2020 IEEE 9th International Conference on Communication Systems and Network Technologies (CSNT 2020)

Gwalior, India **10 – 12 April 2020**



IEEE Catalog Number: CFP2018P-POD ISBN:

978-1-7281-4977-6

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:
 CFP2018P-POD

 ISBN (Print-On-Demand):
 978-1-7281-4977-6

 ISBN (Online):
 978-1-7281-4976-9

ISSN: 2329-7182

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



2020 9th IEEE International Conference on

Communication Systems and Network Technologies

CSNT 2020

Table of Contents

| Welcome from IEEE CSNT 2020 General Chairs | |
|--|------------|
| me from IEEE CSNT 2020 Program Chairsiii | |
| Conference Committees | <i>İ</i> \ |
| | |
| Track-A: Microwave Components, Antenna and Propagation | |
| A Multiband Antenna for WLAN and WiMAX Wireless Applications | 01 |
| Microwave Imaging Based Automatic Crack Detection System Using Machine Learning For Columns | 05 |
| Prashanth Kannadaguli, Vidya Bhat | |
| Rectangular Ring Monopole Antenna using Defected Ground Structure for Television White Space Application | 09 |
| | |
| Polarization Independent Super Thin Metamaterial Microwave Broadband Absorber for K-Band Application | 13 |
| Gaurav Chaitanya; Ankit Chandachoriya | 13 |
| Track-B: Al, Fuzzy and Machine Learning | |
| Demystifying and Anticipating Graduate School Admissions using Machine Learning Algorithm Mohd Aijaj Khan; Manish Dixit; Aaradhya Dixit | າຣ. 19 |
| Deep Learning prospective for massive MIMO: Challenges and Future prospects | |
| Case for Dynamic Parallelisation using Learning Techniques | |
| mplementation of Machine Learning Technique for Identification of Yoga Poses Yash Agrawal; Yash Shah; Abhishek Sharma | 40 |
| ransfer Learning with L2 Norm Regularization for classifying static Two Hand Hindi Sign | |
| anguage Gestures | 44 |
| Hand Written Digit Recognition using Machine Learning | 49 |

| Accelerated Computer Vision Inference with AI on the Edge | |
|---|------|
| Mohan krishna K; Prashanth Kannadaguli | |
| Comparative analysis of Human Face Recognition by Traditional Methods and Deep | 00 |
| Learning in Real-time Environment | 66 |
| Track C: Mobile Computing, WSN, IOT and next Generation Networks | |
| Precedence & Issues of IoT based on Edge Computing | 72 |
| IOT Based Wireless Sensor Network for Air Pollution Monitoring | 78 |
| Network Path Capability Identification and Performance analysis of Mobile Ad hoc Network Mohan Patsariya; Anand Rajavat | 82 |
| Video Transmission Over Next Generation Emergency Services | .88 |
| Spectrum Sensing Techniques for Cognitive Radio: A Re examination | 93 |
| Effect of WSN nearest neighbours on convergence rate of periodic gossip algorithms | .96 |
| Importunity & Evolution of IoT for 5G | 102 |
| Anas Ahmad; Bharat Bhushan; Nikhil Sharma; Ila Kaushik; Saurabh Arora | |
| Evolution of 5G Wireless Network in IoT | .108 |
| Saurabh Arora; Nikhil Sharma; Bharat Bhushan; Ila Kaushik; Anas Ahmad | |
| IoE: A Boon & Threat to the Mankind | 114 |
| A Survey on IOT enabled cloud platforms | 120 |
| Ranjana Sikarwar, Pradeep Yadav; Aditya Dubey | |
| IoT and BLE Beacons: Demand, Challenges, Requirements, and Research Opportunities-Planning-Strategy | 125 |
| Sagar Damoday Padiya, Vijay S. Gulhane | |
| Intelligent Monitoring systems for transportation of perishable products based on Internet | |
| of Things (IOT) | 130 |
| Mohammad Hossein Ahmadzadegan; Hamidreza Ghorbani; Anna Stahlbrost | |
| Improved Performance Using Fuzzy Possibilistic C-Means Clustering Algorithm in Wireless Sensor Network | .134 |
| Shweta Kushwah, Kuldeep Singh Jadon | |
| A Survey on IOT Based Smart Waste Bin | .140 |
| State of the art of Mobile Banking Services and Future Prospects in Developing Countries | 145 |
| Emotion Classification on Twitter Data Using Word Embedding and Lexicon based approach R Jeberson Retna Raj; Prasanjeet Das; Prabat Sahu | 150 |

| Track D: Hardware Design, Data Mining and systems |
|--|
| PWM Techniques to Power converters of the Wind Energy Conversion System |
| COMPASS: IPS-based Navigation System for Visually Impaired Students |
| Implementation and Extension of Bit Manipulation Instruction on RISC-V Architecture using FPGA |
| Vineet Jain; Abhishek Sharma; Eduardo A Bezerra |
| Producing Energy Using Blind Man Stick |
| Optimization of Cost: Storage over Cloud Versus on Premises Storage |
| Educational Data Mining Methods: A Survey |
| Track E: Cryptography, Blockchain and Security Algorithms |
| A Survey on Hardware Implementation of Cryptographic Algorithms Using Field Programmable |
| Gate Array |
| Secured Multi-Tier Mutual Authentication Protocol for Secure IoT System |
| Improved AES with a Privacy Database Structure for IoT Nodes |
| Design and Development of trust management scheme for internet of things based on the optimization algorithm |
| High Dimensional Data Processing in Privacy Preserving Data Mining |
| IoT based Smart home: Security Aspects and security architecture |
| Security Issues & Seclusion in Bitcoin System |
| Smart Contract Definition for Land Registry in Blockchain |
| Neoteric Security and Privacy Sanctuary Technologies in Smart Cities |
| Security Challenges & Controls in Cyber Physical System |
| A Comprehensive Survey on various Security Authentication Schemes for Mobile |
| Touch Screen |
| Working principle, Application areas and Challenges for Blockchain Technology254 <i>Lakshit Madaan; Amit Kumar; Bharat Bhushan</i> |
| Blockchain for Cybersecurity: A Comprehensive Survey |

| A Multi-classifier Framework for Detecting Spam and Fake Spam Messages in Twitter266 R Jeberson Retna Raj; Senduru Srinivasulu, Aldrin Ashutosh |
|--|
| Security-Centric Investigation of Social Networks and Preventative Behavioral Analysis of |
| Online Activity by the Kuleshov effect |
| Mohammad Hossein Ahmadzadegan; Hamidreza Ghorbani; Anna Stahlbrost |
| An Efficient Storage in the cloud &Secure EHRRetrieval by using HECC |
| A Comprehensive Survey on Various Machine Learning Methods used for Intrusion |
| Detection System |
| Track F: Image Processing, Signal Processing intelligent systems |
| Effective Framework for Underwater Image Enhancement using Multi-Fusion Technique 290 Aashi Singh; Khushboo Agarwal |
| Side searching and object improving algorithms for Images |
| Phishing Detection Using Significant Feature Selection |
| Analysis of Geographical Change Detection using Satellite Images |
| BDonor: A Geo-localised Blood Donor Management System Using Mobile Crowdsourcing313 Hridoy Deb Das; Rakib Ahmed; Nurunnahar Smrity; Linta Islam |
| An Analysis of Image Segmentation Methods for Brain Tumour Detection on MRI Images318 Anurag Goswami; Manish Dixit |
| Wavelet Based Empirical Approach to Mitigate the Effect of Motion Artifacts from EEG Signal323 Shailja Shukla; Vandana Roy; Anand Prakash |
| Different Techniques for Identification of a Bone Fracture in Analysis of Medical Image327 Rinisha Bagaria; Sulochna Wadhwani; A.K. Wadhwani |
| A Survey on Underwater Images Enhancement Techniques |
| Author Index |