2019 4th International Conference on Computational Systems and Information Technology for Sustainable Solution (CSITSS 2019)

Bengaluru, India 20 – 21 December 2019



IEEE Catalog Number: CFP19STD-POD ISBN: 978-1-7281-2620-3

Copyright © 2019 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:
 CFP19STD-POD

 ISBN (Print-On-Demand):
 978-1-7281-2620-3

 ISBN (Online):
 978-1-7281-2619-7

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-040

Phone: (845) 758-0400 Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



2019 4th International Conference on Computational Systems and Information Technology for Sustainable Solution (CSITSS)

Sl. No.	Paper ID	Paper Title	Page No.
1.	CSITSS-2019-003	Massively Scalable Parallel KMeans on the HPCC Systems Platform Lili Xu, Amy Apon, Flavio Villanustre, Roger Dev and Arjuna Chala	1-8
2.	CSITSS-2019-004	Post Disaster Management Using Satellite Imagery and Social Media Data Malika Makker, Ramya Ramanathan and Sindhu B Dinesh	9-14
3.	CSITSS-2019-009	A Comparative Study of Spark Schedulers' Performance Ashmita Raju, Ramya Ramanathan and Dr. Hemavathy R	15-19
4.	CSITSS-2019-012	Hand Recognition and Motion Analysis using faster RCNN Prof. Srividya MS, Dr. Anala MR, Dushyanth NM and Datla V. Satya K. Raju	20-23
5.	CSITSS-2019-013	IOT BASED SMART AGRICULTURE MANAGEMENT SYSTEM G. S. Nagaraja, Avinash B Soppimath, T. Soumya and Abhinith A	24-28
6.	CSITSS-2019-018	A Survey of Popular Image and Text analysis Techniques, Rahul Suresh and Keshava N	29-36
7.	CSITSS-2019-021	Time Series Forecasting methods suitable for prediction of CPU usage Sriram N Rao, Srinivas Prabhu, Shobha G and Deepamala N	37-41
8.	CSITSS-2019-025	Using virtual reality to boost the effectiveness of brain- computer interface applications Sriram N Rao, Shivani Hariprasad, Prapulla S B, Maghup Gupta, Shobha G and Sai Aneesh Reddy	42-46
9.	CSITSS-2019-032	Prediction of breast cancer using Find-S and Candidate elimination algorithm Nithya C L, Sunanda Dixit and B. I. Khodhanpur	47-50
10.	CSITSS-2019-034	Reinforcement Learning Based Channel Selection for Design of Routing Protocol in Cognitive Radio Network Sopan Talekar and Sujatha Terdal	51-56
11.	CSITSS-2019-035	Development of GNSS Test Tool and Automatic Suit Neetin Kumar, Deepak Gupta and Sujata D. Badiger	57-59
12.	CSITSS-2019-037	A Novel Hybrid data security algorithm for Electronic Health Records security Kushal Rashmikant Dalal	60-63
13.	CSITSS-2019-041	3D Reconstruction of 2D X-Ray Images Dr.Sunanda Dixit, Karan Agnani, Vishwas G Pai, Vaishna Priyan S R and Vivian Claud Rodrigues	64-68
14.	CSITSS-2019-042	Indian Food Image Classification with Transfer Learning Rajayogi J R, Manjunath G and Shobha G	69-72

Sl. No.	Paper ID	Paper Title	Page No.
15.	CSITSS-2019-045	Cloud based Architecture for Solid Waste Garbage Monitoring and Processing Rashmi G, Mohammed Ameenulla and S Sathish Kumar	73-76
16.	CSITSS-2019-050	Load Balancing Scheme for the Public Cloud using Reinforcement Learning with Raven Roosting Optimization Policy (RROP) Bhargavi K and B. Sathish Babu	77-82
17.	CSITSS-2019-051	Comparative Study of Lightweight Hashing Functions for Resource Constrained Devices of IoT Vidya Rao and Prema K V	83-87
18.	CSITSS-2019-052	Analysis and Prediction of Earthquake Impact-a Machine Learning approach Anmol Gaba, Arnab Jana, Rahul Subramaniam, Yash Agrawal and Merin Meleet	88-92
19.	CSITSS-2019-053	Hybrid Classifier for Identification of Heart Disease Yukti Sharma, Rikku Veliyambara and Prof. Rajashree Shettar	93-95
20.	CSITSS-2019-060	An Energy Efficient Routing and Compression Based Data Collection Applying Bio-Inspired Ant-Cuckoo Technique for Wireless Sensor Network Devika G, Ramesh D and Asha Gowda Karegowda	96-103
21.	CSITSS-2019-061	Decision Support System to Agronomically Optimize Crop Yield based on Nitrogen and Phosphorus Meeradevi, Sanjana V and Monica R Mundada	104-109
22.	CSITSS-2019-064	Intelligent Clinical Diagnosis System Prakarsh Anand, Sirsha Chatterjee, Ishita Agarwal, Shantanu, Aman Anupam, Krupa A.Jain	110-114
23.	CSITSS-2019-067	An approach to enable secure and reliable communication on IoT Devices Harsha B R, Anish Damodaran, Sindhu Ranganath, Vaishnav Raut and Shashanka Holla	115-120
24.	CSITSS-2019-068	A Study on Music based Audio and Brain Signal Processing Swapna Rao P and Dr. Soumya A	121-126
25.	CSITSS-2019-075	Machine Learning Model for Predicting Insomnia Levels in Indian College Students Aishwarya Seth, Satish Babu B. and S.S. Iyenger	127-132
26.	CSITSS-2019-076	Deep Learning Based Effective Baby Crying Recognition Method Under Indoor Background Sound Environments Karinki Manikanta, K.P. Soman and M. Sabarimalai Manikandan	133-138
27.	CSITSS-2019-084	AI-NLP Analytics: A thorough Comparative Investigation on India-USA Universities Branding on the Trending Social Media Platform "Instagram" Thejas G. S., Kundan Kumar, S. S. Iyengar, Prajwal Badrinath and N. R. Sunitha	139-146
28.	CSITSS-2019-085	A Robust Pose & Illumination Invariant Emotion Recognition from Facial Images using Deep Learning for Human-Machine Interface Suja Palaniswamy and Suchitra	147-152

Sl. No.	Paper ID	Paper Title	Page No.
29.	CSITSS-2019-086	A Variation in the Working of Playfair Cipher Pathikrit Pal, Thejas G. S., Sanjeev Kaushik Ramani, S. S. Iyengar and N. R. Sunitha	153-159
30.	CSITSS-2019-087	ElGamal-based Privacy-Preseving Scheme (EPPS) for Edge- Cloud-of-Things (ECoT) Jayashree N and B Sathish Babu	160-163
31.	CSITSS-2019-088	A Multi-time-scale Time Series Analysis for Click Fraud Forecasting using Binary Labeled Imbalanced Dataset Thejas G. S., Jayesh Soni, Kianoosh G. Boroojeni, S.S. Iyengar, Kanishk Srivastava, Prajwal Badrinath, N. R. Sunitha, Nagarajan Prabakar and Himanshu Upadhyay	164-171
32.	CSITSS-2019-090	Machine Learning Techniques to Detect Fraud in Credit Cards ontheHPCC Systems Platform Akshar Prasad, Roger Dev, Shobha G and Jyothi Shetty	172-178
33.	CSITSS-2019-092	Natural Language to Structured Query Language using Elasticsearch for descriptive columns Sourabh S Badhya, Akshar Prasad, Shetty Rohan, Yashwanth Y S, Deepamala N and Shobha G	179-183
34.	CSITSS-2019-094	Machine Learning Techniques to Understand Partial and Implied Data Values for Conversion of Natural Language to SQL Queries on HPCC Systems Akshar Prasad, Shobha G, Deepamala N, Sourabh S Badhya, Yashwanth YS and Shetty Rohan	184-188
35.	CSITSS-2019-095	Library Automation System: Book cover recognition using deep learning Jainil Viren Parikh, Abhiram Natarajan and B Sathish Babu	189-193
36.	CSITSS-2019-096	Autonomous UGV Delivery Systems Karthik S, Anurag Bannur, Akshay T Rao and Krishna Y	194-199
37.	CSITSS-2019-099	Identification of Criminal Activity Hotspots using Machine Learning to Aid in Effective Utilization of Police Patrolling in Cities with High Crime Rates Ramshankar Yadhunath, Srivenkata Srikanth, Arvind Sudheer and Suja Palaniswamy	200-205
38.	CSITSS-2019-102	A novel utility metric to measure information loss for generalization and suppression techniques in Privacy Preserving Data publishing. Veena Gadad and Sowmyarani C N	206-210
39.	CSITSS-2019-103	Plant Diseases Detection and Classification using Machine Learning Models Poojan Panchal, Vignesh Charan Raman and Shamla Mantri	211-216
40.	CSITSS-2019-105	Design and Implementation of Machine Learning Evaluation Metrics on HPCC Systems A. Suryanarayanan, Arjuna Chala, Lili Xu, Shobha G, Jyoti Shetty and Roger Dev	217-223
41.	CSITSS-2019-106	Design and Implementation of Octave Plugin for HPCC Systems Sathvik K R, Shobha G, Jyoti Shetty and Dan Camper	224-228

Sl. No.	Paper ID	Paper Title	Page No.
42.	CSITSS-2019-112	Evaluating deep learning based models for predicting click through rate Gautam Chauhan and Dhruva Vatsa Mishra	229-233
43.	CSITSS-2019-117	Information Retrieval in Kannada using Ontology H C Vijayalakshmi and Bhavana S Dixit	234-238
44.	CSITSS-2019-118	Evaluation of Internal Factors in Driver Distraction H.S. Srihari, Aishwarya Seth and Dr. Sowmyarani C.N.	239-242
45.	CSITSS-2019-119	A Machine Learning Approach to Water Leak Localization Deeksha Shravani, Prajwal Y R, Prapulla S B, Girish Rao Salanke N S, Shobha G and Syed Farhan Ahmad	243-248