

2019 First International Conference of Intelligent Computing and Engineering (ICOICE 2019)

**Hadhramout, Yemen
15 – 16 December 2019**



**IEEE Catalog Number: CFP19V10-POD
ISBN: 978-1-7281-4488-7**

**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:	CFP19V10-POD
ISBN (Print-On-Demand):	978-1-7281-4488-7
ISBN (Online):	978-1-7281-4487-0

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

Preserving Privacy of Paging Procedure in 5thG Using Identity-Division Multiplexing	1
<i>Mamoon Saeed, Rashid Saeed and Elsadig Saeid</i>	
Use of comparative classification techniques to build a system for diagnosing heart diseases.	7
<i>Ayedh Abdulaziz Mohsen, Taher Atrashahy, Naoufel Kharroubi and Somia Noaman</i>	
Survey on Image Retrieval Based on Rotation Invariant Features	17
<i>Mohammed Al-Soswa, Abdullah Al-Shuibi, Ameen Aldarawani and Homaidi Al-Homaidi</i>	
Mammogram Classification using Supervising Vector Machine and K-Nearest Neighbors for Diagnosis of Breast Cancer	28
<i>Shada Khanbari and Adel Haider</i>	
Multi-column Deep Neural Network Based On Particle Swarm Optimization.	34
<i>Amr Al-Furas, Mohammed El-Dosuky and Taher Hamza</i>	
Major Depressive Disorder Early Detectin.	39
<i>Ahmed N. Al-Naggar, Saeed H. Bamashmos, Mohamad Wadaane, Lara Hamawy and Mohamad Wadaane</i>	
Generalized Biharmonic Wang-Ball Surface.	46
<i>Ahmed Kherd, Azizan Saaban and Ibrahim Eskandar</i>	
Image Enlargement Using Biharmonic DP-Ball Surface	52
<i>Ahmed Kherd, Azizan Saaban and Ibrahim Eskandar</i>	
The Impact of Control Flow Obfuscation Technique on Software Protection Against Human Attacks	56
<i>Mohammed Binshamlan, Mohammed Bamatraf and Adnan Zain</i>	
Mathematical Model for Reducing Energy Consumption and Greenhouse Gas Emissions in the Crude Distillation Unit Using the LINGO Program.	61
<i>Badiaa Babaqi</i>	
Exploring Staff Perception of InfoSec Policy Compliance: Palestine Universities Empirical Study	69
<i>Yousef Moh'D Iriqat, Abd Rahman Ahlan, Nurul Nuha Abdul Molok and Noor Hayani Abd Rahim</i>	
Microstrip Antennas for Next Generation Wireless Devices	78
<i>Abdulguddoos S. A. Gaid, Osaid Abdulrahman Saeed and Amjad M. H. Alhakimi</i>	
Hybrid Traffic Dispersion and Network Densification Scheme for 5G Millimeterwave Wireless Networks	82
<i>Redhwan Shaddad, Ahmed Saeed, Refaat Najji and Abdulmajeed Baalawi</i>	
A Review on Current and Old SCADA Networks Applied to Water Distribution Systems .	88
<i>Daniel Jose Franco, Abdullah Muhammed, Shamala K. Subramaniam, Azizol Abdullah, Rui Miguel Silva and Omar Khasro Akram</i>	
Security Management Techniques and Tools for IS Auditing	99
<i>Osamah Almatari, Iman Helal, Sherif Mazen and Sherif Elhenawy</i>	

Ubiquitous Computing and its Security Concerns	107
<i>Omar Ahmed Al-Motwakel and Ammar Thabit Zahary</i>	
Densification of 5G Heterogeneous Cellular Wireless Network Based on Millimeter-Wave Communication	123
<i>Ahmed Al-Hazemi, Amer Ali Al-mekhlafi and Redhwan Qasem Shaddad</i>	
The Development and Evaluation of A Progress Monitoring Prototype Tool for Software Project Management	129
<i>Hamzah Alaidaros, Mazni Omar, Rohaida Romli and Adnan Hussein</i>	
Planning of 5G Heterogonous Wireless Local Network Based on Millimeter Wave Signals for University Campus	138
<i>Redhwan Shaddad, Mohammed Esmail, Ahmed Al-Absy, Yusuf Al-Hagry and Merfat Al-Gobani</i>	
Tethered Balloon Technology for Green Communication in Smart Cities and Healthy Environment	145
<i>S. H. Alsamhi, Mohd Samar Ansari, Liang Zhao, Sau Nguyen Van, S Gupta, Amr A. Alammari, Akram Hatem Saber, Mohammed Y.A.M.Hebah, Marwan Ahmed Abdullah Alasali, Hasan Mohsen Aljabali, Mohd Najim and Ashutosh Srivastava</i>	
Bat Algorithm for Protein Conformational Search	152
<i>Hesham Bahamish, Naziha Al-Aidroos and Aziz Boraik</i>	
Shallow vs. Deep Image Representations: A Comparative Study Applied for the Problem of Generic Object Recognition	159
<i>Yasser Abdullah and Mussa Ahmed</i>	
Ubiquitous Computing Environment: Literature Review	169
<i>Sarah Alshqaqi, Ammar Thabit Zahary and Mohammed Mohammed Zayed</i>	
Performance Analysis for TCP Protocols over mmWave in 5G Cellular Networks	177
<i>Fuaad Abdulrazzak, Eftekar Abdulaziz and Khalid Al-Hussaini</i>	
10Gbps MMW backhaul network based on FBMC-PON-WDM	183
<i>Abdulaziz Al-Hetar and Abdunasser Abdulgaleel</i>	
Pre-service Teachers' Usage of Internet Technology at Faculty of Education-Amran University, Yemen	187
<i>Abdulsalam Al-Hadabi and Mansoor Al-Abdi</i>	
Adapting Sequence Alignments for Text Classification	192
<i>Rasha Bin-Thalab and Seham Bamatraf</i>	
Feature Selection approach using KNN supervised learning for Content-Based Image Retrieval	198
<i>Fahd Alqasemi, Hamza Alabbasi, Fathi Sabeha, Ahmed Alawadhi, Sanad Khalid and Ammar Zahary</i>	
Molecular Structure and Spectroscopic Studies of Some Diazo Dyes Compounds using DFT Method	203
<i>Mohammed Hadi Al-Douh, Haydar A. Mohammad-Salim, Elham Abdalrahem Bin Selim and Hassan Hadi Abdullah</i>	

Breast Tumor Diagnosis using Machine Learning with Microwave Probes	207
<i>Maged A. Aldhaeabi, Saeed M. Bamatraf, Omar M. Ramahi and Saeed A. Binajjaj</i>	
Enterprise Resource Planning Quality Model ERPQM.....	211
<i>Sultan Alanazi, Mohammed Akour and Mohammad Anbar</i>	
Two-Level Frame Aggregation Scheme Under Unreliable Channel Conditions for IEEE 802.11n WLANs: A Survey	216
<i>Fatoumata Sorra, Mohamed Othman, Fakrul Hakim, Mohamed Alrshah, Monir Abdullah and Anwar Saif</i>	
Predict Reservoir Fluid Properties of Yemeni Crude Oils Using Fuzzy Logic Technique ...	223
<i>Salem Baarimah, Abdelrigeeb Al-Gathe and Amer Binmerdhah</i>	
Color-based Object Categorization Model Using Fuzzy HSV Inference System	228
<i>Abdulaziz Al-Hetar, Murad Rassam, Osama Shormani, Abdullah Salem and Huthifa Al-Yousofi</i>	
Multilayer Base Station Antenna at 3.5 GHz for Future 5G Indoor Systems.....	234
<i>Samir Salem Al-Bawri, Md. Shabiul Islam, Khaled Sahal Bin Sahaq, Majdi Salem Marai, Muzammil Jusoh, Thennarasan Sabapathy, Surentiran Padmanathan and Mohammad Tariqul Islam</i>	
Clustering Web Users Based on K-means Algorithm for Reducing Time Access Cost	238
<i>Maged Nasser, Hentabli Hamza, Naomie Salim and Faisal Saeed</i>	
Chi Square and Support Vector Machine with Recursive Feature Elimination for Gene Expression Data Classification	245
<i>Talal Almutiri and Faisal Saeed</i>	
Image Steganography Based on LSB Matching and Image Enlargement	251
<i>Naziha Al-Aidroos and Hesham Bahamish</i>	
Hybrid Artificial Intelligent Approach for Choke Size Estimation in Volatile and Black Oil Reservoirs.....	257
<i>Abdelrigeeb Ali Al-Gathe, Salem Baarimah, Abbas Al-Khudafi and Khaled Ba-Jaalal</i>	
Clustering RDF data using K-medoids	262
<i>Seham Bamatraf and Rasha Bin-Thalab</i>	
Biometric Authentication Security System Using Human DNA	270
<i>Ali Z. Ghazi Zahid, Ibrahim Hasan Mohammed Salih Al-Kharsan, Hesham A. Bakarman, Muntadher Faisal Ghazi, Hanan Abbas Salman and Feras N Hasoon</i>	
Mobile-based Intelligent Skin Diseases Diagnosis System.....	277
<i>Amer Sallam and Abdulfattah Ba Alawi</i>	
Using Chemical Composition of Crude Oil and Artificial Intelligence Techniques to Predict The Reservoir Fluid Properties.....	283
<i>Salem Baarimah, Naziha Al-Aidroos and Khaled Ba-Jaalal</i>	
On the Uplink Detection Performance in Large Scale MU-MIMO System with Different Scenarios	288
<i>Amr A. Alammari, Mohd Sharique and Athar A. Moinuddin</i>	

Performance Evaluation of OLSR and AODV Routing Protocols over Mobile Ad-hoc Networks.....	294
<i>Al-Aiz Hashim, Mujahed Mohammed Farhan and Sabri Alshybani</i>	
Recent Progress of Named Entity Recognition over the Most Popular Datasets	302
<i>Mohammed Al-Bared, Marc Gallofré Ocaña, Abdullah Saeed Ghareb and Tareq Al-Moslmi</i>	
Efficient Power-Delay Management Framework for Enhancing the Lifetime of IoT Devices	311
<i>Ali Bin Salem, Salah Bindahman, Sabri M. Hanshi, Waddah Munassar and Khaled Aladhal</i>	
Theoretical Bases of Identifying Determinants of Protection Intentions towards Bring Your Own Device (BYOD) Protection Behaviours.....	316
<i>Ibrahim Alharthy, Fiza Abdul Rahim, Nor’Ashikin Ali and Amando P Singun Jr</i>	
An Improved Pre-processing Machine Learning Approach for Cross-Sectional MR Imaging of Demented Older Adults.....	325
<i>Afreen Khan, Swaleha Zubair and Muaadhabdo Al Sabri</i>	
OpenFlow Protocol Based on UserSpace (OFUS).....	332
<i>Alzilal Kamal, Fuaad Abdulrazzak and Sharaf Alhomdy</i>	
YEMENI PAPER CURRENCY DETECTION SYSTEM.....	338
<i>Ghazi Alnowaini, Aisha Alabsi and Heba Ali</i>	
Designing an Accurate and Efficient Algorithm for Matching Arabic Names.....	345
<i>Salah Alhagree, Maher Al-Sanabani, Khaled Alalayah and Mohammed Hadwan</i>	
Planning of 5G Millimeterwave Wireless Access Network for Dense Urban Area.....	357
<i>Redhwan Shaddad, Faisal Al-Kmali, Mohammed Noman, Nizar Ahmed, Essa Marish, Abdulwahab Al-Duais, Akram Al-Yafarsi and Fahed Al-Sabri</i>	
A Comparative Study Of Co-Occurrence Strategies for Building A Cross-Domain Sentiment Thesaurus.....	361
<i>Tareq Al-Moslmi, Nazlia Omar, Adel Al-Shabi, Mohammed Al-Bared and Salwani Abdullah</i>	
Data Benchmark Collection of Patients with Malaria for Machine Learning a study in Hadhramout-Yemen.....	369
<i>Rami.A Al - Dhaibani, Mohammed Bamatraf and Khalid Sha’afal</i>	
Performance Enhancement For Gender Recognition Using Trainable Bank of Gabor Filters and NCA.....	372
<i>Khaled Basulaim and Adeeb Dabash</i>	
Rain Streaks Detection and Removal In Single Image â Using Curvelet Transform	377
<i>Ahmed Bahashwan, Phaklen Ehkan, Syed Alwee Aljunid, Anuar Mat Safar, Mazen Bahashwan and Adel Hafeezallah</i>	
Bidirectional Feature Transfer for Cross-Domain Sentiment Analysis.....	387
<i>Tareq Al-Moslmi, Mohammed Al-Bared, Adel Alshabi, Salwani Abdullah and Nazlia Omar</i>	

An Efficient Implementation of LED Block Cipher on FPGA	395
<i>Mohammed Omar Awadh Al-Shatari, Fawnizu Azmadi Hussin, Azrina Abd Aziz, Gunawan Witjaksono Djaswadi, Mohd Saufy Rohmad and Xuan-Tu Tran</i>	
Internet of Things for Smart Healthcare: A Hardware Perspective	400
<i>Mohammad Tabrez Quasim, Mohammad Meraj, S P Singh, P. Johri, Mohammad Ayoub Khan and Monir Abdullah</i>	
Improved Model Population Analysis in Near Infrared Spectroscopy	405
<i>Hasan Ali Gamal Al-Kaf, Abdulqader M. Mohsen and Kim Seng Chia</i>	
Dense 5G Network Planning for Coastal Area at Aden City, Yemen.....	414
<i>Amer Ali Farhan Ahmed, Osama Mahyoub Al-Kamali, Redhwan Qasem Shaddad and Mohammed A. Abduljalil</i>	
An Enhanced Algorithm for Matching Arabic Names Entered by Mobile Phones.....	421
<i>Salah Al-Hagree, Sarah Abdulmalik, Muneer Alsurori and Maher Al-Sanabani</i>	
An Improved N-gram Distance for Names Matching	429
<i>Salah Al-Hagree, Maher Al-Sanabani, Mohammed Hadwan and Mohammed A. Al-Hagery</i>	
Impact of System Quality, Information Quality, and Service Quality on Actual Usage of Smart Government	436
<i>Ali Ameen, Khalifah Alfalasi, Osama Isaac and Nadhmi A. Gazem</i>	
Deluge Harmony Search Algorithm For Nurse Rostering Problems.....	442
<i>Mohammed Hadwan, Masri Ayob, Murad Rassam, Essa Hezzam and Mohammed A. Al-Hagery</i>	