International Conference on Smart Sustainable Intelligent Computing and Applications under ICITETM 2020

Procedia Computer Science Volume 173

Delhi, India
4 – 6 February 2020

Editors:

Namita Gupta
P. S. Grover
Vincenzo Piuri
Valentina Emilia Balas
Chuan Ming Liu

ISBN: 978-1-7138-1597-6

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2020) The Authors. Published by Elsevier Ltd.
Creative Commons Attribution 4.0 International License.
License details: http://creativecommons.org/licenses/by/4.0/.

No changes have been made to the content of these proceedings. There may be changes to pagination, and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact the publisher:

Elsevier B.V.
Radarweg 29
Amsterdam 1043 NX
The Netherlands

Phone: +31 20 485 3911
Fax: +31 20 485 2457

http://www.elsevierpublishingsolutions.com/contact.asp

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
Email: curran@proceedings.com
Web: www.proceedings.com

Available online at www.sciencedirect.com

ScienceDirect

Procedia Computer Science 173 (2020) iii-v

Procedia Computer Science

www.elsevier.com/locate/procedia

Table of Contents

EDITORIAL - PREFACE
Namita Gupta 1

Foreword
3

Edge Detection using Guided Image Filtering and Enhanced Ant Colony Optimization
Akshi Kumar, and Sahil Raheja 8

Estimation of Parameters in Fractional order Financial Chaotic system with Nature Inspired Algorithms
Sangeeta Gupta, Gaurava Gautam, Deepak, Divyanshu Vats, Pragya Varshney, and Smriti Srivastava . . . 18

Super-Resolution using GANs for Medical Imaging
Rohit Gupta, Anurag Sharma, and Anupam Kumar. 28

Meta-heuristic based optimization of WSNs Localisation Problem- a Survey
Neha Sharma, and Vishal Gupta 36

Performance Evaluation of IPv6 Network for Real-Time Applications using IS-ISv6 Routing Protocol on Riverbed Modeler
Neha Jain, and Ashish Payal 46

Insurance Fraud Identification using Computer Vision and IoT: A Study of Field Fires
Srishti Sahni, Anmol Mittal, Farzil Kidwai, Ajay Tiwari, and Kanak Khandelwal. 56

Packet Header Compression in the Internet of Things
Syed Rameem Zahra, and Mohammad Ahsan Chishti. 64

Performance Analysis of Various Server Hosting Techniques
Prerna Jain, Yogesh Munjal, Jatin Gera, and Pooja Gupta. 70

Flood Damage Analysis Using Machine Learning Techniques
Snehil, and Ruchi Goel 78

ASYMMETRICALLY SLOTTED, TUNABLE AND SINGLE MODE CIRCULARLY POLARISED MICROSTRIP ANTENNA FOR IoT APPLICATION
S K Kundu, and Shashank Jaiswal. 86

Robustness in Multilayer Networks Under Strategical and Random Attacks
Rajesh Kumar, and Anurag Singh 94

Credit Card Fraud Detection using Pipeling and Ensemble Learning
Siddhant Bagga, Anish Goyal, Namita Gupta, and Arvind Goyal. 104

Comparison of Various Scale Invariant Crowd Count Analysis Methods
Ashish Sharma, Sandeep Tayal, Kamaljot Singh Pannu, Deepak Jindal, and Vishal Yadav 113

Effect of Influential Nodes on Time Varying Opinion Formation Models
Eeti, and Anurag Singh 120

Heart Disease Prediction using Exploratory Data Analysis
R. Indrakumari, T. Poongodi, and Soumya Ranjan Jena 130

Design and Implementation of Fast Booth-2 Multiplier on Artix FPGA
Abhinav Behl, Abhilasha Gokhale, and Neelam Sharma 140

Investigation of Artificial Intelligence Techniques in Finance and Marketing
Raman Tiwari, Smriti Srivastava, and Rajat Gera 149

Decentralized and Secure Communication Architecture for FANETs using Blockchain
Kashish Khullar, Yishu Malhotra, and Anupam Kumar. 158

Preserving the Privacy of Electronic Health Records using Blockchain
Yogesh Sharma, and B. Balamurugan 171

Hand Gesture Recognition using Image Processing and Feature Extraction Techniques
Ashish Sharma, Anmol Mittal, Savitoj Singh, and Vasudev Awatramani 181

Reliability analysis of a 3D Printing process
Imran Siraj, and Pushpendra Singh Bharti. 191

Predicting Information Cascade on Twitter Using Random Walk
Nidhi Singh, Anurag Singh, and Rajesh Sharma 201

Comparative Analysis of Bagging and Boosting Algorithms for Sentiment Analysis
Aman Sawarn, Ankit, and Monika Gupta 210

Intelligent Learning based Opinion Mining Model for Governmental Decision Making
Abhilasha Sharma, and Himanshu Shekhar. 216

Enhanced Image Restoration by GANs using Game Theory
Akshat Kishore, Anupam Kumar, and Nobel Dang. 225

Employing Differentiable Neural Computers for Image Captioning and Neural Machine Translation
Rishab Sharma, Anupam Kumar, Deepak Meena, and Sanidhya Pushp 234

Comparative Analysis of Ant Colony and Particle Swarm Optimization Algorithms for Distance Optimization
Arushi Gupta, and Smriti Srivastava 245

Real-Time Anomaly Recognition Through CCTV Using Neural Networks
Virender Singh, Swati Singh, and Pooja Gupta 254

Critical Analysis of Data Storage Approaches
Shelly Sachdeva, Pranav Sharma, Rupal Jain, and Siddharth Parashar. 264

Review of Clustering Techniques in Control System
Saumya Singh, and Smriti Srivastava 272

Lung tuberculosis detection using anti-aliased convolutional networks
Jodh Singh, Alok Tripathy, Priyam Garg, and Anupam Kumar. 281

Android Malware Detection using LSI-based Reduced Opcode Feature Vector
Adarsh Kumar Singh, Gandharv Wadhwa, Mayank Ahuja, Keshav Soni, and Kapil Sharma 291

Peer to Peer Communication in GUI interface using Lora Technology
Aakash Madaan, Sahil Bansal, Aaditya Sahu, and Farzil Kidwai 299

Denigration Bullying Resolution using Wolf Search Optimized Online Reputation Rumour Detection
Saurabh Raj Sangwan, and MPS Bhatia 305

Efficient Influence Maximization in Social-Networks Under Independent Cascade Model
Nitesh Trivedi, and Anurag Singh 315

Sentimental Analysis of Twitter Data with respect to General Elections in India
Ankita Sharma, and Udayan Ghose 325

Predictive Analysis of Manpower Requirements in Scrum Projects Using Regression Techniques
Kamna Vaid, and Udayan Ghose 335

Android Malware Detection based on Vulnerable Feature Aggregation
Arindaam Roy, Divjeet Singh Jas, Gitanjali Jaggi, and Kapil Sharma 345

A study of learner's satisfaction from MOOCs through a mediation model
Parul Kumar, and Neha Kumar 354

Data Life Cycle Management in Big Data Analytics
Kumar Rahul, and Rohitash Kumar Banyal. 364

Community detection in Networks using Graph Embedding
Rimjhim Agrawal, Md. Arquam, and Anurag Singh 372

Cloud Computing Tools: Inside Views and Analysis
Soumya Ranjan Jena, Raju Shanmugam, Kavita Saini, and Sanjay Kumar 382

A Landscape of XML Data from Analytics Perspective
Pratima Singh, and Shelly Sachdeva 392