	
5.	4	**Leveraging Machine Learning Techniques to Analyze Soil Organic Carbon Dynamics in the Eastern Himalayan Region**	
6.	57	**Denoising in Terahertz Images**	
7.	83	**Modeling Stock Prices Using XGBoost, Prophet, and ARIMA: A Comprehensive Evaluation**	
8.	86	**Advancements in Sugarcane Disease Detection and Prediction**	
9.	102	**AI-Powered Personalized Learning and Intelligent Recommendation Systems**	

END OF DAY 2

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.

DAY-3 (Tuesday): 12th February 2025

Time	Session Details	Duration (min)
09:00 AM	**Conference Breakfast and Registration**	60
10:00 AM	**NEIAIS 2025 - AIORI IoT Workshop** **Prof. Indrajit De, Institute of Engineering & Management, Kolkata** **Mr. Anand Raje, CTO, AIORI**	90
11:30 AM	**High Tea**	15
11:45 AM	**Continue on NEIAIS 2025 - AIORI IoT Workshop**	90
01:15 PM	**Keynote Talk by @ Prof. Monowar Bhuyan, Umeå University, Sweden**	45
02:00 PM	**Lunch Break**	60
03:00 PM	**Keynote Talk by @ Dr. Arnab Kumar Maji, NEHU Shillong**	45
03:45 PM	**High Tea**	15
04:00 PM	**Certificate Distribution, Feedback and Closing**	60

END OF DAY 3

Paper Presentation will be for 10 minutes (max), followed by 5 minutes Q&A session.