

2020 Fifth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2020)

**Bangalore, India
26 – 27 November 2020**



**IEEE Catalog Number: CFP20D01-POD
ISBN: 978-1-7281-8819-5**

**Copyright © 2020 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:	CFP20D01-POD
ISBN (Print-On-Demand):	978-1-7281-8819-5
ISBN (Online):	978-1-7281-8818-8

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

2020 Fifth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)

Table of Contents

Title Page	i
Message from the General Chairs	iii
Committee Lists	v

Computational Intelligence Track-I

Prediction of Covid-19 pandemic based on Regression <i>Ashish U Mandayam, Rakshith. A. C, Siddesha S, and S K Niranjan</i>	1
Interpretable Underwater Image Enhancement based on Convolutional Neural Network <i>Soumyadip Dhar, Hiranmoy Roy, Arunarka Mukhopadhyay, Antu Kundu, Arunava Ghosh, and Soham Roy</i>	6
Analysis of Cyberattacks and its Detection Mechanisms <i>K. Muthamil Sudar, P. Deepalakshmi, P. Nagaraj, and V. Muneeswaran</i>	12
A Multilingual Decision Support System for early detection of Diabetes using Machine Learning approach : Case study for Rural Indian people <i>E. Ramanujam, T. Chandrakumar, K. T. Thivyadharsine, and D. Varsha</i>	17
VIRTECS: Virtual Screening Of Therapeutic Classes Using Encodings Of Chemical Structures <i>Dweepa Honnavalli, Kavya Varmay, and Gowri Srinivasa</i>	22
Lung Cancer Detection Using Deep Learning Network: A Comparative Analysis <i>Susmita Das and Swanirbhar Majumder</i>	30
Entropy-Based Feature Selection for Data Clustering Using k -Means and k -Medoids Algorithms <i>Moni Kishore Dhar, S. M. Nahid Hasan, Tahsin Rahaman Otushi, and Musharrat Khan</i>	36
Artificial Neural Networks for detecting Intrusions: A survey <i>Loreen Mahmoud and Raja Praveen</i>	41

Computational Intelligence Track-II

Detection of Recoloring and Copy-Move Forgery in Digital Images <i>Jijina M.T, Litty Koshy, and Gayathry. S. Warriar</i>	49
Machine Learning based Handover Execution Algorithm for Heterogeneous Wireless Networks <i>Nishatbanu Nayakwadi and Ruksar Fatima</i>	54
Accuracy Enhancement of Portrait Segmentation by Ensembling Deep Learning Models <i>Yong Woon Kim, Innila Rose J, and Addapalli V N Krishna</i>	59
A Survey Report on Hypernym Techniques for Text Classification	65

2020 Fifth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)

<i>Pramod Sunagar, Anita Kanavalli, and Shweta S</i>	
Automatic Traffic Accident Detection System Using ResNet and SVM	
<i>Aman Kumar Agrawal, Kadamb Agarwal, Jitendra Choudhary, Aradhita Bhattacharya, Srihitha Tangudu, Nishkarsh Makhija, and Rajitha B</i>	71
Comparison of Gradient Boosting and Extreme Boosting Ensemble Methods for Webpage Classification	77
<i>J Dutta, Yong Woon Kim, and Dalia Dominic</i>	
Mental Workload Estimation Using EEG	
<i>Vishal Pandey, Dhirendra Kumar Choudhary, Vinita Verma, Greeshma Sharma, Ram Singh, and Sushil Chandra</i>	83
Twitter Hate Speech Detection using Stacked Weighted Ensemble (SWE) Model	87
<i>Sujatha Arun Kokatnoor and Balachandran Krishnan</i>	

Signal Processing and Communication Track-III

Nondestructive Testing Image Segmentation based on Neutrosophic Set and Bat Algorithm	93
<i>Soumyadip Dhar, Malay K. Kundu, and Hiranmoy Roy</i>	
Edge Detection based on Local-Friis-Radiation-Magnitude-Ratio (LFRMR)	99
<i>Subhadeep Koley, Hiranmoy Roy, Soumyadip Dhar, and Debotosh Bhattacharjee</i>	
A New Modified Red Deer Algorithm for Multi-level Image Thresholding	105
<i>Sourav De, Sandip Dey, Soumyaratna Debnath, and Abhirup Deb</i>	
Imagenation - A DCGAN based method for Image Reconstruction from fMRI	112
<i>K. Bhargav, S. Ambika, S. Deepak, and S.Sudha</i>	
A compact triple slotted Rectangular Microstrip Patch Antenna with Metamaterial ground for Sub-6 GHz/5G communication	120
<i>Vinoth M and Vallikannu R</i>	
Functional Approach for Reliability Evaluation of WLAN Communication Networks	125
<i>Ruchita Manohar, Ranjith Kumar Sreenilayam, and Vikas Pandey</i>	

Information Security and Cloud Computing Track-IV

Diffie-Hellman Instantiations in Pre- and Post-Quantum World: A Review Paper	130
<i>Ali Raya and K. Mariyappn</i>	
Transparent Data Encryption: Comparative Analysis and Performance Evaluation of Oracle Databases	137
<i>Natarajan K and Vaheedbasha Shaik</i>	
OBSC: Osmotic BlockChain based framework for Smart City Environment	143
<i>Sourav Hati and Debashis De</i>	
Resiliency Analysis of ONOS and Opendaylight SDN Controllers Against Switch and Link Failures	149
<i>Mehmet Dagli, Selcuk Keskin, Yagmur Yigit, and Adem Kose</i>	

2020 Fifth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)

Cache Aware Task Scheduling Algorithm for Heterogeneous Cloud Computing Environment	154
<i>Nagendra Prasad S, Subhash Kulkarni, and Prasanth Venkatareddy</i>	
Real World Solutions for Smart Cities Transportation to be Pandemic Ready	159
<i>Yusra Amir, Sanchari Deb, Mohammad Saad Alam, Yasser Rafat, and Salman Hameed</i>	
GALB: Load Balancing Algorithm for CP-ABE Encryption Tasks in E-Health Environment	165
<i>Mohammad Bany Taha and Rasel Chowdhury</i>	
CG-D2D: Cooperative Game Theory based Resource Optimization for D2D Communication in 5G Wireless Network	171
<i>Subha Ghosh and Debashis De</i>	
Wireless Sensor Networks and Embedded Systems Track-V	
A Comparative Assessment of Cascaded Double Voltage Lift Boost Converter	177
<i>Radhika. S and Margaret V</i>	
A Study and Analysis on Various Types of Agricultural Drones and its Applications	181
<i>Dileep M R, Navaneeth A V, Savita Ullagaddi, and Ajit Danti</i>	
Efficient Solution to Avoid Overcrowding in Local Train Compartments	186
<i>Meghal Jambhale, Sakshi Joshi, Sakshi Amrutkar, and Neha Baisane</i>	
Prototype Proposal for Quick Accident Detection and Response System	191
<i>Sonjoy Rana, Shounak Sengupta, Sourav Jana, Rahul Dan, Mahamuda Sultana, and Diganta Sengupta</i>	
Patient Health Observation and Analysis With Machine Learning And IoT Based in Realtime Environment	196
<i>Arnab Dey, Pramit Brata Chanda, and Subir Kumar Sarkar</i>	
Review on Emerging Internet of Things Technologies to Fight the COVID-19	202
<i>S. Yoshita Manavi, Vinuthna Nekkanti, Ram Shankar Choudhary, and N. Jayapandian</i>	
Employing Deep Learning In Intraday Stock Trading	209
<i>Taroon G, Ayushi Tomar, Chinthakunta Manjunath, Balamurugan M, Bikramaditya Ghosh, and Addapalli V N Krishna</i>	
Author Index	215