

2022 Third International Conference on Smart Technologies in Computing, Electrical and Electronics (ICSTCEE 2022)

**Bengaluru, India
16 – 17 December 2022**



**IEEE Catalog Number: CFP22W60-POD
ISBN: 978-1-6654-5665-4**

**Copyright © 2022 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:	CFP22W60-POD
ISBN (Print-On-Demand):	978-1-6654-5665-4
ISBN (Online):	978-1-6654-5664-7

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

**2022 Third International Conference on Smart Technologies in
Computing, Electrical and Electronics (ICSTCEE) 16th & 17th
December 2022 (09:00 AM to 05:30 PM, IST) Organize by IEEE
Student Branch REVA University & School of C&IT, in association
with Research & Development Cell, REVA University, Bengaluru,
India**

Table of Contents

Pg.	Session 1 Track 1 COMPUTER SCIENCE –Machine Learning
1	An Effective Emotion Recognition Method Using Facial and Speech Features <i>K.Muthumanickam, P.C.Senthil Mahesh, P.Vijayalakshmi</i>
7	Machine Learning Based Predictive Analysis of Diseases in Health Care <i>Swamydoss D, Lilly Florence M, Swithin Asir S</i>
14	Machine Learning-Based Personalized Recommendation System for E-Learners <i>Geeta S Hukkeri, R H Goudar</i>
20	Prediction of DDoS Flooding Attack using Machine Learning Models <i>Pooja S Patil, S L Deshpande, Geeta S Hukkeri, R H Goudar, Poonam Siddarkar</i>
26	Image Based Crack Recognition On Concrete Structures Using Convolutionalal Neural Networks <i>Krishna Prasad S, Raghunanadan KR, Gururaj Acharya, Sowmya</i>
31	A Machine Vision-Based Person Detection Under Low-Illuminance Conditions Using High Dynamic Range Imagery for Visual Surveillance System <i>Julie Ann B. Susa, Sammy V. Militante, Aimee G. Acoba, Ryan Soriente Evangelista, Luisito Lolong Lacatan, Charlemagne G. Laviña, Bartolome T. Tanguilig III</i>
	Session 1 Track 2 COMPUTER SCIENCE –Deep Learning
37	AEDAMIDL: An Enhanced and Discriminant Analysis of Medical Images using Deep Learning <i>A. Manju, M. Arivukarasi, M. Mahasree</i>
44	Social Media Event Summarization using Neural Networks <i>Sucharitha Yadala, Anitha Gurram, Yamunadevi S, Veeresh U, S Bhargavi Latha, TN Chitti</i>
50	Review of Deep Reinforcement Learning- Based Recommender Systems <i>Krishnamoorthi S, Gopal K. Shyam</i>
62	DRSAL: Deep Reinforcement Skin Cancer Diagnosis with Active Learning Technique <i>Renith G, A. Senthilselvi</i>
69	A Comprehensive Analysis of Deep Learning Frameworks to Mitigate the Impact of Varied Lighting and Weather Conditions <i>Anshuman Mohanty, Anshuman Mohanty, Anshuman Mohanty</i>

	Session 1 Track 3 COMPUTER SCIENCE –Networks and Information Security
74	Security Attacks and Key Challenges in Blockchain Technology: A survey <i>Krishnaraj Rao N S, Raghunadan K R, Radhakrishna Dodmane, Bhavya K, Sardar M N Islam, Surendra Shetty</i>
80	Interference Aware Routing In 5G Backhaul Wireless Mesh Networks <i>Nirmalkumar S. Benni, Sunilkumar S. Manvi</i>
87	Cloud Computing Based Workload Optimization using Long Short Term Memory Algorithm <i>Ayyadurai M, Suresh S, Pavithra Guru.R, Pavithra Guru.R</i>
94	PBSK (Parity Bit Interleaved Shift Key) based Quantum Key Distribution for Controlling side channel attacks <i>Gopinath N, Prayla Shyry . S</i>
102	Preventing the False Negatives of Vehicle Object Detection in Autonomous Driving Control Using Clear Object Filter Technique <i>Venkata Satya Rahul Kosuru, Ashwin Kavasseri Venkitaraman</i>
108	Analysis on Attributes of Software Defined Radio For Space Communication. <i>Anil Kumar C S, Devanthan M, Chaithra.T, Muppalla Lakshmi Divya, Anitha.H, Ayan Kumar</i>
	Session 2 Track 1 COMPUTER SCIENCE –AI &ML
115	Detection of Valvular Heart and Respiratory Diseases using and AI technique <i>Supriya Salian, Preethi Salian K, Puneeth B.R, Prathyakshini, Tanzila Nargis, Sudesh Rao</i>
120	Insights on Assessing Image Processing Approaches Towards Health Status of Plant Leaf <i>Harsha.R, Veena. K. N</i>
127	Design And Implementation of Low cost Hemoglobin Level Prediction Using Machine Learning <i>Sabari B, Suganthi J</i>
132	Flight Delay Prediction for Indian Air Carriers with Explainable Artificial Intelligence <i>Jyoti Singh, Mithun Dolthody Jayaprakash, Rashmi Agarwal</i>
138	Deauthentication Attack Detection in the Wi-Fi network by Using ML Techniques <i>Latha R, R.M. Bommi</i>
144	A Unified Methodology for Early recognition of Diabetic Retinopathy <i>S.Deepa, A.Umamageswari, S.Shoba</i>
	Session 2 Track 2 COMPUTER SCIENCE –Deep Learning
150	Achieving Linear and Systematic Perspectives to detect stroke rehabilitation exercise posture using Neural Network

	<i>A.Umameswari, S.Deepa, J.Faritha Banu</i>
155	Iceberg Detection In Aerial Images Using Deep Learning Models <i>Ramkumar R, Suganthi J</i>
163	Emotional Analysis Through Deep Learning Models <i>Lakshmanan M, G.S. Anandha Mala</i>
168	Automated ECG Arrhythmia classification using Resnet and AutoML Learning Model <i>S.Jayanthi, S.Prasanna Devi</i>
174	Classification of DDoS in Software-Defined IoT Networks using Hybrid Feature Selection Technique with DL <i>Muthulakshmi K, Kalaivani K, Uma J, Primya T, Sivakumaran AR, Selvapandian D</i>
180	Detection of EDoS attacks in SDN-based Cloud Model using Deep Learning based SDPN Technique <i>Suguna M, Suguna M, Srikanth J, M Suresh, P G Banupriya, Logeshwari Dhavamani</i>
	Session 2 Track 3 COMPUTER SCIENCE –Cloud and Blockchain
187	Serverless Blockchain-based AI-Powered Financial Transaction Management System on Cloud <i>Sri Sathya K B, Nithyasri A, Amirtha E, Fowjiya S</i>
193	An Efficient Storage Solution For Healthcare Management Systems Using Cloud <i>Ms.Judy Flavia B, Balika J Chelliah</i>
200	A survey of node localization in wireless sensor networks using various Optimization algorithms <i>Devika E, Saravanan A</i>
206	An Effective Network Communication algorithm for Dynamic Handover <i>Sivasankaran V, Maheswar R, Sugumaran S, Sountharajan S, Jayarajan P</i>
211	Detection of Malicious Nodes in Flying Ad-hoc Network with Supervised Machine Learning <i>Shrikant Tangade, R Arun Kumaar, Malavika S, Monisha S, Farooque Azam</i>
	Session 3 Track 1 COMPUTER SCIENCE
216	Product Affinity Analysis to Increase Sales using Machine Learning <i>Sharon Joseph, Mithun D J, Rashmi Agarwal</i>
224	Novel prediction system for stock market through Hybrid Cat Boost Correlation Algorithm (HCBC) <i>K.Sivasankari, T.Yeshwanth Kumar, B.Mokesh, N. Mahesh Reddy</i>
231	Aspect Level Sentiment Analysis Aided Supportive System for Interactive Platforms <i>Kavya K S, Vijaya Kumar B, Kusuma S M</i>
239	Design and Implementation of an Automated Control System for Anomaly Detection Using an Enhanced Intrusion Detection System <i>K Prabu, P Sudhakar</i>
246	Prediction And Its Impact On Its Attributes While Biasing Machine Learning

	Training Data <i>J.Kavitha, J.Sasi Kiran, Srisailapu D Vara Prasad, Krushima Soma, G Charles Babu, S Sivakumar</i>
253	Sensitivity of Initial Pose Variations to Feature based 3D-2D Registration in Vertebral Pose Estimation <i>Ushakiran, Anitha H, Shyamasunder N Bhat, Roshan R Naik</i>
257	Road Condition Monitoring and Information System: Survey <i>Mallikarjun Kodabagi, Pavithra S, Bhavana N, Rakshitha H</i>
	Session 3 Track 2 COMPUTER SCIENCE – IoT and Machine Learning
262	Hyperspectral Image Acquisition Methods And Processing Techniques Based On Traditional And Deep Learning Methodologies-A Study <i>V.Vishnu Sai Swarupa, M.Devanathan</i>
275	Design And Development Of Low Power High Performance Current Limiting Voltage Level Shifter For Iot Applications <i>Raji.C, HariHaraKumar</i>
281	Design And Implementation Of Smart Agriculture Management Intelligent Things Using Nb-IoT <i>S.Senthil, M.Rajesh Kumar, R.Sarath Kumar, A.Kingsly Jabakumar, K.Madhan</i>
286	Electrical Equivalent Circuit Modeling of Lithium-Ion Battery <i>Bansilal Bairwa, Kapil Pareek, Manohar K A, Nanditha Varshini E</i>
291	Recent Security Challenges in Agriculture Applications in Smart Agriculture: A Survey <i>Kavya M, Geetha D. D.</i>
301	EV Home Charging Infrastructure & Low Battery AI Algorithm <i>Dileep Kumar Sharma, Harsha Vardhan B K, Vishwanath R Hulipalled</i>
310	Animal detection and prevention in agri field using IOT <i>Bharathan K, Suganthi J</i>
316	Fertilizer Quality Assessment Methods for Sustainable Agriculture <i>Thirumala Akash K, Upendra R S, Mohammed Riyaz Ahmed, Sanjana Mathias, Ananya R, Deepika Nayak, Sagam Bhaskar, Yuktha Dabke</i>
320	Electric Vehicle Charging Network Optimization using Multi-Variable Linear Programming and Bayesian Principles <i>Ashwin Kavasseri Venkitaraman, Venkata Satya Rahul Kosuru</i>
325	Integrated Motor Generator Moduledrive Trains For E-Cycles <i>A.Selvaraj, J. Balaganesh, P. Abinaya</i>
	Session 3 Track 3 ELECTRICAL AND ELECTRONICS
331	A Survey of Saga Frameworks for Distributed Transactions in Event-driven Microservices <i>Krishna Mohan Koyya, B Muthukumar</i>
337	Waste Segregation using IoT and Image Recognition

	<i>Rashmi C, Rahul Kumar Jha, Rinjan Chatterjee, Saikumar Kamthane</i>
343	Depiction Of Fpga Based Vending Machine Using Mealy Model <i>Sathiyapriya.K, Nirmala.P, Deepika.M, Revanth.J, Saravanan.M, Mohankumar.M</i>
348	Minimization of energy consumption in MANET using optimized K-Medoid PSO Clustering Model <i>Jebakumar Immanuel D, Aby K Thomas, Prasath B, Kanchana M, Narasimharaj V, Anandhasilambarasan D</i>
354	Abnormal flow detection using Optimized ABFlow Network in SDN based Smart Grid Application <i>Prasath B, Deepa P, Kalaivani K, Wasim Raja A, Gokila S, Narasimharaj V</i>
362	Performance analysis of multiple distributed generation placement in radial distribution system using Reptile Search Algorithm <i>Devabalaji Kaliaperumal Rukmani, Komla Agbenyo Folly</i>