



INVITATION



ERB Sponsored | ICADCML | 2023 | 15th- 16th January, 2023



The Department of Computer Science and Engineering, NIT Rourkela, cordially invites you to the 4th "International Conference on Advances in Distributed Computing and Machine Learning (ICADCML-2023)" during 15th - 16th January 2023.

Patron

Prof. K. Umamaheshwar Rao Hon. Director, NIT Rourkela.

Convener

Dr. Suchismita Chinara Dept. of CSE, NIT Rourkela.

General Chair

Prof. D. P. Mohapatra H.O.D. CSE, NIT Rourkela.

Convener

Dr. Judhistir Mahapatro Dept. of CSE, NIT Rourkela.

Venue: PK Parija Auditorium (PPA), NIT Rourkela,

Time: 9:30 AM

Contact: 9437116795, 9599646708

Schedule

15th JANUARY

16th JANUARY

09:00 AM to 9:30 AM	Registration	09:15 AM to 10:00 AM	Keynote Talk #5 (Online) [Prof. Ness B. Shroff] https://cutt.ly/L2l1Q53	
9:30 AM to 10:30 AM	Inauguration [Dean (FW): Prof. C. K. Sahoo, Chief Guest: Dr. Pratibha Jolly, Guest of Honour: Prof. Maheshwari P. Singh]	10:15 AM to 11:00 AM	Keynote Talk #6 (Online) [Dr. Amlan Kusum] https://cutt.ly/l2nuiQN	
10:45 AM to 11:45 AM	Keynote Talk #1 (Online) [Speaker :- Prof. Laxmi N. Bhuyan] https://cutt.ly/L2l1Q53	11:15 AM to 12:00 PM	Keynote Talk #7 (Online) [Prof. Chandrasekaran K] https://cutt.ly/L2l1Q53	
12:00 PM to 12:45 PM	Keynote Talk #2 [Prof. Maheshwari Prasad Singh] (Venue : PPA)	12:00 PM to 1:00 PM	Technical Session #4 (Venue : PPA)	
02:00 PM to 02:30 PM	Technical Session #1 (Venue : PPA)			
02:30 PM to 05:10 PM	Technical Session #2 (Online) https://cutt.ly/l2nuiQN Technical Session #3 (Online) https://cutt.ly/L2l1Q53	02:00 PM to	Technical Session #5 (Online) https://cutt.ly/L2l1Q53 Technical Session #6 (Online) https://cutt.ly/l2nuiQN	
05:15 PM to 06:00 PM	Keynote Talk #3 (Online) [Prof. Ashutosh Dutta] https://cutt.ly/L2l1Q53			
06:15 PM to 07:00 PM	Keynote Talk #4 (Online) [Prof. Manu Malek] https://cutt.ly/l2nuiQN	04:00 PM to 04: 30 PM	Valedictory	

For Help, Contact : Vipul Negi Email :- vipulhld001@gmail.com, Phone:- 9997364106







4th International Conference on Advances in Distributed Computing and Machine Learning (ICADCML) (15th and 16th January 2023)

Organized by

Department of Computer Science and Engineering, National Institute of Technology, Rourkela, India
Online Meeting Platform: Microsoft Teams

Online Meeting Platform: Microsoft Teams					
	Programme Schedule				
Time	e Date: 15th January 2023 (Sunday)				
	M to 9:30 AM (IST)				
Inauguration Chief Guest: Dr. Pratibha Jolly, Guest of Honor: Pro Dean (FW): Prof. C.K.Sahoo, General Chairs: Prof. Dl Conveners: Prof. Suchismita Chinara, Prof. Judhist AM (IST) Link: https://cutt.lyl.2/1053		Chief Guest: Dr. Pratibha Jolly, Guest of Honor: Pro Dean (FW): Prof. C.K.Sahoo, General Chairs: Prof. D Conveners: Prof. Suchismita Chinara, Prof. Judhist	P Mohapatra, Prof. Kuan-Ching Li		
10:45 AM to 11:45 T		Keynote Talk #1: Prof. Laxmi N. Bhuyan, FIEEE, FACM,FAAAS, FWIF, Distinguished Professor Emeritus, University of California, Riverside, CA, USA Title: Intelligent Power Management of Latency Critical Search Engines Link: https://cutt.ly/L2l1Q53			
12:00 PM to 12:45 PM (IST)		Keynote Talk #2: Prof. Maheshwari Prasad Singh, Professor and Head, National Institute of Technology, Patna Title: Few-shot Learning based Medical Image Segmentation and Classification.			
12:45 PM to 02:00 PM (IST) Lu		Lunch Break			
Technical Session #1: Physic		: Physical (2PM – 2:30 PM (IST))			
02:00 PM to 02:30 PM (IST)		Technical Session #1 (Physical) (Paper IDs: 1669, 3003, 5630) Session Chair: Prof. RK Mohapatra, Prof. Ratnakar Dash			
SL NO	PAPER ID	PAPER TITLE	AUTHORS NAME		
1	1669	Multi-branch Multi-Scale Attention Network for Facial Expression Recognition (FER) in-the-Wild	Chakrapani Ghadai and Dipti Patra		
2	3003	Bitcoin Price Prediction by Applying Machine Learning Approaches	Debachudamani Prusti, Asis Kumar Tripathy, Rahul Sahu, and Santanu Kumar Rath		
3	5630	Evaluation of Federated Learning Strategies on Industrial Time Series Fault Classification	Baratam Prathap Kumar, Sameer Chouksey, Madapu Amarlingam, and Ashok S		
Technic	al Session #2	: Virtual (2:30 PM – 5:10 PM (IST))			
Technical Session #2 (Virtual) (Paper IDs: 523, 1923, 2115, 2122, 2142, 2421, 3139, 3219, 3466, 3945, 4137, 3089)					

Technical Session #2: Virtual (2:30 PM – 5:10 PM (IST))			
Technical Session #2 (Virtual) (Paper IDs: 523, 1923, 211 02:30 PM to 05:10 Session Chair: Prof. Sanjay Panda, Prof. Sangharatna G PM (IST) Link: https://cutt.ly/l2nuiQN			2115, 2122, 2142, 2421, 3139, 3219, 3466, 3945, 4137, 3089) a Godboley
SL NO	PAPER ID	PAPER TITLE	AUTHORS NAME
1	523	Health Insurance Fraud Detection using Feature Selection and Ensemble Machine Learning Technique	Anuradha Mohanta and Dr Suvasini Panigrahi
2	1923	Identifying COVID-19 Pandemic Stages using Machine Learning	Shomoita Jahid Mitin, Muhammad Jafar Sadeq, Umme Habiba, Roy D Gregori Ayon, Md. Sanaullah Rabbi, and S. Rayhan Kabir
3	2115	A Multi-Feature Analysis of Accented Multisyllabic Malayalam words - a Low-Resourced Language	Rizwana Kallooravi Thandil, Mohamed Basheer K P, and Muneer V K
4	2122	Machine Learning based fruit detection system	Krishnapriya Ajit and Sofana Reka S
5	2142	Post-hoc Interpretability:Review on New Frontiers of Interpretable AI	Ashly Ann Jo and Ebin Deni Raj
6	2421	SRGAN with 3D CNN Model for Video Stabilization	Sunil Kumawat and Mantosh Biswas
7	3139	SOCIAL ENGINEERING ATTACK DETECTION USING MACHINE LEARNING	Kesari Sathvik, Pranav Gupta, Sai Pranav Syam Sitra,N. Subhashini, and S Muthulakshmi
8	3219	Corn Yield Prediction Using Crop Growth and Machine Learning Models	Audrey Moswa, Patrick Killeen, Iluju Kiringa, and Tet Yeap
9	3466	Deep Learning Based Cancelable Biometric Recognition Using MobileNetV3Small Model	Shakti Maheta and Manisha
10	3945	RecommenDiet: A system to Recommend a Dietary Regimen using Facial Features	Dipti Pawade, Jil Shah, Esha Gupta, Jaykumar Panchal, and Ritik Shah
11	4137	Small-Footprint Keyword Spotting In Smart Home IoT Devices	Arijeet Mohanty, Koushik Sahu, Ritik Parida, Gulmini Pradhan, and Suchismita Chinara
12	3089	CS-based Energy-Efficient Service Allocation in Cloud	Sambit Kumar Mishra, Subham Kumar Sahoo, Chinmaya Kumar Swain, Abhishek Guru, Pramod Kumar Sethy, and Bibhudatta Sahoo
Technic	al Session #3	Virtual (2:30 PM – 5:10 PM (IST))	
	Technical Session #3 (Virtual) (Paper IDs: 2039, 2427, 2674, 4215, 5882, 6326, 6575, 8894, 9722, 6736, 5919, 4277) Session Chair: Prof. Dipti Patra, Prof. Asis Kumar Tripathy Link: https://cutt.ly/L2l1Q53		
SL NO	PAPER ID	PAPER TITLE	AUTHORS NAME
1	2039	A Novel Blockchain based smart contract for Real estate Management	Ashish Kumar Mohanty and D Chandrasekhar Rao
2	2427	Use of Blockchain to Prevent Distributed Denial- ofservice (DDoS) Attack: A Systematic Literature Review	Md Rittique Alam, Sabique Islam Khan, Sumaiya Binte Zilani Choya, Anupam Hayath Chowdhury, S. Rayhan Kabir, and Muhammad Jafar Sadeq
3	2674	Finding the Source of a Tweet and Analyzing the Sentiment of the User from h(is)er Tweet History	Subhadip Mondal, Bilas Ghosh, Uday Dey, Antara Pal, and Alok Ranjan Pal
4	4215	Overcoming an Evasion Attack on a CNN Model in the MIMO-OFDM Wireless Communication Channel	Somayeh Komeylian, Christopher Paolini, and Mahasweta Sarkar
5	5882	An Improved Whale Optimization Algorithm for optimal placement of Edge server	Rajalakshmi Shenbaga Moorthy, K S Arikumar, and Sahaya Beni Prathiba

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6326	Lattice Cryptography based Geo-encrypted Contact Tracing for Infection Detection	Mayank Dhiman, Nitin Gupta, Kuldeep Singh Jadon, Ujjawal Gupta, and Yashwant Kumar	
6575	Beamforming Technique for Improving Physical Layer Security in a MIMO-OFDM Wireless Channel	Somayeh Komeylian, Christopher Paolini, and Mahasweta Sarkar	
Reporting Code Coverage at Requirement Phase using 8 8894 SPIN Model Checker		Golla Monika Rani, Akshay Kumar, Sangharatna Godboley, and Ravichandra Sadam	
9722	Performance Enhancement of the Healthcare System using Google Cloud Platform	Subhadarshini Mohanty, Alka Dash, Subasish Mohapatra, and Amlan Sahoo	
Predictive VM Consolidation for Latency Sensitive 6736 Tasks in Heterogeneous Cloud		Chinmaya Kumar Swain, Preeti Routray, Sambit Kumar Mishra, and Abdulelah Alwabel	
5919	Performance Analysis of LBT Cat4 based 5G IoT enabled New Radio in Unlicensed Spectrum	Zubair Shaban, Nishu Gupta, Krishan Kumar, Sandeep Kumar Sarowa, and Mohammad Derawi	
	Image transformation based detection of breast cancer using thermograms		
4277		Vartika Mishra, Shibashis Sahu, and Santanu Kumar Rath	
PM to 07:00 M (IST)	Keynote Talk #4: Prof. Manu Malek, FIEEE, Stevens Institute of Technology, Hoboken, NJ, USA Title: Internet of Things: Applications, Enablers, Security Link: https://cutt.ly/l2nuiQN		
Time	Date: 16th January 2023 (Monday)		
Keynote Talk #5: Prof. Ness B. Shroff, FIEEE, The 09:15 AM to 10:00 Title: Al-EDGE: Designing future XG networks an			
Keynote Talk #6: Dr. Amlan Kusum, Azure Storage Re 10:15 AM to 11:00 Title: Adapting Data Representations & Query Manipu			
AM to 12:00 M (IST)	eynote Talk #7: Prof. Chandrasekaran K, Professor, NIT, Surathkal tle: Data Quality and Audit in Cloud Computing		
ONDAY (16.01	.2023)		
al Session #4	: Physical (12 PM – 1 PM (IST))		
12:00 PM to 01:00 Technical Session #4 (Physical) (Paper IDs: 379, 2409, 6357, 9524) PM (IST) Session Chair: Prof. Bibhudatta Sahoo, Prof. Supratim Gupta			
PAPER ID	PAPER TITLE	AUTHORS NAME	
379	NS3-based Performance Assessment of Routing Protocols AODV, OLSR and DSDV for VANETs	Madhuri Malakar, Bidisha Bhabani, and Judhistir Mahapatro	
	A Review on VM Placement Scheme using Optimization Algorithms	Akanksha Tandon, Sudhanshu Kulshresha, and Sanjeev Patel	
2409			
	Chatbot for Mental Health	Neel Ghoshal, Vaibhav Bhartia, B. K. Tripathy, and A. Tripathy	
	6575 8894 9722 6736 5919 4277 PM to 06:00 M (IST) PM to 10:00 M (IST) Time AM to 10:00 M (IST) AM to 12:00 M (IST) ONDAY (16.01 al Session #4 PM to 01:00 M (IST) PAPER ID	Beamforming Technique for Improving Physical Layer Security in a MIMO-OFDM Wireless Channel Reporting Code Coverage at Requirement Phase using SPIN Model Checker Performance Enhancement of the Healthcare System using Google Cloud Platform Predictive VM Consolidation for Latency Sensitive Tasks in Heterogeneous Cloud Performance Analysis of LBT Cat4 based 5G IoT enabled New Radio in Unlicensed Spectrum Image transformation based detection of breast cancer using thermograms Keynote Talk #3: Prof. Ashutosh Dutta, FIEEE, Johns Title: 5G Networks and Security – Opportunities and Link: https://cutt.ly/L211Q53 Keynote Talk #4: Prof. Manu Malek, FIEEE, Stevens In Title: Internet of Things: Applications, Enablers, Sec Link: https://cutt.ly/l2nuiQN Keynote Talk #5: Prof. Ness B. Shroff, FIEEE, The Oh Title: Al-EDGE: Designing future XG networks and of Link: https://cutt.ly/l211Q53 Keynote Talk #7: Prof. Chandrasekaran K, Professor Mito 10:00 Miton Mito	

	PM to 02:00 M (IST)	Lunch Break		
echnic	al Session #5	: Virtual (2 PM – 4 PM (IST))		
02:00 PM to 04:00 Se		Technical Session #5 (Virtual) (Paper IDs: 707, 3796, 3833, 3896, 4753, 6282, 6344, 7135, 7337, 7373) Session Chair: Prof. Susmita Das, Prof. Sanjeev Patel Link: https://cutt.ly/L2I1Q53		
L NO	PAPER ID	PAPER TITLE	AUTHORS NAME	
1	707	Real-time American Sign Language Interpretation using Deep Convolutional Neural Networks	Arghya Biswasa, Gaurav Sa, Umakanta Nanda, Diksha Sharma, Lakhan Dev Sharma, and Primatar Kuswiradyo	
2	3796	Performance based evaluation for Detection and Classification of Breast Cancer in Mammograms	Dakshya Prasad Pati and Sucheta Panda	
3	3833	Predictive Maintenance of NASA Turbofan Engines using Traditional and Ensemble Machine Learning Techniques	Dangeti Ajay, Sneegdh Krishnna, and Kavita Jhajharia	
4	3896	Stacking a Novel Human Emotion Recognition Model using Facial Features	Vikram Singh and Kuldeep Singh	
5	4753	Vehicle Re-identification with Convolutional Neural Networks	Nirmal Khedkar, Kotla Karthik Reddy, Hritwik Arya, Sunil Chinnahalli, and Nagamma Patil	
6	6282	Optimized Algorithms for Quantum Machine Learning Circuits	Lavanya Palani, Swati Singh, Balaji Rajendran, Bindhumadhava B S, and S D Sudarsan	
7	6344	Prediction of SOH and RUL for Lithium-Ion Battery using Regression Method with Feature of indirect related to SOH (FIRSOH) and Linear Time Series Model	Aradhna Patel and Shivam Patel	
8	7135	SincSquareNet: Deep Neural Network Based Speaker Identification for Raw Speech.	Banala Saritha, Anish Monsley K, Rabul Hussain Laskar, and Madhuchhanda Choudhury	
9	7337	RSSI-Based Hybrid Approach for Range-free Localization using SA-PSO Optimization	Maheshwari Niranjan and Buddha Singh	
10	7373	Multimodal Paddy Leaf Diseases Detection Using Feature Extraction And Machine Learning Techniques	Kaviya P and Selvakumar B	
ochnic	al Session #6	: Virtual (2 PM – 4 PM (IST))		
02:00 F	PM to 04:00 M (IST)	Technical Session #6 (Virtual) (Paper IDs: 7505, 7657 Session Chair: Prof. PM Khilar, Prof. Arun Kumar Link: https://cutt.ly/l2nuiQN	l 7, 8061, 8107, 8395, 8697, 8716, 8906, 9188, 9925)	
L NO	PAPER ID	PAPER TITLE	AUTHORS NAME	
1	7505	Quad Mount Fabricated Deep Fully Connected Neural Network based Logistic Pricing Prediction	M. Shyamala Devi, Penikalapati Sai Akash Chowdary, Muddangula Krishna Sandeep, and Praveen Yeluri	

2	7657	Machine Learning and Deep Learning Models for Vegetable Leaf Image Classification Based on Data Augmentation	Ochin Sharma
3	8061	Deep Fake Generation and Detection	Shourya Chambial, Rishabh Budhia, Tanisha Pandey, and B.K. Tripathy
4	8107	Similarity-based Recommendation System Using K- Medoids Clustering	Aryan Pathare, Burhanuddin Savliwala, Dr. Narendra Shekokar, and Dr. Aruna Gawade
5	8395	Towards a General Black-Box Attack on Tabular Datasets	Pooja S and Gilad Gressel
6	8697	Multi-Task System For Multiple Languages Translation Using Transformers	Bhargava Satya Nunna
7	8716	Analysing Optimal Environment for the Text Classification in Deep Learning	Ochin Sharma
8	8906	Analysis and Prediction of Datasets for Deep Learning: A Systematic Review	Vaishnavi Deshmukh and Dr. Asha Ambhaikar
9	9188	Lung Cancer Classification Using Capsule Network: A Novel Approach to Assist Radiologists in Diagnosis	S NagaMallik Raj, Eali Stephen Neal Joshua, Nakka Thirupathi Rao, and Debnath Bhattacharyya
10		Front-End Security Analysis for Cloud Based Data Backup Application using Cybersecurity Tools	S Md K N U Affan Ahamed, Vinay Mathew Wilson, Manu Elappila, and Sachin Malayath Jose
	PM to 04: 30 M (IST)	Valedictory	

For information : Mohammad Rafi Rashidi (9840915033)

IMPORTANT DATES

Complete Paper Submission: 21st September 2022 15thOctober 2022 **Acceptance Notification:** 25thOctober 2022 **Final Paper Submission: Author's Registration:** 25th October 2022 15th-16th January 2023 **Conference Dates:**

REGISTRATION

PERTICULARS	FEES
Foreign Authors (USD)	\$200 USD
Industry Professionals	₹ 8000/-
Faculty / Academicians	₹ 6000/-
Research Scholars	₹ 5000/-
UG Students	₹ 4000/-
Co-Authors / Participants	₹ 500/-

- · Conference fee is inclusive of GST.
- Conference fee includes registration kit and certificate of presentation.

BANK DETAILS

CONFERENCE NIT ROURKELA **Account Name:** Account No: 36734418111 IFSC Code: SBIN0002109 Bank Name: State Bank of India NIT Campus, Rourkela **Branch Name:** Complete Branch: NIT Campus, Rourkela, Odisha Address PIN - 769008 MICR NO: 769002007 Swift Code: SBININBB137 **Account Type:** Savings

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Gold	INR 75,000	3
Silver	INR 50,000	2
Bronze	INR 25,000	1

PUBLICATIONS

The Proceedings of ICADCML 2023 will be published in Springer's "Lecture Notes in Networks and Systems (LNNS)" Book series. The books of this series are indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, and SCImago. All books published in the series are submitted for consideration in the Web of Science, All Selected and presented papers will be included in the conference proceedings.





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4th International Conference on Advances in **Distributed Computing & Machine Learning**

ICADCML

2023

15th-16th January, 2023

Organized By

Department of **Computer Science & Engineering** National Institute of Technology Rourkela Rurkela-769008 INDIA





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- Prof. Judhistir Mahapatro, NIT Rourkela, India

Program Chairs

- · Prof. Sanjeev Patel, NIT Rourkela, India
- · Prof. Susmita Das, NIT Rourkela, India

ACCOMODATION

Accommodation will be available in many hotels in Rourkela city at a reasonable tariff on payment. The Institute is situated only 15 minutes driving distance from the city. Nearby airports are Bhubaneshwar, Jharsuguda, Kolkata and Ranchi.

The Institute guest house can be reserved on request depending on the availability.

For Information: Prof. Suchismita Chinara (+91 9437116795) Prof. Judhistir Mahapatro (+91 9599646708)

ABOUT NIT ROURKELA



National Institute of Technology (NIT) Rourkela is an institution of national importance funded by the Ministry of Education. NIT Rourkela was established as Regional Engineering College (REC) on August 15, 1961. NIT Rourkela was ranked 601-800 in the world by the Times Higher Education World University Rankings of 2018 and 126th in Asia. In India, it was ranked 15 among engineering colleges by the National Institutional Ranking Framework (NIRF) in 2022. For details about the institute please visit us at www.nitrkl.ac.in.

TOURIST PLACES NEARBY



Khandadhar Waterfall



Pitamahal Dam



Vedvyas Temple



Mandira Dam



Hanuman Vatika

CALL FOR PAPER

Authors are invited to submit original unpublished research work that demonstrates the recent advances in distributed computing and machine learning, but are not limited to:

TRACK 1: DISTRIBUTED COMPUTING

- · Distributed Algorithms
- · Concurrency and Parallelism
- · System Specification and Verification: Formal Methods
- Secure Computing and Communication
- · Cloud and P2P Systems
- Cloud Computing and Architecture
- Service-oriented Architecture
- · Resource Allocation Problems
- Cyber-physical Systems
- Cyber Security
- Green Computing
- · High-performance Computing
- Fog Computing
- Edge Computing
- Internet of Things: Applications and Services
- Blockchain
- · Cyber-physical Systems
- Healthcare Systems
- Heterogeneous Cellular Networks
- · Internet Traffic Control
- · Internet-of-Things
- · V2V, M2M, and D2D Communications
- Vehicular Wireless Networks
- · Virtualization in Wireless Networks
- Cognitive Radio Networks
- Software-defined Networking
- SDN Security
- Wireless Body Area Networks

TRACK 2: MACHINE LEARNING

- Machine Learning
- . Deep Learning
- Supervised and Unsupervised Learning
- Multi-Agent Learning
- Ensemble Methods
- Reinforcement Learning
- Multi-Strategy Learning
- . Evolution-Based Methods
- Learning in Integrated Architectures
- Software Testing using Machine Learning
- Data Mining
- Information Retrieval
- Web Mining
- Game Playing
- Problem Solving and Planning
- Natural Language Processing
- Robotics and Control
- Design and Diagnosis
- · Vision and Speech Perception
- Artificial Intelligence
- Explainable Artificial Intelligence
- Recommender Systems
- Optimization Techniques