



राष्ट्रीय प्रौद्योगिकी संस्थान, सिलचर
National Institute of Technology Silchar
(राष्ट्रीय महत्वका संस्थान)
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2nd International Conference on
Machine Learning, Image Processing, Network Security and Data sciences (MIND-2020)
30-31, July 2020

Program Schedule

Day-1: 30th July 2020

Time	Activity				
10.00 - 10.30	Inauguration				
10.45 - 11.30	Keynote Talk	Keynote Talk by Padma Shri Prof. Bimal Kumar Roy , ISI Kolkata, India			
11.45–12.30	Keynote Talk	Keynote Talk by Prof. Wai Ho Mow , Hong Kong University of Science and Technology			
12.30 - 14.30	Paper Presentations	Session-1 Track: Data Science and Big Data	Session-3 Track: Image Processing and Computer Vision	Session-5 Track: Machine Learning and Computational Intelligence	Session-7 Track: Network and Cyber Security
15.00 - 17.00	Paper Presentations	Session-2 Track: Data Science and Big Data	Session-4 Track: Image Processing and Computer Vision	Session-6 Track: Machine Learning and Computational Intelligence	Session-8 Track: Network and Cyber Security



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Time	Activity	Day-2: 31 st July 2020		
10.00 - 10.45	Keynote Talk	Keynote Talk by Prof. Prabir Kumar Biswas, IIT Kharagpur, India		
11.00–11.45	Keynote Talk	Keynote Talk by Prof. Firoz Ahmed, University of Rajshahi, Bangladesh		
12.00 - 14.00	Paper Presentations	Session-9 Track: Image Processing and Computer Vision	Session-11 Track: Image Processing and Computer Vision	Session-12 Track: Machine Learning and Computational Intelligence
		Session-10 Track: Image Processing and Computer Vision	Session-13 Track: Machine Learning and Computational Intelligence	Session-14 Track: Machine Learning and Computational Intelligence
15.00 - 17.00	Paper Presentations			





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Session 1		Day 1 (30-07-2020) Time: 12:30 PM to 2:00 PM Track: Data Science and Big Data
Paper ID	Authors	Title
13	Tirthankar Barik and Vikram Singh	Placing Query Term Proximity in Search Context
59	Shruti Joshi, Neha Dhanotiya, Himanshi Gupta Nagariya and Sarika Jain	Identifying Fake Profile in Online Social Network: An Overview and Survey
79	Sraban Kumar Mohanty, Gaurav Mishra, Sumit Kumar and Rahul Gupta	An efficient graph based trust-aware recommendation system
142	Shaswata Saha and Sarmistha Neogy	Permission based Access Control for Healthcare Systems
147	Kunal Chakma, Steve Durairaj Swamy, Amitava Das and Swapan Debbarma	5W1H-based Semantic Segmentation of Tweets for Event Detection using BERT



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Session 2		Day-1 (30-07-2020) Time: 3:00 PM to 5:00 PM Track: Data Science and Big Data
Paper ID	Authors	Title
156	Chandra Prakash Singh Sengar and S. Jaya Nirmala	Sarcasm detection in tweets as contrast sentiment in words using machine learning and deep learning approaches.
182	Ananya Choudhury, Johan Van Soest, Stuti Nayak and Andre Dekker	Personal Health Train on FHIR: a privacy preserving federated approach for analyzing FAIR data in healthcare
202	Shashank Bhatt and Tapas Kumar Mishra	Analyzing the linguistic structure of questions to make unanswered questions answered
211	Vipin Kumar Pandey, Diwakar Deep Tirkey, Mubassir Rahman and Suddhasil De	Applicability of Structured and Unstructured Communication Techniques in Emergency Environment
213	Sneha Rai and Mala De	Effect of Filtering in Big Data Analytics for Load Forecasting in Smart Grid





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Session 3		Day-1 (30-07-2020) Time: 12:30 PM to 2:30 PM Track: Image Processing and Computer Vision
Paper ID	Authors	Title
5	Rahul G. Patekar and Abhijeet V. Nandedkar	Distance Invariant RGB-D Object Recognition Using DSMS System
16	R Lalchhanhima, Debdatta Kandar and R.Chawngsangpuui	Single Look SAR Image Segmentation Using Local Entropy, Median Low-Pass Filter and Fuzzy Inference System
50	Shaji Thorn Blue and Brindha Murugan	An edge detection and sliding window based approach to improve object localization in YOLOv3
56	Mriganka Nath and Dr. Chandrajit Choudhury	Automatic Detection of Pneumonia from Chest X-Rays using Deep Learning
64	N Jagan Mohan, R Murugan, Tripti Goel and Parthapratim Roy	An Improved Accuracy Rate in Microaneurysms Detection in Retinal Fundus Images using Non-Local Mean Filter
70	Ekanshi Agrawal and Jabez Christopher	Emotion Recognition from Periocular Features



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Session 4		Day-1 (30-07-2020) Time: 3:00 PM to 5:00 PM Track: Image Processing and Computer Vision
Paper ID	Authors	Title
73	Divyue Sharma, Parva Jain and Dilip Kumar Choubey	A Comparative Study of Computational Intelligence for Identification of Breast Cancer
78	Rajat Suvra Nandy, Rohit Kamal Chatterjee and Abhishek Das	Segmentation of Blood Vessels from Fundus Image using Scaled Grid
94	Jitendra Madarkar and Poonam Sharma	Head Pose Estimation of Face: Angle of Roll, Yaw, and Pitch of the Face Image
106	Satish Kumar Satti, Dr Suganya Devi K, Prasenjit Dhar and Dr Srinivasan P	Enhancing and Classification of Traffic signs using Deep Convolutional Neural Network
109	Adarsh Pradhan, Bhaskarjyoti Sarma and Rahul Kumar Nath	Diabetic Retinopathy Detection on Retinal Fundus Images using Convolutional Neural Network
112	Kamarthi Vanitha and Satyanarayana Donti	Medical Image Fusion Based On Deep Decomposition and Sparse Representation



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Session 5		Day-1 (30-07-2020) Time: 12:30 PM to 2:30 PM Track: Machine Learning and Computational Intelligence
Paper ID	Authors	Title
12	Rajkamal Sarma and Pankaj Kumar Deva Sarma	Mining Composite Fuzzy Association Rules among Nutrients in Food Recipe
14	Uppugunduru Anil Kumar, Nishant Jain, Sumit K Chatterjee and Syed Ershad Ahmed	Evaluation of Multiplier-less DCT Transform using In-exact Computing
36	Nisarg Mistry, Maneesh Darisi, Rahul Singh, Meet Shah and Aditya Malshikhare	Legal amount recognition in Bank cheques using Capsule Networks
41	Nagaraj Naik and Biju R Mohan	Log Periodic Power Law Fitting on Indian Stock Market
47	K Manojkumar, Srinivas Boppu and M Sabarimalai Manikandan	A Simple Algorithm for Estimating Respiration Rate From Photoplethysmographic Signals
51	Saritha Kinkiri	Phonemes: An explanatory Study Applied to Identify a Speaker



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Session 6		Day-1 (30-07-2020) Time: 3:00 PM to 5:00 PM Track: Machine Learning and Computational Intelligence
Paper ID	Authors	Title
53	Zakir Hussain and Malaya Dutta Borah	Nutritional Status Prediction in Neonate using Machine Learning Techniques: A Comparative Study
55	Suprabhat Maity, Anirban Dey, Ankan Chowdhury and Abhijit Banerjee	Handwritten Bengali Character Recognition using Deep Convolution Neural Network
57	Bireswar Banik and Abhijit Sarma	Lexical Feature based Feature Selection and Phishing URL classification using Machine Learning Techniques
60	Vijay Hasan Puri, Jyoti Vashishtha and Mukesh Nimbiwal	Feature Selection Using PSO : A Multi Objective Approach
63	Md. Minhazul Islam, Shah Ashisul Abed Nipun, Majharul Islam, Md. Abdur Rakib Rahat, Jonayet Miah, Salsavil Kayyum, Anwar Shadaab and Faiz Al Faisal	An Empirical Study to Predict Myocardial Infarction Using K-Means and Hierarchical Clustering
67	Nirupam Shome, Rabul Hussain Laskar, Richik Kashyap and Sivaji Bandyopadhyay	A Robust Technique for End Point Detection under Practical Environment



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Session 7		Day-1 (30-07-2020) Time: 12:30 PM to 2:30 PM Track: Network and Cyber Security
Paper ID	Authors	Title
25	Pankaj Keserwani and Mahesh Chandra Govil	A Hybrid Symmetric Key Cryptography Method to Provide Secure Data Transmission
32	Amit Kumar Roy, Ajoy Kumar Khan and Hridoy Jyoti Mahanta	Trust-Based Detection of Malicious Nodes for Wireless Mesh Networks
43	Pankaj Keserwani, Mahesh Chandra Govil, and Pilli Emmanuel Shubhakar	Evidence Building for Ad Click or Web Access on Cloud
85	Debasish Deb, Kirani Singh, Mahendra Lagineni and Sagorika Raj Chakraborty	Security Analysis of MITM Attack on SCADA Network
104	Md. Omar Faruque Khan Russel, Sheikh Shah Mohammad Motiur Rahman and Takia Islam	A Large-Scale Investigation to Identify the Pattern of App Component in Obfuscated Android Malwares
121	Kushal Kanwar, Sakshi Kaushal and Harish Kumar	An AHP-TOPSIS based framework for the selection of node ranking techniques in complex networks
164	Khem Prosad Sharma and Arup Bhattacharjee	Placement issues in Network FunctionVirtualization



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Session 8		Day-1 (30-07-2020) Time: 3:00 PM to 5:00 PM Track: Network and Cyber Security
Paper ID	Authors	Title
7	Saumya Shankar, Jitendra Madarkar, Poonam Sharma and	Securing Face Recognition System using Blockchain Technology
146	Saijshree Srivastava and Shiva Prakash	Security Enhancement of IoT based Smart Home using Hybrid Technique
158	Malvika Singh, B.M Mehtre and S Sangeetha	Insider Threat Detection based on User Behaviour Analysis
162	Krishna Reddy, Irani Acharjamayum and Arup Bhattacharjee	Layer-2 performance analysis of LTE-A and HetNets for 5G Networks
188	Kaushik Ravichandran, Lalit Kishore Gattani, Advithi Nair and Bhaskarjyoti Das	A Novel Graph Based Approach To Predict Man Of The Match for Cricket
193	Dharminder Dharminder and Dheerendra Mishra	Construction of identity based signcryption using learning with rounding
194	Prakhyat G Kulkarni, Praneet S Y, Raghav R B and Bhaskarjyoti Das	Deep Detection Of Anomalies In Static Attributed Graph



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Session 9		Day-2 (31-07-2020) Time: 12:00 Noon to 2:00 PM Track: Image Processing and Computer Vision
Paper ID	Authors	Title
120	Sanjay Patidar, Aditya Pandey, Aditya Bub and Sriram A	Rice Plant Disease Detection and Classification using Deep Residual Learning
141	Tanmay Bhadra, Avinash Chouhan, Dibyajyoti Chutia, Alexy Bhowmick and P.L.N Raju	Flood detection using multispectral images and SAR data
148	Dibyakanti Mahapatra, Chandrajit Choudhury and Ram Kumar Karsh	Handwritten character recognition using KNN and SVM based classifier over feature vector from Autoencoder
149	Ayush Kumar and Badal Soni	A ConvNet based Procedure for Image Copy-Move Forgery Detection
152	Vidhya R and Brindha M	A novel invisible watermarking approach for double authentication of image content
176	Rohith G and Lakshmi Sutha Kumar	Performance analysis of Deep Convolution Network models for Remote sensing Signature classification



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Session 10		Day-2 (31-07-2020) Time: 3:00 PM to 5:00 PM Track: Image Processing and Computer Vision
Paper ID	Authors	Title
177	Gopa Bhaumik and M C Govil	Buddhist Hasta Mudra Recognition using Morphological Features
189	Anant Kumar and Gyanendra Verma	Image Compression using Deep Learning based multi-structure Feature map and K-means Clustering
191	Gunjan Paul, Saravanan Chandran and Jose Hormese	Building Detection from Satellite Aerial Images using Thresholding, XOR, and Morphological Operations
198	P Joyce Beryl Princess, Salaja Silas and Elijah Blessing Rajsingh	Performance Analysis of Feature Detection and Description (FDD) Methods on Accident Images
210	Madhumita Paul, Ram Kumar Karsh and F A Talukdar	Image authentication using tensor decomposition and local features with geometric correction





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Session 11		Day-2 (31-07-2020) Time: 12:00 Noon to 2:00 PM Track: Machine Learning and Computational Intelligence
Paper ID	Authors	Title
71	Priyanshu Kumar, Aadarsh Singh, Pramod Kumar and Chiranjeet Kumar	An Explainable Machine Learning Approach for Definition Extraction
81	Raghav Kachhawaha, Pragya Gupta, Tushar Kansal, Tanmay Bhowmik and Amitava Choudhury	Sclera Based Human Feature Recognition Process using CNN
82	C. Lalengmawia and Alok Chakrabarty	Optimization of Local Ordering Technique for Nearest Neighbour Circuits
99	Candy Lalrempuii and Badal Soni	Attention-based English to Mizo Neural Machine Translation
107	Ishan Sen, Md. Iqbal Hossain, Md. Faisal Hossain Shakib, Asaduzzaman Imran and Faiz Al Faisal	In Depth Analysis of Lung Disease Prediction Using Machine Learning Algorithms
145	Bibek Majumder and Sharmistha Bhattacharya	Face Recognition Based on Human Sketches Using Fuzzy Minimal Structure Oscillation in the SIFT Domain



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Session 12		Day-2 (31-07-2020) Time: 12:00 Noon to 2:00 PM Track: Machine Learning and Computational Intelligence
Paper ID	Authors	Title
72	Chanambam Sveta Devi and Bipul Syam Purkayastha	Construction of Parallel Corpus For English-Mizo Machine Translation System
124	Deepak Saraswat and Preetvanti Singh	Comparison of different decision tree algorithms for predicting the heart disease
137	Shubham Jain, Bhagath Parabattina and Pradip Kumar Das	Speech Signal Analysis for Language Identification using Tensors
155	Santosh Rajak and Ujwala Baruah	An Ensemble Model for Predicting Passenger Demand Using Taxi Data Set
157	Ujwala Baruah, Harini N, Supraja Venkatesh, Khushbu Maloo and Rahul Debnath	A novel approach to synthesize Hinglish text to English text
163	Heena Kumari, Sunita Sarkar, Vikrant Rajput and Arindam Roy	Neural Abstractive Text Summarization





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Session 13		Day-2 (31-07-2020) Time: 3:00 PM to 5:00 PM Track: Machine Learning and Computational Intelligence
Paper ID	Authors	Title
118	Eman Mohamed	Improving the accuracy of prediction of heart disease based on machine learning and feature selection techniques
123	Ungati Ganapathi and M Sabarimalai Manikandan	Convolutional Neural Network Based Sound Recognition Methods for Detecting Presence of Amateur Drones in Unauthorized Zones
126	Bhagath Parabattina, Megha Jain and Pradip K Das	Dynamic Speech Trajectory based Parameters for Low Resource Languages
133	Manash Sarma and Dr. Subarna Chatterjee	Identify the current state of Alzheimer disease and predict its evolutionary stage from gene and other biomarkers using 'Machine Learning' techniques
134	Manoj Kumar and Pinaki Mitra	Solving Quadratic Assignment Problem using Crow Search Algorithm in Accelerated Systems
139	Deepankar Nankani and Rashmi Dutta Baruah	Effective Removal of Baseline Wander from ECG Signals: A Comparative Study



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Session 14		Day-2(31-07-2020) Time: 3:00 PM to 5:00 PM Track: Machine Learning and Computational Intelligence
Paper ID	Authors	Title
171	Ranjeet Kumar	HRV Signal Feature Estimation and Classification for Healthcare System based on Machine Learning
178	Arun Kumar Rai and Rajendra Kumar Dwivedi	Fraud Detection in Credit Card Data using Machine Learning Techniques
186	Ashish Kumar, Raied Razi, Anshul Singh and Himansu Das	Res-VGG : A Novel Model for Plant Disease Detection by Fusing VGG16 and ResNet Models
190	Rajesh Tripathi	A Novel Algorithm for Salient Region Detetction
204	Maibam Debina Devi and Navanath Saharia	Exploiting Topic Modelling to Classify Sentiment from Lyrics
209	Pallabi Patowary and Dhruba Kr Bhattacharyya	CrGeESCC: Crucial Gene Identification for Esophageal Squamous Cell Carcinoma Using Differential Expression Analysis

