



Organizing
26th (Virtual) annual International Conference on
Advanced Computing and Communications
(ADCOM 2020)
December 16-18, 2020

Program Schedule

16th December 2020

Time	Activity
09.30 - 10.30	Inauguration
10.30 - 10.45	Tea Break
10.45 - 12.00	Plenary Talk on "Edge Computing" Prof. Mahadev Satyanarayanan
12.00 -14.00	Session-I Paper Presentations
14.00 - 14.30	Lunch Break
14.30 - 16.30	Session-II Paper Presentations



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17th December 2020

Time	Activity	
10.00 - 11.15	Keynote Talk on "What Should 6G be?" Prof. Mohamed-Slim Alouini	
11.15 - 11.30	Tea Break	
11.30-13.30	Session-III	Paper Presentations
13.30 - 14.00	Lunch Break	
14.00 - 16.00	Session-IV	Paper Presentations
16.00 - 18.00	Session-V	Paper Presentations



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18th December 2020

Time	Activity
10.00 - 11.00	Keynote Talk on "Domain Science Applications, Huge Data, and Opportunities in Networking and Systems Research" Prof. Deepankar Medhi
11.00 - 11.15	Tea Break
11.15-13.15	Session-VI Paper Presentations
13.15 - 14.15	Lunch Break
14.15 - 16.15	Session-VII Paper Presentations

Session-I		<i>Time: 12.00 -14.00 IST</i>	<i>Date: December 16, 2020</i>
Session Chair: <i>Dr. Wasim Arif and Dr. Laiphrakpam Dolendro Singh</i>			
Paper ID	Title of Paper		
26	Mona Kumari and Ajitesh Kumar	Angle based Multi-Hop Routing Protocol to enhance the performance of IoT Based Network	
28	Mansi Sahi, Nitin Auluck	An IoT Based Intelligent Irrigation Management System	
35	Mummadi Swathi, Dr. Bhawana Rudra	A Novel Architecture for Binary code to Gray code converter using Quantum Cellular Automata	
67	Dr Anupam Das, Dr Mohammad Ali Akour, Dr Abdullah Bahattab, Dr. Qin Zin	Energy Efficient Wireless Communications using EEA and EEAS with energy harvesting schemes	
73	Rashmi Sahay, G. Geethakumari, Barsha Mitra	Partitioning Attacks against RPL in the Internet of Things Environment	
74	Prachi and Vishal Gupta	Medical Sign Shaped Compact Wideband 2x2 MIMO Antenna for 5G Application	
76	Rajarajeswarie B and R. Sandanalakshmi	Uniform Channel Decomposition based Hybrid Precoding using Deep Learning	
80	M Saravanan, Arindam Banerjee	A Auto-shifting computation load in Fog Nodes	

Session-II		<i>Time: 14:30-16:30 IST</i>	<i>Date: December 16, 2020</i>
Session Chair: <i>Prof. Fazal A. Talukdar and Dr. Anish Kumar Saha</i>			
Paper ID	Title of Paper		
230	Puneet Bakshi and Sukumar Nandi	Privacy Enhanced Registered Devices for Fine-grained Access Control	
86	Mukul Shukla and Brijendra Kumar Joshi	An Effective Scheme to Mitigate Blackhole Attack in Mobile Ad-Hoc Networks	
88	Puja Padiya, Amarsinh Vidhate, Ramesh Vasappanavara	A Hybrid Clustering Approach for Faster Propagation of Emergency Messages in VANET	
97	Vishnu Vardhan Nimmalapudi, Mohammad Farukh Hashmi, Avinash G. Keskar	Machine Learning and IoT based Messaging Device for Blind, Deaf and Dumb People	
209	Ilayaraja. N, Sherin. J, Sandra. J, Mary Magdalene Jane. F,	Weighted Road Network Distance Based Data Caching Policy for Spatio-Temporal Data in Mobile Environment	
213	Vishal Deka, Manojit Ghose and Sukumar Nandi	Energy-aware Application Scheduling on DVFS-enabled Edge Computing with Mobile-Edge-Cloud Cooperation	
220	Ajay Bandi	Edge Computing as an Architectural Solution: An Umbrella Review	
224	Abhijnyan Chandra, Arif Ahmed, Sandeep Kumar, Prateek Chand, Malaya Dutta Borah and Zakir Hussain	Content Based Recommender System For Similar Products In E-Commerce	
238	Ravi Kishore Devarapalli and Anupam Biswas	An Approach to Analyze Rumor Spreading in Social Networks	

Session-III		<i>Time: 11.30–13.30 IST</i>	<i>Date: December 17, 2020</i>
<i>Session Chair: Dr. K. L. Baishnab and Dr. Suganya Devi K</i>			
Paper ID	Title of Paper		
33	Anand Tirkey, Ramesh Kumar Mohapatra, Lov Kumar Discerning Android Malwares using Extreme Learning Machine		
83	Yadlapalli Sai Harshini, Ravi Srihitha, V. M. Manikandan A Reversible Data Hiding through Encryption Scheme using an Adaptive Smoothness Measure		
104	Sabuzima Nayak and Ripon Patgiri 6G Communication: A Vision on the Potential Applications		
132	Anand Tirkey, Ramesh Kumar Mohapatra and Lov Kumar Policing Android Malware using Object-Oriented Metrics and Machine Learning Techniques		
160	Muskaan, Sarvesh Tanwar, Sunny Singh, Ajay Rana Challenges and Risks Associated with Public Key Infrastructure		
164	N. Bhalaji, Shanmuga Skandh Vinayak and Xiao-Zhi Gao Analysis of Cryptocurrency Mining in Gaming Consoles		
199	Lov Kumar, Anand Tirkey, Ramesh Kumar Mohapatra Sniffing Android Malware using Deep Learning		

Session-IV		<i>Time: 14:00- 16:00 IST</i>	<i>Date: December 17, 2020</i>
<i>Session Chair: Prof. Nidul Sinha and Dr. Naresh Babu Muppalaneni</i>			
Paper ID	Title of Paper		
34	Omkar Dhavalikar, Muskan Raisinghani, Pawan Chhabria, Rahul Sawra, Dr. Nupur Giri Crime Analysis Using Artificial Intelligence		
58	Govindasamy C and A.Antonidoss Algorithmic Analysis on Spider Monkey Local Leader-based Sea Lion Optimization for Inventory Management integrated with Block Chain in Cloud		
71	B Sirisha , B Sandhya , J.Prasanna Kumar, T Chandrakanth Optimizing View Synthesis Approach for TerraSAR-X Image Registration using Decision Maker Framework		
87	Sanket Mishra, Shubham Arawkar, Sashikant Singh, Ankit Shibu and Chittaranjan Hota HeuristiX: Adaptive event processing using lightweight machine learning approaches on edge devices		
105	Tanuja Pande Analysis and Comparison between Reversible DS GATE and Irreversible NXOR Logic Circuit		
115	Tilak N Shenoy, Mathew Medayil, Sowmya Kamath S Deep Neural Models for Early Diagnosis of Knee Osteoarthritis and Severity Grade Prediction		
118	Gheorghica Radu-Iulian The GNS1 Algorithm for Graph Isomorphism		
122	Ilaiyah Kavati Deep Learning based Pothole Detection for Intelligent Transportation Systems		

Session-V		Time: 16:00-18:00 IST	Date: December 17, 2020
Session Chair: Prof. Binoy K Roy and Dr. Partha Pakray			
Paper ID	Title of Paper		
123	Savio Rajan K, Amith Abraham Rajan , Steve Maria Waltin, Tom Joseph, Anjali C Disaster Management using Artificial Intelligence		
127	Subham Chakraborty, R Murugan, Tripti Goel Classification of Tea Leaf Diseases using Convolutional Neural Network		
128	Ashwin Nayak U, Nachiket Naganure, Sowmya Kamath S BEV Detection and Localisation using Semantic Segmentation in Autonomous Car Driving Systems		
131	Irshad Hussain, Dalton Meitei Thounaojam Epileptic Seizure Classification using Spiking Neural Network from EEG Signals		
145	Ambarish Moharil, Mansimran Singh Anand, Chirag Kedia, Nikhil Sonavane Vascular Clog Loss Classification: An Advanced Alzheimer's Research Using ConvNets		
163	Pankaj Dadure, Partha Pakray, and Sivaji Bandyopadhyay Mathematical Information Retrieval using Formula2Vec Approach		
169	M. Shyamala Devi, P. Swathi, Ayesha Jahangir, A Ravindra Reddy, Mannem Prudhvinadh, M. Naga Sai Tharun Component Species Prediction of Birds with Song Spectrum Features using Machine Learning		
179	Md. Sarfaraj Alam Ansari ; Kunwar Pal ; Mahesh Chandra Govil ; Prajjval Govil ; Adarsh Srivastava P2P Traffic Identification using Machine Learning and Feature Selection techniques.		

Session-VI		Time: 11:15-13:15 IST	Date: December 18, 2020
Session Chair: Dr. Dalton Meitei Thounaojam and Dr. R Murugan			
Paper ID	Title of Paper		
185	Khan Md. Hasib, Md. Imran Hossain Showrov, Jubayer Al Mahmud, Kamruzzaman Mithu Imbalanced Data Classification using Hybrid Under-Sampling with Cost-Sensitive Learning Method		
187	Annesha Das, Asaduzzaman and Ashim Dey Analyzing the Errors in Channel Sensing and Negotiation in Cognitive Radio H-CRAN		
188	Debasis Dwibedy, Rakesh Mohanty A New Fairness Model based on User's Objective for Multi-user Multi-processor Online Scheduling Problem		
197	Gopa Bhaumik Att-PyNet: An Attention Pyramidal Feature Network for Hand Gesture Recognition		
198	Aman Anand Rai, Dr. Mitul Kumar Ahirwal Electroencephalogram based Cognitive Load Classification during Mental Arithmetic Task		
203	Anirudh Kasturi, Ameya Salankar, Sharath S Chandra, and Chittaranjan Hota Vertical Fusion: A Distributed Learning Approach for Vertically Partitioned Data		
205	Anirudh Kasturi, Raviteja Sivaraju, and Chittaranjan Hota FedPeer: A Peer to Peer learning framework using Federated Learning		
206	Sofiane Kharbech Improved Salp Swarm Optimization Algorithm: Application in Feature Weighting for Blind Modulation Identification		
225	M. N. Satwick Gupta, N. L. Siva Narayana, V. Sai Charan, Kunam Balaram Reddy, Malaya Dutta Borah and Deepali Jain Extractive Summarization of Indian Legal Documents		

Paper ID	Title of Paper
211	G. Anirudh, Upasana Talukdar An Experimental Analysis for Credit Card Fraud Detection With Imbalanced and Machine Learning Techniques
212	CHIRANJIT DAS, ADITYA DUBEY, AKHTAR RASOOL Outlier Detection Techniques: A Comparative Study
218	K. ANITHA KUMARI, M. ANANYA A Prediction of Heart Disease using LDL in Edge Computing System
219	Gourav Jain An Efficient Similarity Measure inspired by Gower's Coefficient to tackle Sparsity in Recommender System
231	Avnish Panwar; Geeta Semwal; Silky Goel; Siddharth Gupta Stratification of the Lesions in Color Fundus Images of Diabetic Retinopathy Patients using Deep Learning Models and Machine Learning Classifiers
232	Gitimayee Sahu, Sanjay S. pawar BER Analysis of Massive MIMO in Heterogeneous cellular Network
233	Saptarshi Chakraborty, Dalton Meitei Thounaujam, Alok Singh, Gautam Pal ALO-SBD: A Hybrid Shot Boundary Detection Technique for video surveillance System
234	Vikas Chouhan, Sachi Pandey, Naman Sharma and Naveen Prajapati Fair Trading of Crops in a Trusted and Transparent manner using Smart Contracts
237	Morrel VL Nunsanga, Partha Pakray, Mika Lalngaihtuaha, L. Lolit Kumar Singh Stochastic Based Part of Speech Tagging in Mizo Language: Unigram and Bigram Hidden Markov Model
239	D. R. Kumar Raja and Naresh Babu Muppalaneni Data Analysis on Wireless Services Using Twitter Data set