2022 Applied Informatics International Conference (AilC 2022)

Serdang, Malaysia 18-19 May 2022



IEEE Catalog Number: CFP22BM1-POD **ISBN:**

978-1-7281-8429-6

Copyright © 2022 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:	CFP22BM1-POD
ISBN (Print-On-Demand):	978-1-7281-8429-6
ISBN (Online):	978-1-7281-8428-9

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



Table of Contents

Towards Healthcare Organizational Performance Deriving by Big Data Analytics Quality Factors: A Systematic Literature Review Wan Mohd Haffiz Mohd Nasir, Yusmadi Yah Jusoh, Rusli Abdullah and Salfarina Abdullah	1
Conceptualizing IoT-based Smart Campus Adoption Model for Higher Education Institutions: A Systematic Literature Review Radhwan Sneesl, Yusmadi Yah Jusoh, Marzanah A. Jabar and Salfarina Abdullah	7
Correcting Ambiguous Japanese Sentences Based on Japanese Dependency Analysis Shota Nemoto, Eiji Kamioka, Manami Kanamaru and Phan Xuan Tan	13
News Analytics to Predict Malaysian Telco Stock Price Performance: Dataset Preparation Rozi Nor Haizan Nor, Muhammad Akmal Mahathir and Nur Ilyana Ismarau Tajuddin	19
Spoken Digit Recognition Using Convolutional Neural Network Safie S.I	24
Understanding Students' Online Learning Performance During Covid-19 Pandemic in Bangladesh Rakib Ahmed Saleh, Rozi Nor Haizan Nor, Md. Tariqul Islam, Yusmadi Yah Jusoh and Salfarina Abdullah	28
A Prototype Development and Usability Evaluation of an E-health System Sharifah Sumayyah Engku Alwi, Masrah Azrifah Azmi Murad, Salfarina Abdullah and Azrina Kamaruddin	34
Using Ontology-Centric Knowledge Integration Framework as a Foundation to Innovative Problem-Solving Mahmoud E. Said, Marzanah A. Jabar, Fatimah Sidi and Khaironi Yatim Sharif	40
An Exemplifying Study of the of E-Learning Adoption During Covid-19 Pandemic in Oman Issaa Mohamed Hassan Al Maashri, Shounak Ghosh and Umar Ali Bukar	45
Mobile Social Media Use in Flooding Emergencies: The Impact of Information Seeking and Sharing through Social Media Crisis Communication and Resilience Model Umar Ali Bukar, Marzanah A. Jabar, Fatimah Sidi, Rozi Nor Haizan Nor, Salfarina Abdullah and Iskandar Ishak	51
Empirical Insights on Gender-Based Computer Font Preference of Dyslexic Juvenile Learners: A Case Study in Sarawak, Malaysia Mohd Khairulazwan Sulaiman, Irwandi Hipiny and Hamimah Ujir	57
Who is Tweeting about COVID-19 Fernando Xavier , Gustavo Rick Amaral, João Olenscki, André Luis Acosta, Maria Daniela Araujo Vianna, Maria Anice Mureb Sallum and Antonio Mauro Saraiva	62
A Conceptual Framework for Securing IoT-BIM Baydaa Hashim Mohammed, Hasimi Sallehuddin, Nurhizam Safie, Afifuddin Husairi and Fadele Ayotunde Alaba	68

Malaysian Ethnicity Classification based on Face Images using Deep Learning Mohd. Faris Iskandar Sulfii, Hamimah Ujir, Malverick Irvine Anak Moris @ Michael and Irwandi Hipiny	72
AR Mobile Application Evaluation for Learning History: High School Students' Perspective Jin-Zhi Low, Azrina Kamaruddin, Muhammed-Dzulkhiflee Hamzah, Novia Admodisastro and Salfarina Abdullah	77
Dimensions in Measuring Performance of Agile Software Development Projects: A Literature Review Hooi Ching Beh, Yusmadi Yah Jusoh, Rusli Abdullah and Sa'adah Hassan	83
Requirement Analysis and Problem Finding Using Design Thinking Concepts in Students' Information System Projects Nurul Zawiyah Mohamad, Missie Chundau and Francis Yii Zhi Yang	88
Estimation of the Rat Population and the Number of Leptospirosis Infectious Rats via the Degree of Infectious Spatial-Temporal Weighting (DISTW) Method Sufi Hafawati Ideris, Norshahida Shaadan, Syazreen Niza Shair, Nor Azah Samat, Farah Shafawati Mohd-Taib, Hui Yee Chee, Muhammad Zahin Rosli and Yien Ping Wong	93
Systematic Evaluation Approach to Support Effective Web Interaction Among Visually Impaired Users Mariam Azwa Yazid and Azrul Hazri Jantan	99
S-ADS: Spectrogram Image-based Anomaly Detection System for IoT Networks Zeeshan Ahmad, Adnan Shahid Khan, Sehrish Aqeel, Azlina Ahmadi Julaihi, Seleviawati Tarmizi, Noralifah Annuar and Mohd. Sayeeduddin Habeeb	105
Latency Analysis of Cloud Infrastructure for Time-Critical IoT Use Cases Kartinah Zen, Saju Mohanan, Seleviawati Tarmizi, Noralifah Annuar and Najm Us Sama	111
Current Software Defect Prediction: A Systematic Review Yahaya Zakariyau Bala, Pathiah Abdul Samat, Khaironi Yatim Sharif and Noridayu Manshor	117
Self-Configured Workflow Platform for MapReduce Job Execution in Cloud Environment Muntadher Saadoon and Novia Admodisastro	122
Employing Public Key Infrastructure to Encapsulate Messages During Transport Layer Security Handshake Procedure Nayeem Ahmad Khan, Adnan Shahid Khan, Hushmat Amin Kar, Zeeshan Ahmad, Seleviawati Tarmizi and Azlina Ahmadi Julaihi	126
A Proposed Implementation of Internet of Things as a Teaching Aid for Learning Science Collaboratively Khairul Shafee Kalid, Wan Fatimah Wan Ahmad, Muhammad Shafiq Shahrul Amar, Dwi Sulisworo, Meita Fitrianawati and Arsyad Cahya Subrata	131

How Engaged is Your Student? A Review of Online Learning Tools Rahmalan, H., Mohamad, S.N.M, Ahmad, N., Abdul Rahman, A.F.N., Mohamat Nasir, M. N. I, Sidek, S.	137
Biodiversity Knowledge Retrieval Application Using Natural Language Processing Technique Muhammad Safiyan Roslan and Sharifalillah Nordin	143
Biodiversity Repository and Retrieval System for Malay Language Hazimah Pethie and Sharifalillah Nordin	148
Conceptual Review of DoS Attacks in Software Defined Networks Najmun Nisa, Adnan Shahid Khan, Zeeshan Ahmad, Sehrish Aqeel, Jamil Asim and Shehroz Afzal	154
Real-Time Face Mask Detector Using Deep Learning Yee Kah Chun, Rajermani Thinakaran and Sarasvathi Nagalingham	159
The Development of an Android Automated Testing Tool: CrashDroid Kwang Yi Goh, Salmi Baharom, Jamilah Din and Nurfadhlina Mohd Sharef	165
Factors that Influence Opportunities and Challenges of Social Commerce in Emerging Market Josephine Samuel, Olivia The and Richard	N/A
E-Service Quality Model for Assessing Customer Satisfaction of Mobile Banking Service Jude Ndubuisi Owuamanam, Salfarina Abdullah, Yusmadi Yah Jusoh and Noraini Che Pa	178
Correlation of Mathematics Anxiety and Mathematics Performance Norhatta Mohd and Siti Mistima Maat	N/A
Systematic Literature Review of Metaheuristic Methodologies for High School Timetabling Problem Rooszana A Rahman, Juliana Wahid, Alawiyah Abd Wahab, Syahida Hassan, Rahayu Ahmad and Azizah Ahmad	190
Adoption of Fintech Products and Services in Klang Valley Nur Aqilah Zainordin, Nor Aziyatul Izni, Noor Zira Azlin Md Zaki, Saslina Kamaruddin, Ang Wen Rui and Shannon Chen Wen Qi	N/A
Edge Computing for Critical Infrastructure Delay Sensitive Applications: Current Trends and Future Directions Kefas Yunana, Ishaq Oyebisi Oyefolahan, and Sulaimon Adebayo Bashir	201
Model of Continuous Usage of Mobile Payment Norfaridatul Akmaliah Othman, Doni Purnama Alamsyah, Leni Susanti and Didin Syarifuddin	N/A