

# **2021 2nd International Conference on Computation, Automation and Knowledge Management (ICCAKM 2021)**

**Dubai, United Arab Emirates  
19 – 21 January 2021**



**IEEE Catalog Number: CFP21AKM-POD  
ISBN: 978-1-7281-9492-9**

**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:	CFP21AKM-POD
ISBN (Print-On-Demand):	978-1-7281-9492-9
ISBN (Online):	978-1-7281-9491-2

**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

S. No.	TITLE	PAGE No
1	<b>Sales Forecast of Manufacturing Companies using Machine Learning navigating the Pandemic like COVID-19</b> <i>Prabhat Sharma, Shreyansh Khater, Vasudha Vashisht</i> Paper id 002	1
2	<b>Dynamic analysis of an observation tower subjected to wind loads using ANSYS</b> <i>Shahida Anusha Siddiqui, Ali Ahmad</i> Paper id 004	6
3	<b>Processing of Remote Sensing Ocean Parameter Using Downscaling and Machine Learning Techniques</b> <i>Sivasankari Manickavasagam, Dr. R. Anandan</i> Paper id 008	12
4	<b>Sharding Database for Fault Tolerance and Scalability of Data</b> <i>Bahaa Mahmoud Abdelhafiz, Dr. Mourad Elhadef, Ph.D.</i> Paper id 010	17
5	<b>Knowledge Transfer in UAE Higher Education Institutions During Covid-19 Pandemic: Learners' Cannot Learn Surgery by Watching</b> <i>Rajasekhara Mouly Potluri, Mahwish Anjam</i> Paper id 015	25
6	<b>Arabic Speech Emotion Recognition Method Based On LPC And PPSD</b> <i>Omar Ahmad Mohammad, Mourad Elhadef, Ph.D.</i> Paper id 016	31
7	<b>Complexity of Risk Management in Danish Power Transmission Industry: Managing Disregarded and Minor risks</b> <i>Lucas Peter Høj Brasen, Torben Tambo</i> Paper id 017	37
8	<b>Analysis of Emotion Recognition from Cross-lingual Speech: Arabic, English, and Urdu</b> <i>Moomal Farhad, Heba Ismail, Saad Harous, Mohammad Mehedy Masud, Azam Beg</i> Paper id 019	42
9	<b>Precision Medicine Blockchained: A Review</b> <i>Faiza Hashim, Saad Harous</i> Paper id 020	48
10	<b>Performance Evaluation of different Algorithms for Crack Detection in Concrete Structures</b> <i>Luqman Ali, Saad Harous, Nazar Zaki, Wasif Khan, Fady Alnajjar, Hamad Al Jassmi</i> Paper id 021	53
11	<b>Classification of Different Stages of Diabetic Retinopathy using Convolutional Neural Networks</b> <i>P. Saranya, K.M. Umamaheswari, Dr. M. Sivaram, Chirag Jain, Debarpan Bagchi</i> Paper id 024	59
12	<b>End-to-End Elimination of Traffic Elimination Using Self-Adaptive Prediction Model in Cloud</b> <i>K.M. Umamaheswari, M. Sivaram, V. Manikandan, K. Batri, P. Saranya, V. Porkodi</i> Paper id 025	65
13	<b>Forensic Block Chain and it's linkage with Artificial Intelligence: A new Approach</b> <i>Nikitha Mani, Soham Sanjay Parab, Srikuja Manaswini, Sharon Philip, Parli B Hari, Nrashant Singh</i> Paper id 034	70

14	<b>A theoretical workflow for the verification of embedded threats on mobile devices</b> <i>Michelle Ann Joseph, Sharon Philip, Bryan Miranada, Amol Deshmukh, Nrashant Singh</i> Paper id 035	75
15	<b>Design Of Estimator For Level Monitoring Using Data Driven Model</b> <i>Vighnesh Shenoy, Santhosh K V</i> Paper id 036	81
16	<b>Incremental Multi-Feature Tensor Subspace Learning Based Smart Traffic Control System and Traffic Density Calculation Using Image Processing</b> <i>Dr. G. Suseendran, Dr. D. Akila, Dr. D. Balaganesh, Dr. V. R. Elangovan, V. Vijayalakshmi</i> Paper id 039	87
17	<b>Advanced FFT architecture based on Cordic method for Brain signal Encryption system</b> <i>Dr. Souvik Pal, Dr. G. Suseendran, Dr. D. Akila, Dr. R. Jayakarthish, T. Nusrat Jabeen</i> Paper id 040	92
18	<b>Developing Mapping and allotment in Volunteer Cloud systems using Reliability Profile algorithms in a virtual machine</b> <i>Dr. S. Jeyalakshmi, Dr. M. S. Nidhya, Dr. G. Suseendran, Dr. Souvik Pal, Dr. D. Akila</i> Paper id 041	97
19	<b>Heart atherosclerosis detection using FCM+kMeans Algorithm</b> <i>Dr. V. R. Elangovan, Dr. A. J. Rajeswari Joe, Dr. D. Akila, Dr. K. Hema Shankari, Dr. G. Suseendran</i> Paper id 042	102
20	<b>A Neuro-fuzzy based Medical Intelligent System for the Diagnosis of Hepatitis B</b> <i>Dalwinder Singh, Sahil Verma, Jimmy Singla</i> Paper id 044	107
21	<b>Securing Vehicular Ad-Hoc Networks: A DDoS Case Study</b> <i>Wedad Ahmed Al-Dhuraibi, Prof. Mourad Elhadef</i> Paper id 046	112
22	<b>Biometric Authentication With Finger Vein Images Based On Quadrature Discriminant Analysis</b> <i>D. Akila, Dr. S. Jeyalakshmi, Dr. R. Jayakarthish, S. Mathivilasini, Dr. G. Suseendran</i> Paper id 048	118
23	<b>Prediction based Load Balancing and VM Migration in Big Data Cloud Environment</b> <i>P. Tamilarasi, Dr. D. Akila</i> Paper id 050	123
24	<b>Heterogeneous Fair Resource Allocation and Scheduling for Big Data Streams in Cloud Environments</b> <i>R Kiruthiga, Dr. D Akila</i> Paper id 053	128
25	<b>Credit Card Fraud Detection System based on Operational &amp; Transaction features using SVM and Random Forest Classifiers</b> <i>C. Sudha, Dr. D. Akila</i> Paper id 055	133
26	<b>Prediction Performance of Crime Against Women Using Rule Based Decision Tree J48 Classification Algorithms in various states of India</b>	139

	<i>Mrs. S. Lavanya, D. Akila</i> Paper id 056	
27	<b>Graphical Framework For Review Spammer Group Detection Using Metadata</b> <i>Thahira A, Sabitha S</i> Paper id 057	145
28	<b>A Review of Cyber Securities in Smart Grid Technology</b> <i>Asif Iqbal Kawoosa, Dr. Deepak Prashar</i> Paper id 058	151
29	<b>Design and Implementation Issues in Autonomous Vehicles- A Comparative Review</b> <i>Najamul Saqib, Mir Mohammad Yousuf, Mamoon Rashid</i> Paper id 060	157
30	<b>Application of Computational Technique to Assess the Performance of Staff for Sustainable Business</b> <i>Nagaraju Dasari, Mahendra Parihar</i> Paper id 061	163
31	<b>Smart Access Card system to mitigate the Covid-19 Outbreak</b> <i>Fathimath Shahina C.A., Saifudeen A Kabeer</i> Paper id 062	168
32	<b>Enhancing Marketing Strategies and Analytics Through Artificial Intelligence</b> <i>Dr. Anubhuti Gupta, Dr. Komal Tomar</i> Paper id 063	174
33	<b>Reforming fixed asset database in university using SQL database management system</b> <i>Dr. T. Varun, Dr. G. Suseendran</i> Paper id 064	180
34	<b>Integration of NIC algorithms and ANN: A review of different approaches</b> <i>Ramandeep Kaur, Amar Singh, Jimmy Singla</i> Paper id 066	185
35	<b>Recent Routing Approaches for WMN's: A State of Art</b> <i>Bhanu Sharma, Amar Singh, Jimmy Singla</i> Paper id 067	191
36	<b>Analyzing COVID-19 Dataset through Data Mining Tool "Orange"</b> <i>Uzma Thange, Vinod Kumar Shukla, Ritu Punhani, Wonda Grobbelaar</i> Paper id 073	198
37	<b>Importance Of Intelligent Automation In Post COVID Era: A Study</b> <i>Ravinder Kumar, Kawin Singh V, Harish K, Bhavish R K</i> Paper id 082	204
38	<b>A Study on Indicators for Open Innovation Performance in Food Processing SMEs in India through AHP Approach</b> <i>Supriya Lamba Sahdev, Prof. Dr. Gurinder Singh, Dr. Navleen Kaur</i> Paper id 083	210
	<b>Towards Technology Attitude comparison of Hungarian and Indian Student for Real-Time</b>	

39	<i>Chaman Verma, Zoltán Illés, Veronika Stoffová, Viktoria Bakonyi</i> Paper id 086	216
40	<b>Telecommunication &amp; Networking – Changing Customer Profile &amp; Preferences</b> <i>Anupam Mehrotra, Satish Menon</i> Paper id 089	221
41	<b>Review and analysis of data security using image steganography</b> <i>Bharat Kapila, Tejinder Thind</i> Paper id 097	227
42	<b>Impact of Influencers on Consumer Behaviour: empirical study</b> <i>Priya Govindan, Ibrahim Alotaibi</i> Paper id 103	232
43	<b>Efficient Feature Selection Technique based on Fast Fourier Transform with PSO-GA for Functional Magnetic Resonance Imaging</b> <i>Mamoon Rashid, Harjeet Singh, Vishal Goyal</i> Paper id 110	238
44	<b>Second Round of FinTech - Trends and Challenges</b> <i>Anupam Mehrotra, Satish Menon</i> Paper id 111	243
45	<b>Digital Conservation: Unravelling Tourists’ Expectation from Online Amenities of Sunderbans Tiger Reserve, India</b> <i>Ananya Ghosh, Dr. Pankaj Kumar Tyagi, Dr. Pawan Gupta</i> Paper id 113	249
46	<b>Analysing the Opportunities for Technological Entrepreneurship: A Conceptual Framework for Hospitality-Housekeeping Industry</b> <i>Priyanka Verma, Dr. Malini Singh, Dr. Neeraj Aggarwal</i> Paper id 114	254
47	<b>IoT Based Weather Monitoring System Using Arduino-UNO</b> <i>Lipsa Das, Akhilesh Kumar, Saurav Singh, Ahmad Raheel Ashar, Rishab Jangu</i> Paper id 115	260
48	<b>Novel Detection Technique For Framejacking Vulnerabilities In Web Applications</b> <i>Asra Kalim, C. K. Jha, Deepak Singh Tomar, Divya Rishi Sahu</i> Paper id 116	265
49	<b>Single sink position in wireless sensor networks</b> <i>Deghima Manel, Lemia Louail, Saad Harous</i> Paper id 119	271
50	<b>Gas Leakage Source Localization and Boundary Estimation using Mobile Wireless Sensor Network</b> <i>Subhash Kumar, Sameer Chouksey</i> Paper id 120	276
51	<b>Automatic Speaker Recognition using Deep Neural Network Classifiers</b> <i>Abdikarim Ali Moumin, Smitha S Kumar</i>	282

	Paper id 121	
52	<b>Geo-SID: A new Geocast Safety Information Dissemination protocol in VANET for urban areas</b> <i>Oussama Senouci, Zibouda Aliouat, Saad Harous</i> Paper id 123	287
53	<b>Investigating TikTok as an AI user platform</b> <i>Mark Eugene Z. Francisco, Sonakshi Ruhela</i> Paper id 125	293
54	<b>Laying the table from the cloud during Lockdown: Impact of Covid crisis on Cloud Kitchens in India</b> <i>Dr. Alka Maurya, Dr. Geetha Subramaniam, Dr. Sweta Dixit</i> Paper id 129	299
55	<b>Annular liquid sheets and its dynamics - A review</b> <i>Raveendran Meloth Swaroop, Kizhakkalan Sudhakaran Siddharth</i> Paper id 130	303
56	<b>Educational Association Mining on the Use of Media Platforms for e-Learning</b> <i>Aparna Agarwal, Raza Hasan, Vikas Rao Naidu, Mohammed Saqib, Shyamala Srinivas, Karan Jesrani</i> Paper id 131	309
57	<b>Establishing link between Talent Development Practices and Organizational Performance</b> <i>Rajeev Ranjan Mishra, Dr. Malini Singh, Dr. Sanjeev Kumar</i> Paper id 141	315
58	<b>Monetizing Personal Brand for Business Success, Financial Security and Career Longevity- Sentiment Analysis in COVID 19 Era</b> <i>Dr Navleen Kaur, Supriya Lamba Sahdev, Prof. Dr. Gurinder Singh, Nisha Tokas</i> Paper id 147	321
59	<b>Key element in online education to activate students with real-time tools</b> <i>Viktória Bakonyi, Zoltán Illés, Chaman Verma</i> Paper id 155	326
60	<b>Phrases based Document Classification from Semi Supervised Hierarchical LDA</b> <i>Rohit Agarwal</i> Paper id 166	332
61	<b>Analysis of thermal energy storage system to achieve net zero energy building in Composite Climate</b> <i>Jaspal Singh, R.K. Tomar, N. D. Kaushika</i> Paper id 176	338
62	<b>Quicker Sort Algorithm: Upgrading time complexity of Quick Sort to Linear Logarithmic</b> <i>Dr. Sandeep Kumar Budhani, Dr. Naveen Tewari, Dr. Mukesh Joshi, Kshitij Kala</i> Paper id 178	342
63	<b>Comparative study of Automotive Sensor technologies used for Unmanned Driving</b> <i>Kritika Rana, Dr. Parampreet Kaur</i>	346

	Paper id 179	
64	<p><b>Bitcoin: An Investment Management Tool – Comparison between risk and average returns of different financial assets with BTC</b></p> <p>Dr. Navleen Kaur, Supriya Lamba Sahdev, Prof. Dr. Gurinder Singh, Ashna Garg</p> <p>Paper id 181</p>	351
65	<p><b>Integration of Artificial Intelligence into software reuse: An overview of Software Intelligence</b></p> <p><i>Amandeep Kaur Sandhu, Ranbir Singh Batth</i></p> <p>Paper id 182</p>	357
66	<p><b>Development of Hindi Mnemonics for generating private keys used in Hierarchical Deterministic wallets</b></p> <p><i>Rajeev Kanday, Ranbir Singh Batth</i></p> <p>Paper id 184</p>	363
67	<p><b>Program Controls Effectiveness Measurement Framework &amp; Metrics</b></p> <p><i>Abhinav Palia, Caroline Devlin, Megan Yelorda, Angela Morrison</i></p> <p>Paper id 185</p>	369
68	<p><b>Enhancement of Retinal Image by Hybrid Approach</b></p> <p><i>Manjot Kaur, Dr. Amit Kamra</i></p> <p>Paper id 240</p>	374