

2023 12th International Conference on Advanced Computing (ICoAC 2023)

**Chennai, India
17 – 19 August 2023**



**IEEE Catalog Number: CFP2363H-POD
ISBN: 979-8-3503-1822-7**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP2363H-POD
ISBN (Print-On-Demand):	979-8-3503-1822-7
ISBN (Online):	979-8-3503-1821-0

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Anna University- Chennai
Department of Computer Technology, MIT Campus
12th IEEE International Conference on Advanced Computing -ICoAC 2023
Programme Schedule Revised
18-19th August 2023

Time	Friday, 18 th August 2023		
09.00am-09.30am	Inauguration-ICoAC2023		
Session 1 Rajam Hall MIT Campus 09.45am-10.30am	Keynote Address Prof. Vijayan Sugumaran Department of Decision and Information Sciences, Oakland University, Rochester, Michigan, USA		
10.30am-10.45am	Tea Break		
Session 2A (Physical mode) Conference Hall CB Block 18/08/2023 10.45am-12.15pm	Oral Paper Presentations on Intelligent Computing/Network Science Session Chairs: Dr. R. Gunasekaran & Dr. S. Uma Maheswari Session Coordinator: Ms. M Jenila Vincent & Mr. E Selvam		
	PG	ID	TITLE
	1	305	Classification of Natural Disasters Using Decision Tree Techniques <i>Senthilnayaki B, Sarawathi N, Sathiyavathi V, M. Shanmuga Priya and L SaiRamesh</i>
	6	90	ComPuDTIK: Computational Prediction of Drug-Target Interactions in Kinases <i>Uma E, Yashwanth A, Pravinbabu B, Surendhar P and Mala T</i>
	14	271	Resource Management in Serverless Computing - Review, Research Challenges, and Prospects <i>Kannan Govindarajan and André De Tienne</i>
	19	294	Detection of pulmonary disorders with CNN model using knowledge distillation technique <i>Keerthana R, Jayaprakash S, Guru Raman C and Monisha Raghu</i>
	26	266	Data Cataloging based SINDy Approach for weather forecasting. <i>J, JohnMathuram, Regis X, Padiyarajan V</i>
	31	197	AI-based Network Flooding Attack Detection in SDN using Multiple Learning Models and Controller <i>Neelavathy Pari S, Ritika E C, Ragul B and Bharath M</i>
	38	246	Computer Vision Based Shopping Assistant <i>Jayashree P, Siddarth M, Jerfin Nishanth and Rishikesh D</i>
	Session 2B (Online) Meeting Hall CB Block 18/08/2023 10.45am-12.15pm	Oral Paper Presentations on Social Computing/Intelligent Computing Session Chairs: Dr. P. Kola Sujatha & Dr. M. Nava barathy (Online) Session Coordinator: Ms. Anusha Jayasimhan	
PG		ID	TITLE
45		43	Predicting Thyroid Dysfunction Using Machine Learning Techniques <i>Thirumala Akash K, Mohammed Usman F, Nitesh Kumar T, Mohammed Riyaz Ahmed and RaveendraGudodagi</i>
53		67	A Hybrid Approach to Support the Detection of Autism Spectrum Disorder (ASD) through Machine Learning and Deep Learning Techniques <i>Meghna Manoj and Praveen Joe</i>
60		188	An Effective Automated Framework for Oral Cancer Detection by Enhanced Convolutional Neural Networks <i>santhiya M, Sindhuja M, Jegatha R and Manikandan Jothi</i>
67		82	PRISM: Predicting Student Performance using Integrated Similarity Modeling with Graph Convolutional Networks <i>Raja lakshmiPillaiyar, Geetha A V, Priyanka D and Mala T</i>
74		104	Building of Computationally Effective Deep Learning Models using Attention-Guided Knowledge Distillation <i>Ashwath V A, Anish Sai Ayyagari, Deebakkarthi C R and Arumuga Arun R</i>
82		153	Non-Invasive Parameter-Based Machine Learning Models for Accurate Diagnosis of Congenital Heart Disease <i>Rishika Anand, S.R.N. Reddy and Dinesh Kr. Yadav</i>
88		176	Detection of epileptic seizure using hybrid machine learning algorithms <i>P Velvizhy, Ria Bas Len, Rajeshwari N and Kanimozhi K</i>
95		74	Ontology as an Open World Assumptions and Its Futuristic View <i>Sujata Pardeshi, Suresh Kumar Billakurthi and SushoptiGawade</i>
12.15 pm-1.00 pm	LUNCHBREAK		

Conference Hall CB Block 1.00pm–1.45pm	<p style="text-align: center;">Keynote Address Mr. L. R. Prakash Senior Director, CDAC, Chennai</p>		
Session 3A (Physical mode) Conference Hall CB Block 18/08/2023 1.45pm–3.15pm	<p>Oral Paper Presentations on Intelligent Computing Session Chairs: Dr. M. R. Sumalatha & Dr. S. Chithra Session Coordinator: Ms. R Keerthana & Ms. Mubeena begum</p>		
	PG	ID	TITLE
	102	99	Detection of Breast Cancer using Curvelet Transform and Adaptive Particle Swarm Optimization Technique <i>Meena L C, Joeprathap P M and Sankara Narayanan S</i>
	107	241	A Tuned Random Forest Model for Selecting Significant Genes <i>Valliyammai Chinnaiah, Arthi T, Sreeshreya M and Porsiya R</i>
	113	259	Multiclass Classification and Defect Detection of Surfaces using Modified-YOLO <i>Deepti Raj G and Dr Prabadevi B</i>
	119	53	Sports video data classification using Yolov5 model. <i>Rathish Manivannan and Amsaprabhaa M</i>
	124	318	Comparing EMG Signal Classification with Raw and Time Domain Feature Extracted Data <i>VaishaaleeTrishaa B and Sathiesh Kumar V</i>
	129	319	Reconstruction of Temporal Envelope using 1D FLCNN LSTM Speech Enhancement model <i>M R Anitha, B Vijayalakshmi and N S Bhuvaneswari</i>
	135	34	An Intelligent prediction of Customer Churn in Telecom Industry using Business Analytics Classification Models <i>Shradhdha Gohil, ManasAmeria and Vergin M</i>
Session 3B (Online) Meeting Hall CB Block 18/08/2023 1.45pm–3.15pm	<p>Oral Paper Presentations on High Performance Computing Session Chairs: Dr. E. Sivasankar (Online) & Dr. P. Varalakshmi Session Coordinator: Mr. R. Praveen</p>		
	PG	ID	TITLE
	142	198	Gait Based Human Activity Recognition using Hybrid Neural Networks <i>Rukesh Asokan, Viswanath Pathmanaban, ShenbagaShudhan VRR and AbiramiMurugappan</i>
	148	258	Classification of Agricultural Fruit Imagery using CHAR <i>Keerthana R, Thilaksurya B and Krishna Padmanabhan</i>
	154	206	Breast Cancer Detection Framework Using Evolutionary Search and SVM Classifier <i>Pruthvi Patel, Tina Babu and Rekha Nair</i>
	160	217	Unveiling Emotions through Handwriting: A Data Analysis Approach <i>Muskan Azmi, Shaik Lubna Fathima, and Mohammed Wasid</i>
	166	222	Evaluation of Wavelet Transformed features on detection of Epileptic Seizures using 2D Scalogram Images of EEG Signals <i>S Ramya, M Uma</i>
	172	235	Effective Identification and Diagnosis of Malaria Parasite in Blood Cell Images Through Deep Learning Approach <i>PramitBrata Chanda, Sarthak Chatterjee, Ritoja Sen, Sunidhi chandra ,Abhinaba Das, Subir Kumar Sarkar</i>
	179	292	Time Series Analysis of Urban Expansion Using Land-Use and Land-Cover Change Detection of LANDSAT Imagery for Pune District of Maharashtra <i>Anjali AJagtap;D. K. Shedge;Varsha Degaonkar;Rajesh Chowdhary V</i>
185	293	Group-Scanning by Face Identification and Real time Emotion detection using Faster R-CNN <i>K.Jayanthi, Chitradevi D, Saranya N, S. Anbukkarasi</i>	
3.15pm-3.30pm	<p style="text-align: center;">TEABREAK</p>		

Session 4A (Physical mode) Conference Hall CB Block 18/08/2023 3.30pm–5.00pm	Oral Paper Presentations on Social Computing/Smart Computing Session Chairs: Dr. R. Kathirolu & Dr. S. Neelavathy Pari Session Coordinator: Ms. M. Jenila Vincent & Ms. R. Roshina Sarah		
	PG	ID	TITLE
	191	199	RESD: Realtime Spam Detection for Social Media Textual Conversation <i>Valliyammai Chinnaiyah, Gagan B, Manikandan Dhayanithi, Bhavani Venkata Karthik K and Saktheeswaran K</i>
	197	62	An Visual Question Answering System using Cross-Attention Network <i>Dhana Lakshmi R and Abirami Murugappan</i>
	203	94	Diffusion MRI preprocessing for Deep Learning Analysis of Brain Structural Connectivity <i>Udayakumar P and Subhashini R</i>
	208	215	Performance Evaluation of a Multi-Class Classification Model for Marine Objects <i>Geomol George, Anusuya S</i>
	216	270	Exploratory Data Analysis of WhatsApp group chat <i>Srishti Gulecha R, Muthu Reshmi K and Dr. Abirami S</i>
	222	277	An Efficient Workflow Scheduling Approach for Enhancing the Performance in Cloud Environment <i>George Mirobi, V Suresh and M Kala Devi</i>
	227	324	Convolutional Neural Network and Capsule Network Fusion for Effective Attrition Classification <i>R Praveen, P Pabitha, V Sakthi, S Madhavi and R Vijay Sai</i>
Session 4B (Online) Meeting Hall CB Block 18/08/2023 3.30pm–5.00pm	Oral Paper Presentations on Smart Computing Session Chairs: Dr. V. Shanmuganeethi (Online) & Dr. B. Lydia Elizabeth Session Coordinator: Ms. K. Blessing Christiana		
	PG	ID	TITLE
	233	172	An Effective Approach for Reducing Time and Memory Requirements for Sign Language Detection <i>Pravin Sabari Bala S S, Sriram R and Arumuga Arun R</i>
	241	173	Pixels to Phrases: Bridging the Gap with Computationally Effective Deep Learning models in Image Captioning <i>Serath Chandra K, RoshiniPoda, Ardra Vinod and Arumuga Arun R</i>
	248	306	End-To-End Autonomous Vehicle Navigation Using Imitation Learning <i>Vijayalakshmi M, Suvitha D and Sivaguru P</i>
	254	307	Moving Vehicle Speed and Distance Estimation in Autonomous Vehicles <i>Vijayalakshmi M, Suvitha D and Gowtham Krishna</i>
	259	308	CNN based Deep Learning for Pneumonia Detection <i>SK Mydhili, Amrin Z, Venkatesh C and Jaya Dharani M</i>
	266	313	GPS-based Arrival Time Prediction for Bus Schedules: Enhancing Commuter Experience <i>Shanthi N, Suganthe R C, Manimaran V, ManojKumar P, Kavimbharathi A and Mythili E</i>
	272	321	Enhanced classification of epileptogenic and non-epileptogenic EEG signals using ANN-FDM <i>Manjunath V Gudur, Parthasarathy P, Shreeshayana R and Pradeep Kumar M</i>
	278	322	Talking Fingers – A Cost Effective Hand Gesture to Speech Device for Mute <i>Viji K, Athar Ahmed, Chitra K, GajjalaKousitha, Nageswara Rao, BathineniKowshik</i>
284	1	A Comparative Study for breast cancer prediction methods using Deep learning Technique <i>Punithavathi K and Yamuna G</i>	

Time	Saturday, 19 th August 2023		
09.00am-09.45am	Keynote Address Prof. C. Chandra Sekhar Department of Computer Science and Engineering, IIT Madras, India		
Session 5A (Physical mode) Conference Hall CB Block 19/08/2023 09.45am-11.15am	Oral Paper Presentations on Social Computing/Intelligent Computing Session Chairs: Dr. B. Thanasekar & Dr. S. Muthuraj Kumar Session Coordinator: Ms. R. Keerthana & Mr. E. Selvam		
	PG	ID	TITLE
	290	201	SLatAR - A Sign Language Translating Augmented Reality Application <i>Neelavathy Pari S, Magarika M, JivudinSharafath Ahamed M and Latchiyathan Kalyanasundaram</i>
	298	66	Community Detection in Diverse Networks to Locate Influential Spreaders based on K-core and Random Walk Algorithms <i>Rajeswari S and Bhavana S U</i>
	304	95	Student Stress Buster: Mobile App Testing and Solutions for Anxiety and Depression <i>Rakshitha V S, Mahadevi M and Durgadevi S</i>
	312	105	A general model for an instructional video-based personalized programming learning environment and its practical implications <i>Sanal Kumar T S and R. Thandeeswaran</i>
	318	114	An Improved Honey Badger Algorithm to Solve Dynamic Economic Dispatch Problems with Valve-Point Loading Effect <i>Arul Rajagopalan, Savitha Arul and Mohamed Abdul Azharuddin A</i>
	323	174	Carbon Footprint Monitoring System Using Machine Learning and Deep Learning Techniques <i>Priya N, Srinidhi K and Kousalya T</i>
	331	208	IoT Based Automated Irrigation System for Agricultural Activities <i>Dhinakaran D, M. Keerthana, M. Ananthi, R. Harish, S. M. Udhaya Sankar, M. Sai Sree</i>
Session 5B (Online) Meeting Hall CB Block 19/08/2023 9.45am-11.15am	Oral Paper Presentations on High Performance Computing/Intelligent Computing Session Chairs: Dr. Usha Devi (Online) & Dr. T. Sudhakar Session Coordinator: Ms. S. Karthika		
	PG	ID	TITLE
	337	20	Horticultural Image Clustering with Multispectral Optimization and Gaussian Lion Vector Quantization <i>Divya A and sungeetha D</i>
	345	71	Fake News Detection for Portuguese Language <i>Lucia Tembe and Anand Kumar M</i>
	349	144	A Machine Learning-based Agricultural Yield Forecasting System for Predicting Crop/Plant Yield before Planting the Crops/Plants <i>Arumuga Arun R, Saraswathi T, Meeha D and Sugeerthi G</i>
	355	155	Design of Voice Automated Floor Cleaning Robot <i>Roopa S, Manju H B, Mohammed Shadab, Nikhil J and Nithin N S</i>
	362	161	A Miniaturized Wideband Floret - Monopole Antenna for C band Applications <i>Ramyia Vasudevan, Nagaraju V</i>
	367	167	Yolov7-based Brake Light Detection Model for Avoiding Rear-End Collisions <i>Manoj Kushwaha and abirami M.S.</i>
	374	171	Parameter Investigation Study on Task Scheduling in Cloud Computing <i>Santhosh Kumar Medishetti and Ganesh Reddy Karri</i>
381	243	Smart classroom for better pedagogical process and effective energy utilization <i>Jayashree P, Hemanth N, Yogeeshwar S, Sai Soundharya Lakshmi and Vimal Raaj M</i>	
11.15am-11.30am	TEABREAK		

Session 6A (Physical mode) Conference Hall CB Block 19/08/2023 11.30am–1.00pm	Oral Paper Presentations on Intelligent Computing/Cyber Security Session Chairs: Dr. Ponsy R. K. Sathia bama & Dr. G. Rajesh Session Coordinator: Ms. M. Jenila Vincent & Mr. R. Praveen		
	PG	ID	TITLE
	387	32	SwinCNN: A Hybrid Deep Learning Architecture for Accurate Cotton Disease Prediction <i>Muthurajkumar S and Kajeeth Kumar G</i>
	394	57	LBA-PAKE: Lattice-Based Anonymous Password Based Authentication Key Exchange Scheme for VANET <i>Jagatheswari S and Arman Ahmad</i>
	402	60	A Survey on Various Kinds of Image Segmentation of Cancer Images Using Fuzzy Image Processing Methods <i>Jagatheswari S and Manivasagan M</i>
	407	81	Performance Analysis of Multi-Level Error Corrected Hierarchical Modulation in Multiple Antenna Systems <i>Abhishek R, Ananth Ram R, Ann Caroline Jenifer R and Madhumitha Jayaram</i>
	413	192	Geometric Structure Based Feature Transformation for Network Anomaly Detection System <i>Aneetha, A.S.</i>
	419	207	Protected Data Sharing using Attribute Based Encryption for Remote Data Checking in Cloud Environment <i>Ram Prasath, Kalpana A V, Nadana Ravisankar, Anand M and Shobana J</i>
	427	309	Design and Simulation of Microstrip Patch Antenna for Early Breast Cancer Detection <i>SK Mydhili, Dhevaki V, Jeevika K, Kalaiyarasi N and SethuHarshini V</i>
Session 6B (Online) Meeting Hall CB Block 19/08/2023 11.30am–1.00pm	Oral Paper Presentations on Cyber Security/Smart Computing Session Chairs: Dr. C. Valliammai, Dr. C. Gunavathi (Online) & Dr. Y. Nancy Jane Session Coordinator: Ms. V. Stella mary		
	PG	ID	TITLE
	434	36	Network Security Threat Detection: Leveraging Machine Learning Algorithms for Effective Prediction <i>Nitesh Kumar T, Thirumala Akash K, Mohammed Usman F and Mohammed Riyaz Ahmed</i>
	439	138	Revolutionizing the Dealer Experience with an Intuitive Web Interface for SAP Vehicle Management System (VMS) <i>S. Brindha, T. P. Kamatchi, V.S.Jayani and S.Sushmitha</i>
	447	280	A Hybrid Eagle's Web Swarm Optimization (EWSO) technique for effective cloud resource management <i>Jagadish kumar N, Balasubramanian C, Naresh kumar A, G.Praveenkumar, S.JindhiyaSree</i>
	453	281	CubeSat attitude control by implementation of PID controller using python. <i>Madhana Mohan Kannan, Anitha U and Anbumani K</i>
	458	283	Intelligent Nutrition Assistant Application <i>S RahmathNisha, Aarthi M, V Shyamala, M Pavithra, K Vallipriyadharshini, B Samgiftson Raj</i>
	464	320	A Deep Learning Based Cross Model Text to Image Generation using DC-GAN <i>Gayathiri Kasi, Abirami S and Dhana Lakshmi R</i>
	470	33	ERC721M: A Web3 Token Standard for REIT Companies <i>Suganthi K, Krishnansh Singh, Sajal Tayal and Mandeep Singh</i>
1.00 pm – 2.00 pm	LUNCH BREAK		

Session 7A (Physical mode) Conference Hall CB Block 19/08/2023 2.00pm–3.30pm	Oral Paper Presentations on High Performance Computing/Smart Computing Session Chairs: Dr. V. P. Jayachitra & Dr. K. Kottilingam Session Coordinator: Ms. R. Keerthana & Mr. G. Kajeeth Kumar		
	PG	ID	TITLE
	478	286	Intelligent Shiny Dashboard for District-wise Crop Suggestion in Tamil Nadu <i>Dr. Nancy Jane Y., Praveen P, Kavya Swetha J and Shanthosh Kumar E</i>
	482	45	Cover selection for image steganography determined by distinct characteristics. <i>Rupa Jamatia and Prof. B. Bhuyan</i>
	490	58	Image Enhancement of Cardiac MR motion Image for High-Quality Segmentation using combined Fuzzy Pooling Layer in Convolutional Neural Networks <i>Jagatheswari S and Tharun Balasubramaniam</i>
	495	59	A Review of Image Processing Methods and Segmentations for Brain Tumour Analysis <i>Jagatheswari S and Nirmaladevi S</i>
	501	85	Deep Fake Face Detection using Convolutional Neural Networks <i>Prakash P, Sasithradevi, Anablagan, Kasthuri P, Alben Richards M J, and Diviya N</i>
	505	190	Uniform And Randomly Distributed Fuzzy Logic Based Clustering in Wireless Sensor Networks <i>Sree Nidhi S, Kishore Kumar, and Sridharan D</i>
	511	21	A Comparative Study of Deep Learning Models for ECG Signal-based User Classification <i>Pabitha P, Praveen Ramalingam, Chandana Kamma Cheruvu Jayaraja, Ponlibarnaa S and Aparnaa S</i>
Session 7B (Online) Meeting Hall CB Block 19/08/2023 2.00pm–3.30pm	Oral Paper Presentations on Cyber Security/Network Science/Smart Computing Session Chairs: Dr. B. Surendiran (Online) & Dr. Chandra Mouli (Online) Session Coordinator: Mr. G. Kajeeth Kumar		
	PG	ID	TITLE
	519	61	A Survey: An Effective Utilization of Machine Learning Algorithms in IoT Based Intrusion Detection System <i>Maheswaran N, Bose S, Buvanewari N, Logeswari Govindaraj and Anitha Thangasamy</i>
	526	72	Multi-Camera Multi-Person Tracking in Surveillance System <i>HEDDE, Omprasad V; M, Anand Kumar</i>
	533	92	A New High-Performance Feature Selection Method for Machine Learning-Based IoT Intrusion Detection <i>Maheswaran N, Bose S, Buvanewari Natarajan, Logeswari Govindaraj and Anitha Thangasamy</i>
	541	106	Identifying illicit transactions in Bitcoin Tumbler services using Supervised Machine Learning Algorithms <i>Ezhilmathi S and Selvakumara Samy</i>
	549	134	An Information-Theoretically Secure Method to Encrypt One-Time Pads Utilizing Cellular Automata <i>Kumaresan G</i>
	557	160	A Case Study Using Top Companies to Examine the Nmap Tool's Applicability for Network Security Assessment <i>Asokan J, Kaleel Rahuman A, Suganthi B, Fairouz Shaik, Dr. Sundar Prakash Balaji Muthuswamy and Vellaippan Elamaran</i>
	563	269	Transformer based Twitter Trending Topics Sentiment Drift Analysis in Real Time <i>Susi E and Shanthi A P</i>
	570	285	Crime Detection Using Multi-Layer Perceptron in Social Media Platforms <i>Sathya J and Mary Harin Fernandez F</i>
19/08/2023 Conference Hall CB Block 3.40 pm – 4.30 pm	Keynote Address Shri. Ramesh Radhakrishnan, Scientist G, DDG, National Informatics Centre, Govt of India		
19/08/2023 Conference Hall CB Block 4:30pm – 5:00pm	Valedictory and closing ceremony.		