

2018 International Conference on Smart Computing and Electronic Enterprise (ICSCEE 2018)

**Shah Alam, Malaysia
11-12 July 2018**



**IEEE Catalog Number: CFP18NAB-POD
ISBN: 978-1-5386-4839-1**

**Copyright © 2018 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:	CFP18NAB-POD
ISBN (Print-On-Demand):	978-1-5386-4839-1
ISBN (Online):	978-1-5386-4838-4

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

TABLE OF CONTENTS

A NEW ALGORITHM BASED ON THE GBEST OF PARTICLE SWARM OPTIMIZATION ALGORITHM TO IMPROVE ESTIMATION OF DISTRIBUTION ALGORITHM.....	1
<i>Qiuyue Zhao ; Ying Gao</i>	
DEVELOPMENT OF WEB BASED E-COOPERATIVE TRAINING SYSTEM	6
<i>Rayid Alanezi ; Mohammed Ateeq Alanezi ; Nayyar Ahmed Khan</i>	
BIG DATA VISUALIZATION: ALLOTING BY R AND PYTHON WITH GUI TOOLS	12
<i>Sk Ahammad Fahad ; Abdulsamad Ebrahim Yahya</i>	
SOFM AND VECTOR QUANTIZATION FOR IMAGE COMPRESSION BY COMPONENT: REVIEW	20
<i>Shadi M S Hilles</i>	
A MULTI-LAYERED ANNOTATION SCHEME AND COMPUTATIONAL MODEL FOR CO- LEARNING SEMANTIC AND PROSODIC STRUCTURES OF CHINESE DISCOURSE	26
<i>Yuan Jia</i>	
ENHANCING SEAMLESS NURSES-PHYSICIAN COMMUNICATION AFTER-HOURS WITH GOOGLE GLASS	31
<i>Esyin Chew ; Pei Lee Lee ; Weng Han Ho</i>	
DEEP NEURAL CLASSIFIERS FOR EEG-BASED EMOTION RECOGNITION IN IMMERSIVE ENVIRONMENTS	37
<i>Jason Teo ; Jia Tian Chia</i>	
PERSONALIZED NEWS RECOMMENDATION BASED ON MULTI-AGENT FRAMEWORK USING SOCIAL MEDIA PREFERENCES.....	43
<i>Murtaza Ashraf ; Ghalib Ahmed Tahir ; Sundus Abrar ; Mustafa Abdulaali ; Saqib Mushtaq ; Hamid Mukthar</i>	
INTEGRATED HEALTH MONITORING SYSTEM USING GSM AND IOT	50
<i>Suliman Mohamed Fati ; Amgad Muneer ; Dheeraj Mungur ; Ahmad Badawi</i>	
ACCURATE DISPARITY MAP ESTIMATION BASED ON EDGE-PRESERVING FILTER	57
<i>Rostam Affendi Hamzah ; M. Saad Hamid ; A. F. Kadmin ; S. Fakhar Abd Gani ; S. Salam ; T. M. F. Tengku Wook</i>	
ENERGY HARVESTING FOR EFFICIENT 5G NETWORKS	61
<i>Fadhil Mukhlif ; Kamarul Ariffin Bin Nooridin ; Yousef Ali Al-Gumaei ; Abdu Saif Al-Rassas</i>	
NOTPETYA: CYBER ATTACK PREVENTION THROUGH AWARENESS VIA GAMIFICATION	66
<i>Reyner Aranta Lika ; Danushyaa Murugiah ; Sarfraz Nawaz Brohi ; Daksha Ramasamy</i>	
THE ADOPTION OF SOCIAL LEARNING SYSTEMS IN HIGHER EDUCATION: EXTENDED TAM.....	72
<i>Samer Bamansoor ; Bakare Kayode ; Abdulsalam K. Alhazmi ; Syarilla I. Ahmad Saany</i>	
ANOMALY DETECTION IN CYBER SECURITY ATTACKS ON NETWORKS USING MLP DEEP LEARNING	79
<i>T. T. Teoh ; Graeme Chiew ; Edwin J Franco ; P. C. Ng ; M.P Benjamin ; Y. J. Goh</i>	
APPLYING RNN AND J48 DEEP LEARNING IN ANDROID CYBER SECURITY SPACE FOR THREAT ANALYSIS	84
<i>T.T. Teoh ; Graeme Chiew ; Yeaz Jaddoo ; H. Michael ; A. Karunakaran ; Y.J. Goh</i>	
OBSTACLES TO THE APPLICATION OF ELECTRONIC ADMINISTRATION IN THE YEMENI UNIVERSITIES (UNIVERSITY OF ADEN AS A MODEL) AND SOLUTIONS	89
<i>Farid Saleh Amer ; Wael M.S. Yafooz ; Ahmed Abdo Abdullah Al-Manakhi</i>	
THE EFFECT OF THE ORGANIZATION FACTORS, TECHNOLOGY AND SOCIAL INFLUENCES ON E-GOVERNMENT ADOPTION IN JORDAN	99
<i>Yousef A.Baker El-Ebiary</i>	
DESIGN AND DEVELOPMENT OF SMART-JACKET FOR POSTURE DETECTION.....	103
<i>Princy Randhawa ; Vijay Shanthagiri ; Rishabh Mour ; Ajay Kumar</i>	
AN ASSOCIATION RULE MINING-BASED FRAMEWORK FOR PROFILING REGULARITIES IN TACTICS TECHNIQUES AND PROCEDURES OF CYBER THREAT ACTORS	108
<i>Umara Noor ; Zahid Anwar ; Umara Noor ; Zahid Anwar ; Zahid Rashid</i>	
EARLY WARNING SYSTEM FOR THE CONTINUOUSE USE OF INJECTABLE CONTRACEPTION, USING SMS GATEWAY IN THE SUCCESS OF FAMILY PLANNING PROGRAMS.....	114
<i>Febrina Sari ; Fera Damayanti ; Ama Hadiansa ; Elisa Hafrida</i>	
COMPARATIVE PERFORMANCE ANALYSIS BETWEEN AGENT-BASED AND CONVENTIONAL DIASTER MANAGEMENT SYSTEM.....	120
<i>Tooba Samaad ; Ghalib Ahmed Tahir ; Mansoor-Ur-Rahman ; Murtaza Ashraf</i>	

AN APPROACH OF VEHICLE DEFECTS ASSESSMENT UPON MULTI - SOURCE DATA	126
<i>Jundian Song ; Bingrong Dai ; Fengyuan Liu ; Rui Zhang</i>	
A ROBUST METHOD FOR IDENTIFICATION OF PAPER CURRENCY USING OTSU’S THRESHOLDING	132
<i>Muhammad Ahsan Ansari ; Suresh Kumar Mahraj</i>	
CHILD COMPUTER INTERACTION: A CASE OF PRESCHOOL EDUTAINMENT SYSTEMS	137
<i>Tahreem Yasir</i>	
AN EFFECTIVE ENHANCEMENT AND SEGMENTATION OF CORONARY ARTERIES IN 2D ANGIOGRAMS.....	143
<i>Sammer Zai ; Asad Abbas</i>	
FEATURE DATA REDUCTION OF MFCC USING PCA AND SVD IN SPEECH RECOGNITION SYSTEM.....	147
<i>Anggun Winursito ; Risanuri Hidayat ; Agus Bejo ; Muhammad Nur Yasir Utomo</i>	
DESIGN AND ANALYSIS OF GENERALIZED LED INDEX MODULATION OFDM ON FPGA.....	153
<i>Dwi Astharini ; Nurul Ihsan Hariz Pratama ; Sasono Rahardjo ; Fadjar Rahino Triputra ; Ary Syahriar ; Octarina Nur Samijayani</i>	
COMPARISON POWER OF SEMICONDUCTOR LASERS AT WAVELENGTH 1480NM USING INGAAS INGAASP MATERIALS FOR EDFA PUMPING SCHEME.....	160
<i>Satyo Pradana ; Ary Syahriar ; Ahmad H Lubis ; Sasono Rahardjo</i>	
ACCELERATION IMPROVEMENT OF A SIGMOID POWER CONTROL GAME ALGORITHM IN COGNITIVE RADIO NETWORKS	165
<i>Y. A. Al-Gumaei ; K. A. Noordin ; A. M. Mansoor ; K. Dimyati</i>	
MAPREDUCE A COMPREHENSIVE REVIEW.....	170
<i>Mahmoud Ahmad Al-Khasawneh ; Siti Mariyam Shamsuddin ; Shafaatunnur Hasan ; Adamu Abu Bakar</i>	
EXTENDED USER CENTERED DESIGN (UCD) PROCESS IN THE ASPECT OF HUMAN COMPUTER INTERACTION.....	176
<i>Ahamed. M Mithun ; Ahamed. M Mithun ; Wael. M. S. Yafouz</i>	
NETWORK PLANNING OPTIMIZATION OF LONG TERM EVOLUTION RADIO TRANSMITTER USING TAGUCHI’S METHOD.....	182
<i>Suci Rahmatia ; Ali Akbar Tanjung ; Octarina Nur Samijayani ; Widya Nurcahayanti Tanjung</i>	
WIRELESS SENSOR NETWORK PERFORMANCE EVALUATION ON BUILDING WITH ZIGBEE TRANSMISSION	188
<i>Octarina Nur Samijayani ; Annisa Maulidary Muthiah</i>	
PERFORMANCE EVALUATION OF A WDM OPTICAL NETWORK NODE WITH WAVELENGTH CONVERTIBLE OPTICAL BURST SWITCHING.....	194
<i>Rumana Akhter ; Satya Prasad Majumder</i>	
A REVIEW OF EVIDENCE EXTRACTION TECHNIQUES IN BIG DATA ENVIRONMENT	199
<i>Siti Hawa Mokhtar ; Gopinath Muruti ; Zul-Azri Ibrahim ; Fiza Abdul Rahim ; Hairoladenan Kasim</i>	
ADVANCE STRONG AUTHENTICATION STRONG INTEGRITY (ASASI) PROTOCOL FOR LOW COST RADIO FREQUENCY IDENTIFICATION.....	206
<i>Madiha Khalid ; Umar Khokhar ; Muhammad Najam-Ul-Islam</i>	
FACE RECOGNITION AND DETECTION USING RANDOM FOREST AND COMBINATION OF LBP AND HOG FEATURES	212
<i>Huda Mady ; Shadi M. S. Hilles</i>	
REDUCING USB ATTACK SURFACE: A LIGHTWEIGHT AUTHENTICATION AND DELEGATION PROTOCOL	219
<i>Arash Mahboubi ; Seyit Camtepe ; Hasmukh Morarji</i>	
AN EMPIRICAL ANALYSIS OF COST ESTIMATION MODELS ON UNDERGRADUATE PROJECTS USING COCOMO II.....	226
<i>Faiza Tahir ; Mahum Adil</i>	
CHALLENGES AND BENEFITS OF MODERN CODE REVIEW-SYSTEMATIC LITERATURE REVIEW PROTOCOL.....	231
<i>Nargis Fatima ; Suriyati Chuprat ; Sumaira Nazir</i>	
IMPROVED DATA CLASSIFICATION USING FUZZY EUCLIDEAN HYPERBOX CLASSIFIER	236
<i>Chandrashekhar Azad ; Ashok Kumar Mehta ; Vijay Kumar Jha</i>	
AN IMPROVED CHAOTIC IMAGE ENCRYPTION ALGORITHM.....	242
<i>Mahmoud Ahmad Al-Khasawneh ; Siti Mariyam Shamsuddin ; Shafaatunnur Hasan ; Adamu Abu Bakar</i>	
COPY-MOVE IMAGE FORGERY DETECTION BASED ON GABOR DESCRIPTORS AND K-MEANS CLUSTERING	250
<i>H M Shahriar Parvez ; Somayeh Sadeghi ; Hamid A. Jalab ; Ala’ a R. Al-Shamasneh ; Daa M. Uliyan</i>	

ADAPTIVE SHUFFLED FROG LEAPING ALGORITHM FOR OPTIMAL POWER RATE ALLOCATION: POWER LINE	256
<i>Abdullah. M.M Altrad ; Angela Amphwan ; Shadi M.S Hilles</i>	
LATENT FINGERPRINT ENHANCEMENT BASED ON DIRECTIONAL TOTAL VARIATION MODEL WITH LOST MINUTIAE RECONSTRUCTION	261
<i>Abdilahi Liban ; Shadi M S Hilles</i>	
OLD HANDWRITTEN MUSIC SYMBOL RECOGNITION USING DIRECTIONAL MULTI-RESOLUTION SPATIAL FEATURES	266
<i>Savitri Apparao Nawade ; Mallikarjun Hangarge ; Chitra Dhawale ; Mamun Bin Ibne Reaz ; Rajmohan Pardeshi ; Norhana Arsad</i>	
A COMPARATIVE STUDY OF REACTIVE AND PROACTIVE ROUTING PROTOCOLS ON A MOBILITY MODEL IN MOBILE AD HOC NETWORK (MANET).....	270
<i>Martin Appiah ; Rita Cudjoe</i>	
CLASSIFICATION AND DIAGNOSIS USING BACK PROPAGATION ARTIFICIAL NEURAL NETWORKS (ANN)	277
<i>Najeeb Abbas Al-Sammarraie ; Yahya Mahdi Hadi Al-Mayali ; Yousef A. Baker El-Ebiary</i>	
FEATURE LEVEL FUSION FOR MULTI-BIOMETRIC WITH IDENTICAL TWINS.....	282
<i>Bayan Omar Mohammed ; Siti Mariyam Shamsuddin</i>	
USE OF MOBILE PHONE AND FACILITY-BASED SERVER TECHNOLOGY IN ROUTINE IMMUNIZATION AND DISEASE SURVEILLANCE ACTIVITIES IN NIGERIA: STRENGTHENING POLIO SURVEILLANCE	288
<i>Godwin Ubong Akpan ; Sisay Gashu Tegegne ; Tesfaye Erbetto ; Oluseyi Daramola ; Fiona Braka ; Pascal Mkanda</i>	
EFFECT ON DETECTION AND FALSE ALARM PROBABILITIES BY REPORTING CHANNEL BASED CONTRIBUTION (RCBC).....	297
<i>Mubashar Iqbal ; Wahab Khan ; Asim Altaf Shah ; Junaid Imtiaz</i>	
BATTERY MEASUREMENT ON EXPERIMENTAL TESTBED FOR WIRELESS COMMUNICATION THROUGH XBEE	302
<i>Dahlila Putri Dahnil ; Supiah Selamat ; Khairul Azmi Abu Bakar ; Rosilah Hassan ; G. Ahmad Ismail</i>	
DEVELOPING A FRAMEWORK FOR COST-BENEFIT ANALYSIS OF CLOUD COMPUTING ADOPTION BY HIGHER EDUCATION INSTITUTIONS IN SAUDI ARABIA	308
<i>Nouf S. Aldahwan ; Mohamed S. Saleh</i>	
ANALYSIS AND IMPROVEMENTS ON CURRENT POTHOLE DETECTION TECHNIQUES	317
<i>Sumit Srivastava ; Ayush Sharma ; Harsh Balot</i>	
AN EMPIRICAL STUDY ON TONAL PATTERNS OF SHANDONG DIALECTS	321
<i>Yuan Jia</i>	
INVESTIGATION ON THE EFFECT OF DIFFERENT WINDOW SIZE IN SEGMENTATION FOR COMMON SPORT ACTIVITY	326
<i>Nurul Fathiah Ghazali ; Muhammad Amir As'ari ; Norazman Shahrar ; Hadafi Fitri Mohd Latip</i>	
KNOWLEDGE MANAGEMENT IN HEALTH: AN AUSTRALIAN VIEWPOINT	333
<i>Sumayya Banna</i>	
CLOUD COMPUTING REVIEW: FEATURES AND ISSUES.....	337
<i>Ahmad Salah Al-Ahmad ; Hasan Kahtan</i>	
CUSTOMER CHURN PREDICTION MODELLING BASED ON BEHAVIOURAL PATTERNS ANALYSIS USING DEEP LEARNING.....	342
<i>Sanket Agrawal ; Aditya Das ; Amit Gaikwad ; Sudhir Dhage</i>	
EVALUATION OF FEATURE DETECTORS ON REPEATABILITY QUALITY OF FACIAL KEYPOINTS IN TRIANGULATION METHOD	348
<i>Adhi Kusnadi ; Wella ; Rangga Winantyo ; Ivransa Zuhdi Pane</i>	
A COMPLEX PLANE SPECTRAL SUBTRACTION METHOD FOR VEHICLE INTERIOR SPEAKER RECOGNITION SYSTEMS.....	352
<i>Shuiping Wang ; Shiqiang Li ; Chunnian Fan</i>	
MULTI-CLASS SENTIMENT ANALYSIS COMPARISON USING SUPPORT VECTOR MACHINE (SVM) AND BAGGING TECHNIQUE-AN ENSEMBLE METHOD	359
<i>Shashank Sharma ; Sumit Srivastava ; Ashish Kumar ; Abhilasha Dangi</i>	
IDENTIFICATION OF AGE, GENDER, & RACE SMT (SCARE, MARKS, TATTOOS) FROM UNCONSTRAINED FACIAL IMAGES USING STATISTICAL TECHNIQUES.....	365
<i>Rishi Gupta ; Sandeep Kumar ; Pradeep Yadav ; Sumit Shrivastava</i>	
UBIQUITOUS APPLICATION TESTING ON CLOUD	373
<i>Asharul Islam Khan ; Ali Al-Badi</i>	

EXTREME LEARNING MACHINE METHOD FOR DENGUE HEMORRHAGIC FEVER OUTBREAK RISK LEVEL PREDICTION	377
<i>Abdul Mahatir Najar ; Mohammad Isa Irawan ; Dieky Adzkiya</i>	
DESIGN AND EVALUATION OF CLOUD-BASED STUDENTS DATA MANAGEMENT SYSTEM USABILITY	382
<i>Rami Muqbel Al-Sumaty ; Irfan Naufal Umar</i>	
SPATIAL FREQUENCY FILTERING USING SOFM FOR IMAGE COMPRESSION	390
<i>Shadi M S Hilles</i>	
SMART TUTORING SYSTEM FOR ARABIC SIGN LANGUAGE USING LEAP MOTION CONTROLLER.....	397
<i>Heba Fasihuddin ; Shatha Alsolami ; Seham Alzahrani ; Rawan Alasiri ; Afnan Sahloli</i>	
A COST-COMPETITIVE TWIN PROGRAMMABLE MICROCONTROLLER-BASED DIGITAL POTENTIOMETER FOR LOW RANGE RESISTANCE APPLICATION IN AUTOMOTIVE TESTING	402
<i>Wan Shahmisufi Wan Jamaludin ; Muhammad Nasiruddin Mahyuddin ; Noor Hafizi Hanafi ; Dahaman Ishak</i>	
EDUCATIONAL DATA MINING: CLASSIFIER COMPARISON FOR THE COURSE SELECTION PROCESS.....	407
<i>Sumit Srivastava ; Saif Karigar ; Radhesh Khanna ; Rajat Agarwal</i>	
TOWARDS AN OPTIMIZED SMART TRAFFIC FOR CONGESTION AVOIDANCE WITH MULTI LAYERED (ST-CA) FRAMEWORK	412
<i>Nada M. Alhakkak ; Ban Salman ; Najeeb Abbas Al-Sammarraie</i>	
DEVELOPMENT OF GUI FOR AUTOMATED OIL PALM TREE COUNTING BASED ON REMOTE SENSING IMAGERY	415
<i>Shaparas Daliman ; Nina Shakina Md Kamal ; Samsudin Ahmad</i>	
INFLECTIONAL REVIEW OF DEEP LEARNING ON NATURAL LANGUAGE PROCESSING.....	421
<i>Sk Ahammad Fahad ; Abdulsamad Ebrahim Yahya</i>	
MANAGING TEXTUAL DATA SEMANTICALLY IN RELATIONAL DATABASES	425
<i>Wael M. S. Yafooz ; Siti Zalhah Abidin ; Sk Ahammad Fahad</i>	
FLEXIDC:A FLEXIBLE PLATFORM FOR DATABASE CONVERSION.....	430
<i>Wael. M. S. Yafooz ; Sk Ahammad Fahad ; Siti Zaleh Abidin</i>	
AUTOMATED ESSAY SCORING WITH ONTOLOGY BASED ON TEXT MINING AND NLTK TOOLS	437
<i>Jennifer O. Contreras ; Shadi Hilles ; Zainab Binti Abubakar</i>	
RANKY: AN APPROACH TO SOLVE DISTRIBUTED SVD ON LARGE SPARSE MATRICES.....	443
<i>Resul Tugay ; Sule Gündüz Ögüdücü</i>	
THERMAL IMAGE PROCESSING TO RECOGNIZE AND QUANTIFY PAIN IN HUMAN BODY	449
<i>Naresh Pal ; Aravind Kilaru ; Yvon Savaria ; Ahmed Lakhssassi</i>	
ASSESSING THE ROLE OF MOOC ON KNOWLEDGE, ATTITUDE, AND PRACTICE OF GREEN TECHNOLOGY AMONG TVET STUDENTS IN MALAYSIA	454
<i>Siti Nur Hidayah Bt Md Kassim ; Saifullizam Bin Puteh</i>	
Author Index	