2019 International Conference on Computer and Information Sciences (ICCIS 2019)

Sakaka, Saudi Arabia 3 – 4 April 2019



IEEE Catalog Number:

ISBN:

CFP1913T-POD 978-1-5386-8126-8

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:
 CFP1913T-POD

 ISBN (Print-On-Demand):
 978-1-5386-8126-8

 ISBN (Online):
 978-1-5386-8125-1

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



Table of Contents

Survey on Social Network Analysis using Big Data Platform	1
Smart Environment Data Monitoring	6
Failure Function of the Connected $(1,2)$ -or- $(2,1)$ -out-of- (m,n) : F Linear & Circular System $Imad\ Nashwan$	12
A Novel Compact and High-Speed CMOS Parity Generator/Checker	18
An Effective Model-Based Integration Testing Technique for Component-Based Software Abubakar Elsafi, Dayang Jawawi, Abdelzahir Abdelmaboud, Ashraf Ibrahim and Ibrahim Almahy	23
Genetic Algorithm VS Simulated Evolution: A Comparative Study of Evolutionary Optimization Techniques for Object Recognition	29
Efficient Utilization of Energy using Fog and Cloud based Integrated Environment in Smart Grid	33
Simulated Kalman Filter Optimization Algorithm for Maximization of Wireless Sensor Networks Coverage	39
Improved Video Stabilization using SIFT-Log Polar Technique for Unmanned Aerial Vehicles	45
Effective cost optimization approach in Healthcare to Minimize the treatment cost of Brain-tumor Patients	52
Using Gamification and Serious Games for English Language Learning	57
Multi-Model Deep Neural Network based Features Extraction and Optimal Selection Approach for Skin Lesion Classification	63
An improved N-grams based Model for Authorship Attribution	70
Identification of stakeholder's roles in cloud environment: A Survey	76

Ontology Based Approach for Annotating a Corpus of Computer Science Abstracts 82 Zainab Almugbel
Face detection authentication on Smartphones: Usability Assessment based on End-users Experience & Perceptions
Sentiment Analysis of Customer Reviews Using Ensemble Method
Evaluation of Different Horizon Lengths in Single-agent Finite Impulse Response Optimizer
A new Improved Round Robin-Based Scheduling Algorithm-A comparative Analysis106 Yosef Jbara
Phishing Websites Classification using Association Classification (PWCAC)
A Novel Approach for Dealing with Missing Values in Machine Learning Datasets with Discrete Values
Intelligent decision making and planning for outbound call center
Fault classification for Photovoltaic Modules Using Thermography and Machine Learning Techniques
An Efficient Islanding Classification Technique for Single Phase Grid Connected Photovoltaic System
MODEM: an UML profile for MODEling and Predicting software Maintenance before implementation
Short Term Power Load Forecasting using Machine Learning Models for energy management in a smart community
Fog Computing as a Complementary Approach to Cloud Computing
Analysis of NBA Players and Shot Prediction Using Random Forest and XGBoost Models 157 Maram Shikh Oughali, Mariah Bahloul and Sahar Ismail
Convolution, Approximation and Spatial Information Based Object and Color Signatures for Content Based Image Retrieval

Sentiment Classifier: Logistic Regression for Arabic Services' Reviews in Lebanon	168
Comparative study of crossover operators for the MTSP	173
IoT Based Healthcare Infrastructure: A Case Study of Saudi Arabia	179
A Survey of Scheduling Algorithms in Cloud Computing	186
Random Forests for Diabetes Diagnosis	192
Conceptual/Functional Co-Simulation Technique for Embedded Systems	196
Identification of scope creep factors and their impact on software project success	201
SSA-SDA: Subjectivity and Sentiment Analysis of Sudanese Dialect Arabic	206
Test Case Generation using Unified Modeling Language	211
A Proposed Approach For Handling Tradeoff Between Security, Usability, and Cost Suliman Alsuhibany	217
A Mobile App for Diagnosing Horses' Diseases	223
SYN Flood Attack Detection based on Bayes Estimator (SFADBE) For MANET	228
Developing a Network Attack Detection System Using Deep Learning	232
An adaptive activity sequencing instrument to enhance e-learning: an integrated application of overlay user model and mathematical programming on the Web	237
A Fitness-Based Adaptive Synchronous-Asynchronous Switching in Simulated Kalman Filter Optimizer	241
Towards Improved Saudi Dialectal Arabic Stemming	246
Feature Selection: Filter Methods Performance Challenges	252

Oppositional Learning Prediction Operator with Jumping Rate for Simulated Kalman Filter
Badaruddin Muhammad, Zuwairie Ibrahim, Mohd Ibrahim Shapiai, Mohd Saberi Mohamad, Kamil Zakhwan Mohd Azmi and Mohd Falfazli Mat Jusof
Influencing Factors of Social Commerce Behavior in Saudi Arabia
The influence of affects on Agile decisions: Measurement and Structural Models 26 Abdulaziz Alhubaishy, Luigi Benedicenti and Abdulmajeed Aljuhani
A Survey on Authentication Techniques for the Internet of Things
Medical Self-Diagnostic System Using Artificial Neural Networks
IMIAD: Intelligent Malware Identification for Android Platform
Merged technique to prevent SYBIL Attacks in VANETs
Development and Web Performance Evaluation of Internet of Things testbed
Comparing Performance of Commercial Cloud Storage Systems: The Case of Dropbox and One Drive
Empirical Analysis of Charging Time Derived from Mobile Charging Stations
Automated Breast Tumor Diagnosis Using local binary patterns (LBP) Based on Deep Learning Classification
Blockchain in Internet-of-Things: Architecture, Applications and Research Directions31 Farhan Ahmad, Zeeshan Ahmad, Chaker Abdelaziz Kerrache, Fatih Kurugollu, Asma Adnane and Ezedin Barka
Integration of datamining techniques into the Case Based Resoning cycle to predict the result of immunotherapy treatment
Towards an Efficient Vehicular Clouds using Mobile Brokers
Enhancing Security of Biometric Systems Using Deep Features of Hand Biometrics

Sentiment Analysis of Twitter Data
Images research by content
Prototype: User Authentication Scheme for IoT Using NFC
Cloud of Things for Healthcare: A Survey from Energy Efficiency Perspective
Android Applications Scanning: The Guide
An Investigation on Detecting Bad Data Injection Attack in Smart Grid
Cloud and Fog based Integrated Environment for Load Balancing using Cuckoo Levy Distribution and Flower Pollination for Smart Homes
A Conceptual Framework for Measuring Personal Privacy Risks in Facebook Online Social Network
An Enhanced Very Short-Term Load Forecasting Scheme Based on Activation Function 378 Adamu Sani Yahaya, Nadeem Javaid and Kamran Latif
A Survey of Consensus Algorithms for Blockchain Technology
A Hybrid Intrusion Detection System for Cloud Computing Environments
Comparative Analysis for Task Scheduling Algorithms on Cloud Computing
An Improved Image Annotation and Retrieval System Using Hybrid Based Semantic and Context Data Analysis
Security Issues and challenges in IoT
Analyzing Usability of Educational Websites Using Automated Tools
Combining Statistical and Structural Approaches for Arabic Handwriting Recognition 416 Muhammad Kashif Siddhu, Muhammad Tanvir Parvez and Shahrul Nizam Yaakob
Review of Signature-based Techniques in Antivirus Products
Software Energy Measurement at Different Levels of Granularity

Brain Tumor Detection from MRI images using Multi-level Wavelets	34
Algorithmic Solution for Effective Selection of Elicitation Techniques	3 9
Adaptive Novel Downlink Scheduling Policy For Anticipating The Retrogression Of The QoS And Extending The Capacity For Emerging 5G Networks	16
Dynamic Interpretation Approaches for Information Security Risk Assessment	i 3
BIOTECHNOLOGICAL APPLICATIONS OF BIOINFORMATICS IN THE POST GENOMIC ERA	59
Arabic Text Classification: A Comparative Approach Using a Big Dataset	i 5
Evaluation and optimization of TWDM-PON system capacity over single bidirectional optical fiber: Migration promising solution for the next generation PONs	7 0
STLS: Smart Traffic Lights for Emergency Response Vehicles	' 6
ProphSoc : Probability-based Social-based routing Scheme in Mobile Social Network (MSN)	32
A proposed noninvasive point-of-care technique for measuring hemoglobin concentration 48 Asma Yamani, Futun Alqahtani, Noura Alshahrani, Razan Alzamanan, Nida Aslam and Atheer Algherairy	37
Performance Evaluation of Proportional Fairness Scheduling in MmWave Network)1
Brain Tumor Classification: Feature Fusion)7
A Context-aware Authentication Approach for Smartphones)3
Nonlinear Autoregressive Moving-average (NARMA) Time Series Forecasting Using Neural Networks)8
Deep Learning-Based Relay Selection In D2D Millimeter Wave Communications 51 Ahmed Abdelreheem, Osama A. Omer, Hamada Esmaiel and Usama Sayed	13
Multi-Instance Neural Network Architecture for Scene Classification in Remote Sensing51 Dalal A. Alajaji, Munirah A. Alsaeed, Asma S. Alswayed and Haikel S. Alhichri	18

Transition to IPv6 Protocol, Where We Are?	523
Design of YAG Coated Laser Diode Driver with Feedback Mechanism	529
Scalable Quality and Testing Lab (SQTL)	534
New Approach to Determine DDoS Attack Patterns on SCADA System Using Machine Learning	541
Reducing Delay and CO2 Emissions in Multi-lane Intersections using Vehicular Ad-hoc Networks	547
Document Categorization Engine Based on Machine Learning Techniques	. 553
Optimization of MEMS PZR Carbon dioxide Sensor	558