



IEM-ICDC 2021

International Conference on Computational Intelligence, Data Science and Cloud Computing

Organized by:

Department of Information Technology  
Institute of Engineering & Management, Kolkata, India



December 22-23, 2021

## PROGRAM SCHEDULE

(As per Indian Standard Time)

Date:	22.12.2021	
10:00 a.m. – 11:00 a.m.	Inauguration	
11:00 a.m. – 12:00 p.m.	Keynote I – Mr. Rajiv Banerjee CMCI, USA	Keynote Title – “Tapping into industry trends for real world solutions”
12:00 p.m. – 1:00 p.m.	Keynote II – Dr. Kouichi Sakurai Kyushu University, Japan.	Keynote Title – “Supply Chain for IoT: Issues and Challenges towards Zero-Trust”
Break		
2:30 p.m. – 4:30 p.m.	Paper Presentation (Parallel Sessions)	
Date:	23.12.2021	
9.30 a.m. – 10:30 a.m.	Keynote III - Dr. Mike Hinchey University of Limerick, Ireland	Keynote Title – “Building Resilient Autonomous Space Exploration Missions”
10:30 a.m. – 11:30 a.m.	Keynote IV – Dr. Miodrag Mihaljevic Serbian Academy of Sciences and Arts, Belgrade, Serbia	Keynote Title – "An Approach for Blockchain Pool Mining Resistant Against Certain Attacks"
12:00 p.m. – 2:00 p.m.	Paper Presentation (Parallel Sessions)	
2:30 p.m. – 3:30 p.m.	Valedictory Session	
<div>Conference Joining Link:</div> <div><a href="https://zoom.us/j/93259118617?pwd=K2R5bEZrY2dUNjJUK05kNU9zcGV3QT09">https://zoom.us/j/93259118617?pwd=K2R5bEZrY2dUNjJUK05kNU9zcGV3QT09</a></div> <div>Zoom Meeting ID: 932 5911 8617</div> <div>Passcode: 533732</div>		

## Paper Presentation Details

22 <sup>nd</sup> December 2:30 pm – 4:30 pm	
<b>Session 1:</b> Computational Intelligence	<b>Session 2:</b> Cyber security & Blockchain
<b>Paper IDs:</b> 15, 27, 41, 73, 75, 76, 78, 80	<b>Paper IDs:</b> 30, 36, 77, 83, 89, 101, 116, 131

23 <sup>rd</sup> December 12:00 pm – 2:00 pm		
<b>Session 3:</b> Computational Intelligence	<b>Session 4:</b> Cloud & ICT	<b>Session 5:</b> Image processing & NLP
<b>Paper IDs:</b> 82, 107, 110, 113, 121, 122, 124, 127	<b>Paper IDs:</b> 47, 58, 64, 71, 88, 103, 125, 126	<b>Paper IDs:</b> 7, 14, 16, 54, 62, 84, 87, 108

# IEM-ICDC 2021

## Session Details

### Session 1: Computational Intelligence

**Session Chair:** Prof. Dr. Sujata Dash, North Orissa University

**Session Co-Chair:** Prof. Dr. Amit Das, IEM, Kolkata

**Rapporteur:** Prof. Dr. Avipsita Chatterjee

**Meeting Link :** <https://zoom.us/j/93259118617?pwd=K2R5bEZrY2dUNjJUK05kNU9zcGV3QT09>

Zoom Meeting ID: 932 5911 8617

Passcode: 533732

Paper id	Authors' Name	Paper Title
15	Debanjan Ghosh, Farhan Hai Khan, Anish Banerjee, Debojyoti Saha, Soumyadip Sarkar, Shivam Kumar and Malay Gangopadhyaya	COVID-DeepNet: Deep Convolutional Neural Network Architecture designed for Early Prognosis of COVID-19 using Post-Anterior View of Chest X-Rays
27	Tohida Rehman, Raghubir Bose, Samiran Chattopadhyay and Debarshi Sanyal	Transfer Learning and Transformer Architecture for Financial Sentiment Analysis
41	Abhishek Sharma, Digbijoy Dasgupta, Shreya Bose, Udayan Misra, Ishita Pahari, Raktim Karmakar and Dr.Sudipta Basu Pal	A Machine Learning Approach for Predicting the Death Time and Mortality
73	Abhirup Paria and Susovan Jana	Prediction of Crops Production Using Random Forest Regression
75	Soumyajit Maity, Rohit Prasan Mandal, Saranya Bhattacharjee and Sankhadeep Chatterjee	Variational Autoencoder based Imbalanced Alzheimer detection using Brain MRI Images
76	Prithwish Jana and Debasish Jana	AutoDrone: Shortest Optimized Obstacle-Free Path Planning for Autonomous Drones
78	Subhalaxmi Chakraborty, Arindam Chakraborty and Pritam Kundu	Predictive analysis of COVID-19 using LSTM and ARIMA Model with various orders in India
80	Amit Kumar Mandal, Saptarshi Sahoo, Nirmalya Misra and Vishal Mandal	Uncertainty Principle in the Light of Quantum Information Science

### Session 2: Cyber security & Blockchain

**Session Chair:** Prof. Dr. Pramatha Nath Basu, Jadavpur University

**Session Co-Chair:** Prof. Dr. Maumita Chakraborty, IEM, Kolkata

**Rapporteur:** Prof. Susovan Jana

**Meeting Link:**

<https://zoom.us/j/98454504952?pwd=cXhEYTNxbS84Q3JwY3FEOWFHZGtzZz09>

Zoom Meeting ID: 984 5450 4952

Passcode: 511989

Paper id	Authors' Name	Paper Title
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30	Kajari Sur and Indraneel Mukhopadhyay	A Survey on IoT Protocol and Threat Matrix
36	Mukund Kr Kedia, Md Faisal Farooquee and Baisakhi Das	THE STUDY OF MAJOR WEB APPLICATION VULNERABILITIES AND THEIR IMPLEMENTATION FOR LEARNING PURPOSE
77	Fadi Abusafat, Tiago Pereira and Henrique Santos	Framework of Tools Denial of Services Attacks
83	Amrita Halder and Maumita Chakraborty	A Comprehensive Study on Blockchain Based Data Security in IoT to Build Reputation for Intelligent Transport Systems
89	Aswathy Mohan, Dr G. Aravind Swaminathan and Ms N Jeenath Shafana	SECURED NETWORK USING PENETRATION METHODOLOGIES
101	Keshav Kaushik and Dr. Susheela Dahiya	An Artificial Intelligence Assisted Defensive Framework for Securing Cyberspace
116	Bhargavi Jha and Baisakhi Das	The study of issues related to Orphan Blocks
131	Tanul Kumar Srivastava, Aniruddha Ghosh, Himadri Mandal, Pritom Adhikary and Amit Phadikar	Controlled Chaos Position Transformation and Noise Generation Based Keyless Speech Encryption Technique

### Session 3: Computational Intelligence

**Session Chair:** Prof. Dr. Sujata Dash, North Orissa University

**Session Co-Chair:** Prof. Dr. Lopa Mandal, IEM, Kolkata

**Rapporteur:** Prof. Dr. Avipsita Chatterjee

**Meeting Link:** <https://zoom.us/j/93259118617?pwd=K2R5bEZrY2dUNjJUK05kNU9zcGV3QT09>  
Zoom Meeting ID: 932 5911 8617  
Passcode: 533732

Paper id	Authors' Name	Paper Title
82	Kushal Kapoor	DeceptionTime: Predicting the movement of Shares using momentum indicators
107	Partha Paul and Indranil Basu	Strategy for margin trading based on Algorithm
110	Madhurima Ghosh, Devdulal Ghosh and Nabarun Bhattacharyya	Cardamom Quality Evaluation employing Electronic Nose
113	Rachna Kulhare, S Veenadhari and Neha Sharma	Analytical Study on Feature Selection for Big Data using Optimization Algorithms
121	Monalisa Dey, Anupam Mondal, Sainik Kumar Mahata and Darothi Sarkar	BREAST CANCER CLASSIFICATION USING DEEP CONVOLUTIONAL NEURAL NETWORKS
122	Amlan Majumdar, Arka Das Chatterjee, Aniket Kirtania, Bidisa Das and Piyali Mukherjee	An Intelligent Fire-Extinguishing Robotic System to combat fire in Coal Mines
124	Srijita Bandopadhyay, Ishanjyoti Ray, Shalini Mondal, Subhrajyoti Manna, Sohini Mitra, Kyamelia Roy, Soumen Banerjee and Sheli Sinha Chaudhuri	Drowsy Driving Detection based on Deep Neural Network for Accident Avoidance
127	Mrutyunjaya Hiremath, Nikhil S. Tengli and Dr. Suvarna Nandyal	Feature Extraction and Machine Learning for the Classification of Fashion Materials

Session 4: Cloud & ICT		
<b>Session Chair:</b> Prof. Dr. Pramatha Nath Basu, Jadavpur University <b>Session Co-Chair:</b> Prof. Dr. Baisakhi Das, IEM, Kolkata <b>Rapporteur:</b> Prof. Susovan Jana		
<b>Meeting Link:</b> <a href="https://zoom.us/j/98454504952?pwd=cXhEYTNXbS84Q3JwY3FEOWFHZGtzZz09">https://zoom.us/j/98454504952?pwd=cXhEYTNXbS84Q3JwY3FEOWFHZGtzZz09</a> Zoom Meeting ID: 984 5450 4952 Passcode: 511989		
Paper id	Authors' Name	Paper Title
47	Srestha Sadhu, Ayusha Burman and Lopa Mandal	A Systematic survey of the Chabot Evolution
58	Subhabrata Sengupta, Anish Banerjee, Tanmoyee Roy, Sakshi Didwania, Srishti Chakraborti and Satyajit Chakrabarti	SEMANTIC WEB ARCHITECTURE BASED EXAMINATION SYSTEM FOR SMART LEARNING ENVIRONMENT
64	Ahadha Parveen and Akilashri Sharagharajan	A study of different encryption techniques to generate keys in Cloud Computing Security
71	Sumit Chakraborty, Maumita Chakraborty and Rajat Kumar Pal	Generation of Non-Isomorphic Connected Graphs by Successive Edge Removals from a Complete Graph
88	Puja Sarkar, Noni Deori, Mojasir Hussain and Amitava Nag	monitorYou: COVID-19 Screening IoT Based Android Application
103	Jayjeet Dhar, Lopa Mandal	Diverse Contemporary Algorithms to Resolve Load Balancing Issues in Cloud Computing - a Comparative study
125	Mrutyunjaya Hiremath, Vijayalaxmi S Patil and Suvarna Nandyal	Intra Prediction in H.265/HEVC to Improve the PSNR using Gradient Calculation
126	Nirmalya Misra, Subhajit Pal, Sreejit Ray and Ruchira Dey	Automated Classroom Attendance System Using Facial Recognition

Session 5: Image processing & NLP		
<b>Session Chair:</b> Prof. Dr. Paramartha Dutta, Visva-Bharati University <b>Session Co-Chair:</b> Prof. Dr. Shibaprasad Sen, UEM, Kolkata <b>Rapporteur:</b> Prof. Shreyashi Dutta		
<b>Meeting Link:</b> <a href="https://zoom.us/j/95051713589?pwd=cIRMdIp4Q29XYW4wRDfRbIMwUUFRTQ09">https://zoom.us/j/95051713589?pwd=cIRMdIp4Q29XYW4wRDfRbIMwUUFRTQ09</a> Zoom Meeting ID: 950 5171 3589 Passcode: 959005		
Paper id	Authors' Name	Paper Title
7	Vineeta Singh and Vandana Dixit Kaushik	A Typical Hybrid Optimization Based Image Quality Enhancement Technique

14	Gopinath Bej, Abhra Pal, Tamal Dey, Sabyasachi Majumdar, Amitava Akuli, Alokesh Ghosh and Nabarun Bhattacharyya	Extraction of appearance-based DUS characteristics of Okra Stem, Flower and Seed using Image Processing
16	Tohida Rehman, Suchandan Das, Debarshi Kumar Sanyal and Samiran Chattopadhyay	An analysis of abstractive text summarization using pre-trained models
54	Susovan Jana	A Comparative Study on Reassembly of Image Fragments
62	Archana Ghotkar, Atharva Gokhale and Durvesh Malpure	Real-time Left- and Right-Hand Detection for Sign Language Recognition
84	Neha Sharma, S Veenadhari and Rachna Kulhare	Analytical Study on Application of Deep Learning for Sentiment Analysis
87	Krishnendu Ghosh, Tamesh Halder, Maitri Roy, Chandranath Biswas, Rintu Kumar Gayen and Debashish Chakravarty	A Survey on Medical Image Diagnosis Systems: Problems and Prospects
108	Saranya Bhattacharjee, Soumyajit Maity, Rahul Sen and Sankhadeep Chatterjee	Class biased Sarcasm detection using Variational LSTM Autoencoder

**Thank You**