

# **2021 International Conference on Communication & Information Technology (ICICT 2021)**

**Basrah, Iraq  
5-6 June 2021**



**IEEE Catalog Number: CFP21AB7-POD  
ISBN: 978-1-6654-3915-2**

**Copyright © 2021 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:	CFP21AB7-POD
ISBN (Print-On-Demand):	978-1-6654-3915-2
ISBN (Online):	978-1-6654-3914-5

**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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

2021 International Conference on Communication & Information Technology  
(ICICT2021) - Basra – Iraq

Table of Contents

No.	Paper Titles	Authors	Pages
01	Study of knowledge management framework to enhance Enterprise Resource Planning system in green software development process	Sarah M. Y. Almusawi; Mustafa S. Khalefa	1- 6
02	Find Edge Map for Medical Images Based on Texture Characteristics	Sahera A. S. Almola	7- 12
03	Machine Learning based Speaker Gender Classification using Transformed Features	Ahmed I. Ahmed; John Chiverton; David L. Ndzi; Mahmoud AL-Faris	13- 18
04	Performance Comparison of Meta-Heuristic Algorithms PSO and ACO for Optimum Power Flow in Power Systems	Raheel Jawad; Ali A. Kadhum; Malak Moneer	19- 24
05	Dense Compounded Features and Data Association Based Multiple People Tracking	Mahmoud Al-Faris; John Chiverton; David Ndzi; Mohanad Alhabo	25- 30
06	Low-Cost Cloud-based Intelligent Remote Patient Monitoring for Heart Patient	Omar R. Kadhim; Zahraa K. Taha; Sarah W. Abd AL- Majeed	31- 36
07	Automated Ultrasound Video Enhancement	Shaima I. Jabbar; Charles R. Day; Abathar Q. Aladi; Edward K. Chadwick	37- 42
08	Human Vocal Type Classification using MFCC and Convolutional Neural Network	Kriesna B. Pratama; Suyanto Suyanto; Ema Rachmawati	43- 48

09	Stream Mining for Network Sensor Data Using Classification and Metaheuristic Techniques	Haneen F. Kadim; Mehdi E. Manaa	49- 54
10	Bezier Curve Extraction and Compression from Fingerprints Using New Method	Ali Al-Haboobi; Hayder Al-Haboobi	55- 61
11	Calculation and Simulation of Different Speeds of Each Wheel Leg of the Wall Pressing Three-plane Pipe Inspection Robot	Hayder Al-Haboobi	62- 67
12	A Survey of Latest Techniques in Medical Image Classification	Wid A. Hassan; Yossra H. Ali; Nuha J. Ibrahim	68- 73
13	Automatic Glycemia Regulation: Avoiding Hypoglycemia and Hyperglycemia	Amer B. Rakan; Taghreed M. Ridha; Shibly A. AL-Saamray	74- 79
14	Hybrid Filter-Wrapper Text Feature Selection Technique for Text Classification	Osamah M. Alyasiri; Yu-N Cheah; Ammar K. Abasi	80- 85
15	Choosing an Appropriate Feature Selection Method to Enhance Feed-Forward ANN	Meekat H. Ali; Wadhah R. Baiee	86- 91
16	Computing the Relevance Degree of Social Media Network	Raghda M. Alshemari; Haider M. Habeeb	92- 97
17	Coronavirus Optimization Algorithm for Breast Cancer Classification	Obaid S. Nassif; Khalid Shaker	98- 103
18	Covid-19 detection and overcome the scarcity of chest X-Ray datasets based on transfer learning and GAN model	Jihad A. Qadir; Samer K. Jameel; Jafar Majidpour	104- 109
19	Reduction of Packet Error Rate in V2V Communication Based on Machine Learning	Salam Alyassri; Muhammad Ilyas; Ali Marhoon; Oguz Bayat	110- 115
20	Velocity-Based Handover Hysteresis Margin Method for Small Cells 5G Networks	Mohanad Alhabo; Naveed Nawaz; Mahmoud Al-Faris	116- 120

21	Analysis and Implementation of Multiple-Receiver Wireless Power Transfer System	Muthana J. Mohammed; Turki K. Hassan	121- 126
22	Study of 5G Networks as a Promising Future Wireless Mobile	Saif H. Alrubae; Bara B. Burhan	127- 132
23	An Overview of mmWave Communications for 5G	Basim K. J. Al-Shammari; Ismail Hburi; Hayder R. Idan; Hasan F. Khazaal	133- 139
24	LTE-V2I System Performance Under Different Stochastic Channel Model for Highway Scenarios	Hussein F. Abd; Ahmed T. Al-Heety; Mazin H. mahmoud	140- 145
25	Multi-User Single-Input Single-Output Scheduling Performance in Long Term Evolution – Vehicle	Abbas A. H. Alsabbagh; Nather A. Hamid; Sefer Kurnaz	146- 151
26	Perfect Channel Estimation of LTE Downlink Performance under HST Condition.	Fatima F. Al-Azzawi; Zina A. Lateef; Ali M. Mozan	152- 155
27	A High Gain Compact Rectangular Patch Antenna For 5G Applications	Sura K.Ibrahim; Zainab T. Jebur	156- 160
28	Performance Monitoring for Processes and Threads Execution-Controlling	Lailan M. Haji; Subhi R. M. Zeebaree; Omar M. Ahmed; Mohammed A. M. Sadeeq; Hanan M. Shukur; Ahmed Alkhayyat	161- 166
29	The Security Challenges with Cognitive Radio Environments for VANETS	Sattar B. Sadkhan; Doaa Jabbar	167- 173
30	A Robust Fog-Computing Security Approach for IoT Healthcare Applications	Ali B. Jaber; Mehdi E. Manaa	174- 179
31	Evaluating Machine Learning Algorithms to Detect and Classify Attacks in IoT	Maha M. Mohammed; Khattab M. A. Alheeti	180- 184
32	Detecting Malicious Behavior for SANET Based on Artificial Intelligence Algorithms	Mustafa I. H. Al-janabi; Khattab M. A. Alheeti; Abd Al-Kareem A. Alaloosy	185- 190

33	Mobile Attendance Recording System using IoT to aid in Social Distancing	Ohood Sabr; David Sam	191- 196
34	The Wearable Foot Rehabilitation Soft Robot	Dina Al-Shamkhani; Fatima Al-Farhan; Alaa Al-Ibadi	197- 201
35	An Investigation on Neural Spike Sorting Algorithms	Helat A. Hussein; Subhi R. M. Zeebaree; Mohammed A. M. Sadeeq; Hanan M. Shukur; Ahmed Alkhayyat; Karzan Hussein Sharif	202- 207
36	Relative Jacobian-based Cooperative Control of Multi-rotor Drones	Rodrigo S. Jamisola Jr.; Keletso Z. Thebe; Larona P. Ramalepa; Olebogeng Mbedzi	208- 214
37	A New Speech Recognition Model in a Human-Robot Interaction Scenario Using NAO Robot: Proposal and Preliminary Model.	Hussain A. Younis; A.S. A. Mohamed; M. N. Ab Wahab; R. Jamaludin; Sani Salisu	215- 220
38	People Tracking in a Smart Room Using Kinect Sensor	Heba A. Salim; Musaab Alaziz; Turki Y. Abdalla	221- 226
39	Intelligent Object Recognition System for Autonomous and Semi-Autonomous Vehicles.	Mohammed G. Alfahdawi; Khattab M A. Alheeti; Salah S. Al-Rawi	227- 233
40	Impact of Asphalt Layer and Glass Thickness on the Thermal Storage of Pavement	Dheya Abdulamer; Waleed Alani; Abdulkader Kadauw; Salman Omran; Ali Alhraishawi	234- 238
41	On Distributive Ring and Hereditary Property	Shahad M. Moteea; Muthana A. Mahmood	239- 243
42	Some Classes of Analytic Functions Associated with Convolution Operator	Nihad H. Shehab; Abdul Rahman. S. Juma	244- 249

43	On Estimating a Series and Parallel Reliability in Case the Rayleigh-Pareto Distribution in Stress-Strength Model	Emad S. M. Haddad; Feras S. M. Batah	250- 255
44	Twitter APIs for Collecting Data of Influenza Viruses, A Systematic Review	Iqbal A.B. Mohammed; Ahmed S. Abbas	256- 261
45	Logistic Regression Based Next-Day Rain Prediction Model	Ogochukwu Ejike; David L. Ndzi; Abdul-Hadi Al-Hassani	262- 267
46	Thresholding and Hybrid CLAHE-HE for Chicken Egg Embryo Segmentation	Shoffan Saifullah; Andiko P. Suryotomo	268- 273
47	A Developed DS-CDMA Detection based on ICA	Sattar B. Sadkhan	274- 278
48	Signature Verification Time Reduction for GOST Digital Signature Algorithm	Hamza A. A. Al-Sewadi; Ruqa A. Al-Shnawa; Mohammed M. Rifaat	279- 283
49	Design and Implementation of Voice Controlled Robotic ARM	Rashed S. Kanash; Seyed E. Alavi; Ali A. Abed	284- 289
50	Solve Polyalphabetic Cipher Based on Intelligent System	Mohammed H. Ahmed; Ahmed K Shabeeb; Ahmed H. Mohammed	290- 296
51	Decision-making systems based on FWQI to assess of drinking water in Basrah – Iraq	Hamid A. A. Alasadi; Mustafa S. Khalefa; Majida A. Abed; Hind S. Rahim	297- 303
52	Individual Recognition with Deep Earprint Learning	Sarah O. Ali; Raid R. O. Al-Nima; Emad A. Mohammed	304- 309
53	Information Security based on DNA - Importance and Future Trends	Sattar B. Sadkhan	310- 314
54	Keynote Talk-1: Mesh Networks and 6G	Dr. Hatim Zaghoul	315
55	Keynote Talk-2: Virtualization	Dr. Abdul-Hadi Al-Hassani	316