

2017 International Conference on Information and Communication Technologies (ICICT 2017)

**Karachi, Pakistan
30-31 December 2017**



**IEEE Catalog Number: CFP17629-POD
ISBN: 978-1-5386-2187-5**

**Copyright © 2017 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:	CFP17629-POD
ISBN (Print-On-Demand):	978-1-5386-2187-5
ISBN (Online):	978-1-5386-2186-8

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

Contents

The IBA	v
The ICICT 2017	vi
I Speech, Image, and Vision Systems	1
1 Comparison of UAV Based Person Detection and Tracking Techniques	2
<i>Bilal M Yousuf, Hassaan Ali Qazi, and Zakir Hussain</i>	
2 Human Action Recognition Using SIFT and HOG Method	6
<i>Hassaan Ali Qazi, Umar Jahangir, Bilal M Yousuf, and Aqib Noor</i>	
3 Improved Chaotic Image Encryption Scheme for Highly Auto correlated Data Using NCA	11
<i>Zeeshan Yasin, Shifa Nadeem, Abdullah Saleem, and Waqas Ahmed</i>	
4 Google Image Suggestions, Extension for Unfamiliar Technologies	16
<i>Ammarah Khalid, Reema Qaiser Khan, Wafa Qaiser Khan, and Haji Muhammad Paryal Memon</i>	
5 Rating Visual Contents of Website Using Brain Computer Interface	23
<i>Muhammad Saif ul Islam and Humera Farooq</i>	
6 VQ Based Comparative Analysis of MFCC and BFCC Speaker Recognition System	28
<i>Faizan ur Rehman, Chandar Kumar, Shubash Kumar, Atif Mehmood, and Umair Zafar</i>	
II Networks & Computer Security	33
7 Towards Dynamic Network Policy Composition and Conflict Resolution in Software Defined Networking	34
<i>Taimur Bakhshi, and Bogdan Ghita</i>	
8 A Survey on Security Issues, Vulnerabilities and Attacks in Android based Smartphone	40
<i>Jalal Hur and Jawwad Shamsi</i>	
9 Detection and Mitigation of Denial of Service (DoS) Attacks Using Performance Aware Software Defined Networking (SDN)	47

Wajahat Nasir and Muhammad Nasir Muntaz Bhutta

10 Wormhole Attack Detection In Routing Protocol for Low Power Lossy Networks	58
<i>Muhammad Saad Ahsan, Muhammad Nasir Muntaz Bhutta, and Moazam Maqsood</i>	
11 Future Applications and Research Challenges of IoT	68
<i>Habib ur Rehman, Muhammad Asif, and Mudassar Ahmad</i>	
12 Implementation of Information Security Techniques on Modern Android Based Kiosk/Remittance Machine	75
<i>Khalid M. Awan, Muhammad Mudassar Yamin, Zahoor ur Rehman, Peer Azmat Shah</i>	
III Software & Information Systems	81
13 Connectivism: E-Learning of Democratic Values on Social Media Public Spheres	82
<i>Muhammad Shahid Imran, Muniba Fatima, and Ghadhia Kosar</i>	
14 Factors Affecting the Transition Time Between Capability Maturity Model Integration (CMMI) Levels in Software Industry of Pakistan: An Empirical Study	90
<i>Muhammad Noman Riaz</i>	
15 Enabling Scientific Workflow and Gateways using the Standards-based XSEDE Architecture	98
<i>Shahbaz Memon, Morris Riedel, Andrew Grimshaw, Daniel Dougherty, Helmut Neukirchen, Matthias Book, Peter Kascuk, Marton Istvan, and Akos Hajnal</i>	
16 The PeLCoT Model of Software Evaluation	107
<i>Samantha McDonald-Amara and Kathleen (Kay) Greene</i>	
17 EKQI An Enhancement of KDQI, Incorporating Mobile Web Access	115
<i>Mirza M. Faisal Baig, Syed Rizwan Ali, Azmat Khan, Moazzam F. Niazi, Rizwan Iqbal, and Farhan Sohail</i>	
18 Quantification of Investor Emotion in Financial News by Analyzing The Stock Price Reaction	120
<i>Syed Mamoon Ahmed</i>	
IV Artificial Intelligence	125
19 Collaborative Filtering Based Online Recommendation Systems: A Survey	126
<i>Basit Mehmood Khan, Asim Mansha, Farhan Hassan Khan, and Saba Bashir</i>	
20 Short-Term Stochastic Load Forecasting Using Autoregressive Integrated Moving Average Models and Hidden Markov Model	132
<i>Jeffrel Hermias, Kardi Teknomo, and Jose Claro Monje</i>	

21 Determining the Relationship between Speculative Activity and Crude Oil Price Volatility, Using Artificial Neural Networks	139
<i>Saqib Khan, Hamed Shafiee Hasanabadi, and Rene Mayorga</i>	
22 Photovoltaic Power prediction by Cascade forward artificial neural network	146
<i>Idris Khan, Honglu Zhu, Danish Khan, and Manoj Kumar Panjwani</i>	
23 Artificial Neural Network based Maximum Power Point Tracking for Solar Photovoltaics	151
<i>Haider Agha, Zafar Koreshi, and Mohammad Bilal Khan</i>	
24 Modelling Locational Marginal Prices Using Decision Trees	157
<i>Nnamdi Nwulu</i>	
V Information Retrieval	161
25 Context Aware You Tube Recommender System	162
<i>Manzar Abbas, Muhammad Usman Riaz, Asad Rauf, Muhammad Taimoor Khan, and Shehzad Khalid</i>	
26 Personality analysis of the USA public using Twitter Profile Pictures	166
<i>Shafaan Khaliq Bhatti, Asia Muneer, M Ikram Lali, Muqaddas Gull, and Saira Moin U Din</i>	
27 Opinion Mining Approaches: A Comparative Study	174
<i>Afshan Ejaz, Zakia Turabee, Maria Rahim, and Shakeel Khoja</i>	
28 Enhanced Ontological Model for The Islamic Jurisprudence System	181
<i>Jibran R. Khan, Farhan A. Siddiqui, Adnan A. Siddiqui, Muhammad Saeed, and Nasir Touheed</i>	
29 Smartphones Usage in Information Retrieval Under Multichannel Settings: An Assessment of Technological Triggers	186
<i>Muhammad Noman Riaz</i>	
VI ICT & Society	191
30 Virtual Reality as a Physical Training Assistant	192
<i>Syed Faizan Ali, Shaheena Noor, Syed Aaqib Azmat, Ahmed Ullah Noor, and Muhammad Hammad Siddiqui</i>	
31 Automation and Monitoring of Greenhouse	198
<i>Muhammad Faizan Siddiqui, Asim ur Rehman Khan, Neel Kanwal, Haider Mehdi, Aqib Noor, and M. Asad Khan</i>	
32 Taxonomy of Ubiquitous Computing: Applications and Challenges	203
<i>Azeem Ayaz Mirani, Muhammad Suleman Memon, Mairaj Nabi Bhati, Mudasar Ahmed Soomro, and Mushtaque Ahemd Rahu</i>	
33 Teaching Programming: A Mind Map Based Methodology to Improve Learning Outcomes	210
<i>Shahla Gul, Muhammad Asif, Waqar Ahmad, and Uzair Ahmad</i>	

34 An Intelligent Scheme for Source Management	215
<i>Mehre Munir, Mubashar Javed, Saad Hassan kiani, Muhammad Aamir Aman, and Daniyal Babar</i>	
Author Index	221