

2022 IEEE Creative Communication and Innovative Technology (ICCIT 2022)

**Tangerang, Indonesia
22-23 November 2022**



**IEEE Catalog Number: CFP22BS5-POD
ISBN: 978-1-6654-6878-7**

**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:	CFP22BS5-POD
ISBN (Print-On-Demand):	978-1-6654-6878-7
ISBN (Online):	978-1-6654-6877-0

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

2022 IEEE Creative Communication and Innovative Technology (ICCIT)

CONTENTS

Analysis of Renewable Energy Utilization Using Solar Power Technology in Eliminating Microplastic Emissions.....1

Untung Rahardja, Po Abas Sunarya, Ninda Lutfiani, Marviola Hardini and Humam Rafif Dananjaya

Opportunities and Conditions in Education on Blockchain Gamification Technology.....7

Budi Tjahjono, Muhammad Dede Soleman, Aulia Azmi, Shofiyul Millah, Riri Andriani and Elisa Royani Dewi

A Review on Feature Selection Approaches and Few Prominent Research Gaps for Image Classification.....15

Purushottam Das, Dinesh C. Dobhal, Ankur Singh Bist, Fitra Putri Oganda, Sudrajat, Ihya Syihabul Fadli and Hardjanto Nusantoro

Optimizing SEO (Search Engine Optimization) Implementation on a Website Content Management System.....22

Muhammad Rachman Mulyandi, Nanda Septiani, Muhamad Yusup, Mochamad Heru Riza Chakim and Nursohit

AI-Enabled Blockchain for Supply Chain in Agriculture.....28

Ankur Singh Bist, Bhupesh Rawat, Anggy Giri Prawiyogi, Wahyuningsih, Nanda Septiani, Muhammad Fakhrezzy and Dimas Bagus Saputra

Integrating Blockchain for Renewable Energy in Digital Business Era.....33

Felix Sutisna, Dwi Apriliasari, Muhammad Dede Soleman, Muhammad Faizal Fazri, Dwi Andayani, Qurotul Aini

Increasing Student Satisfaction Learning Outcomes by using the Mobile Learning Platform.....42

Esi Hairani, Ismail, Viola Tashya Devana, Suwardi, Muhamad Lutfi Huzaifah, Efa Ayu Nabila, Elisa Royani Dewi and Ahmad Bayu Yadila

The Effect of Digital Technology on Student Policy, Academic Achievement and Outcomes.....48

Ahmad Zulva Adi, Yunita Wulansari, Dwi Julianingsih, Tilly Raycitra Widya, Alfiah Khoirunisa and Nova Ramadhona

Startupreneur Multiproduct: Visionary iLearning on Digital Business.....58

Dadang Amiruddin, Galih Putra Cesna, Ruli Supriati, Ninda Lutfiani and Tio Nurtino

Artificial Intelligence Based on Recommendation System for Startup Matchmaking Platform.....65

Ninda Lutfiani, Sutarto Wijono, Untung Rahardja, Ade Iriani and Efa Ayu Nabila

A Hybrid Approach for Feature Subset Selection and Classification Algorithm.....70

Purushottam Das, Ankur Singh Bist, Primasatria Edastama, Bob Subhan Riza, Dwi Julianingsih, Erick Febriyanto, Ahmad Ramadan and Lusyani Sunarya

Artificial Intelligence in Tourism Environments : A Systematic Literature Review.....76

Eka Purnama Harahap, Eko Sedyono, Zainal Arifin Hasibuan, Untung Rahardja and Ihsan Nuril Hikam

An Analytic Study of Learning Management System in Higher Education.....N/A

Cicilia Sriliasta Bangun, I Komang Mertayasa, Mardiana, Giandari Maulani, Nuke Puji Lestari Santoso, Amitkumar Dudhat, Bayu Ajie Putra Seno and Nimatul Khofifah

Deep CNN–Real ESRGAN: An Innovative Framework for Lung Disease Prediction.....83

Vertika Agarwal, M. C. Lohani, Ankur Singh Bist, Lucas Rahardja, Marviola Hardini, and Gadis Mustika

iLearning Education 2.0 Based MooC Platform as Collaborative Learning Smart Technology.....89

Padeli, Eko Sedyono, Zainal Arifin Hasibuan, Sabda Maulana and Adam Faturahman

Improved Intrusion Detection System (IDS) Performance using Machine Learning: A Comparative Study of Single Classifier and Ensemble Learning.....95

Taqwa Hariguna and Andhika R. Hananto

Single and Multi-Documents Text Summarization Technologies for Natural Language Processing: a Systematic Review on Method and Dataset.....102

Arief Agus Sukmandhani, Arief Ramadhan, Edi Abdurachman and Agung Trisetyarso

Identifying The Types and Platforms of the Metaverse – a Systematic Literature Review.....109

S. Pradono Suryodiningrat, Harjanto Prabowo, Arief Ramadhan and Harry Budi Santoso

Scheme iLearning DApps for Education using Blockchain-Based.....115

Qurotul Aini, Danny Manongga, Untung Rahardja, Irwan Sembiring and Ananda Uswatun Hasanah

The University's Integrated ICT Infrastructure: UTAUT2 Implementation.....122

Komputerio Akbar, Arief Ramadhan, Edi Abdurachman, Agung Trisetyarso and Muhammad Zarlis

Server Cloud Based Security Surveillance Systems: a Design Science Research.....N/A

Alexander Nurenie, Arief Ramadhan, Edi Abdurachman, Agung Trisetyarso and Muhammad Zarlis

Risk Assessment Analysis on Mobile Banking Using Cobit 5 Framework.....131

Joy Nashar Utamajaya, Arief Ramadhan, Edi Abdurachman, Agung Trisetyarso and Muhammad Zarlis

FAST-Based Production Monitoring Information System for Extra-High Voltage Power Line Towers.....137

Sutrisna, Giandari Maulani, Muhammad Rehan Anwar, Tio Nurtino, Bhima

Data Mining to Predict the Ability of Prospective Customer Credit Payments.....N/A

Fifit Alfiah, Usanto S, Ade Setiadi, Ajay Supriadi, Yogasetya Suhandu and Lela Nurlaela

The Role of Artificial Intelligence in Digital Marketing.....N/A

Muhamad Yusup, Sri Yulianto Joko Prasetyo, Theophilus Erman Wellem, Rifan Efendy and Ruli Supriati

The Role of Digital Technologies in Incorporating Neoliberal Principles Into Higher Education in Indonesia.....145

Rahul Bhandari

Concept, Technology, Barriers to Smart Village: A Systematic Literature Review.....N/A

Joy Nashar Utamajaya, Meyliana, Harjanto Prabowo and Achmad Nizar Hidayanto

A Bibliometrics Study: Enhancing Management Education using Blockchain Technology.....152

Riya Widayanti, Budi Tjahjono, Ninda Lutfiani, Galih Putra Cesna, and Sugeng Santoso

Implementation Public Address System Design Based on Audio Over Ethernet (AoE).....158

Ignatius Agus Supriyono, Eko Sedyono, Iwan Setyawan, Dendy Jonas Managas, Dedy Prasetya Kristiadi, Nesti Anggraini Santoso and Tuti Nurhaeni

Optimization of Hajj Financial Technology Assets using Hierarchy Analytic.....N/A

Suhaji Lestiadi, Yuswar Zainul Basri, Anggito Abimanyu, Tatik Mariyanti, and Nanda Septiani

E-Book Marketing Strategy Using the Business Model Canvas: A Systematic Literature Review.....N/A

Ardi, Muhammad Wali, Eka Purnama Harahap, Fitra Putri Oganda, Nimatul Khofifah and Sulistio

New Student Registration Platform Innovation Based Interactive Virtual Customer Relationship Management (vCRM).....163

Chandra Lukita, Dewi Sri Surya Wuisan, Po Abas Sunarya, Dede Cahyadi, Mardiana, Agung Yudo Ardianto and Alfiah Khoirunisa

Design of Know Your Customer (KYC) Using Blockchain Technology.....169

Ria Panjaitan, Diana Putri Lazirkha, Mustofa Kamil, Ruli Supriati and Wahyu Nur Wahid

The Role of Blockchain Technology Applications in Building IoT-Based Smart Cities.....175

Dendy Jonas Managas, Danny Manongga, Irwan Sembiring, Indrastanti R. Widiyanti and Sabda Maulana

Integration of Renewable Energy Technology in Waste Recycling Utilization.....181

Alwiyah, Padeli, Maulana Yusuf, Hendra Kusumah and Suwandi

Accelerate Business Change and The Effect of Energy on The Electrical Network Technology.....188

Widhy Setyowati, Mochamad Heru Riza Chakim, Vonda Elmanda, Annisa Risqi Sulistya Kusuma Wardhani, Mohammad Ifran Sanni and Euis Sitinur Aisyah

Predicting Tuition Fees for University of Raharja Students Using Artificial Intelligence.....198

Nina Rahayu, Hindriyanto Dwi Purnomo, Wiwin Sulisty, Sudaryono and Agung

The adoption of Technology for Sharia Banking using Analytic Network Process (ANP) method.....N/A

Wildan Sanjoyo, Tatik Mariyanti and Nirdukita Ratnawati

Microfinance Management Strategy using Poverty Reduction Technology.....N/A

Raden Heriyanto, Tatik Mariyanti, and Riri Andriani

Blockchain Technology Based Credibility Verification in E-Journal Entities.....203

Sri Watini, Zulkarnain Kedah, Chandra Lukita, Petrus Sokibi, Gadis Mustika, Reymund Rahardja, Arsi Yulianjani and Husni Teja Sukmana

A Bibliometric Study for Blockchain Technology in Academic Journals.....209

Suryari Purnama, Daelami Ahmad, Ninda Lutfiani, Arif Darmawan, Mardiana, Yochebed Anggraini Terah and Nadia Nur Azizah

Implementation of the Tableau Application to Determine Earthquake Prone Areas with Geolocation Features.....215

Tata Subrata, Danang Andri Yanto, Agung Rizky, Ihsan Nuril Hikam and Hery Juan Situmorang

Blockchain Technology Evolution Trends Bibliometrics Analysis on Scopus Database using VOSviewer.....221

Heriyanti, Nur Azizah, Galih Putra Cesna, Nesti Anggraini Santoso and Yulia Putri Ayu Sanjaya

Comparison Analysis of Prediction the Number of Covid-19 Cases Using Support Vector Regression and Long Short-Time Memory.....227

Henderi, Sudaryono, Tubagus Mochamad Isnaeni, Euis Sitinur Aisyah, Mukti Budiarto and Hamdani

Covid-19 Systematic Overview Decentralization Using Blockchain Technology.....N/A

Surono, Andri Ma'Mun, Rifan Efendy, Ahmad Ramadan, Dwi Apriliasari, Iqbal Desam Girinzio, Ananda Alifia Putri and Reymund Rahardja

A Mapping Study Research on Blockchain Technology in Education 4.0.....234

Untung Rahardja, Md Asri Ngadi, Asep Sutarman, Desy Apriani and Efa Ayu Nabila

Reliable Smart Grid for Blockchain Technology Transactions.....239

Dewi Sri Surya Wuisan, Tarisya Ramadhan, Shofiyul Millah, Chandra Lukita, Sudaryono and Ageng Setiani Rafika

Overview of the Integration Between Electric Vehicles and Smart Grid Technology.....245

Rahmat Mulyana, Ananda Uswatun Hasanah, Alfiah Khoirunisa, Alfin Yoga Pratama, Rafly Ananda Dwi Septian and Adam Faturahman

Study and Design of Solar Renewable Energy Integration in Indonesia.....N/A

Nur Azizah, Achmad Benny Mutiara, Prihandoko, Hadi Nugroho, Dyah Juliastuti and Tantri Wenny Sitanggang

Microtechnology Business Model Financing Management at Islamic Commercial Banks using Analytic Network Process (ANP) and Tauhid String Relation (TSR).....N/A

Praptiwi Lestiyawati and Tatik Mariyanti

Development of Case Base Reasoning Recommendation and Sound and Lighting Rental System.....N/A

Calandra Alencia Haryani, Bryan Liming, Andree E. Widjaja and Hery

Impact of Earning Zakat Based on Blockchain Technology on Community Welfare.....N/A

Muhammad Kamil Husain and Tatik Mariyanti

Implementation of Goods Loss Prevention Tools Using Electronic Article Surveillance (EAS).....N/A

Mochamad Heru Riza Chakim, Iyang Fatmawati, Cintia Komalasari, Lisma Nur Azizah and Yulia Putri Ayu Sanjaya

New Business Search Model using Patent Landscape in Japan.....252

Ryuta Itoh and Kazunari Sugimitsu

Strategic Analysis of Green Marketing and Brand Image Towards Purchase Decision Consumer Coffee Shop During Pandemic Covid-19.....N/A

Muhamad Aras and Alfi Rahman

Door Lock Access Control using Fusion of Face and Fingerprint Recognition.....260

Bima Sena Bayu Dewantara, M. Rafli Firmansyah, Dewi Mutiara Sari, Setiawardhana, Tri Harsono and Putra Ramawwal Aqil

Sustainable Women Entrepreneurship Ecosystem in Digital Era: Desk Research Finding.....266

Teti Haryati, Rizal Syarief, Yudha Heryawan Asnawi and Siti Amanah

Developing Dataset of Response Variance for Automatic English Speaking Testing App.....271

Irwan Sumarsono, Radina Anggun Nurisma, Salim Nabhan, Aliv Faizal Muhammad and Halimatus Sa'dyah

Comparison of Pretrained BERT Embedding and NLTK Approach for Easy Data Augmentation in Research Title Document Classification Task.....278

Muhammad Fikri Hasani, Kenny Jingga, Kristien Margi Suryaningrum and Michael Caleb

A New Model of Spatial Prediction on Drought Prone Risk Areas.....284

Kristoko Dwi Hartomo, Yessica Nataliani, Sri Yulianto Joko Prasetyo and Yusak Cipta Juanda

The Effect of Event Marketing Promotion on E-Commerce Brand Awareness in Indonesia.....292

Muhamad Aras and Dety Apriyani Laila

Implementation of Active Learning using Card Game Model in Increasing Learning Motivation.....298

Rahmat Salam, Andri Cahyo Purnomo, Astri Russy Rachmani, Desy Apriani, Gilang Kartika Hanum and Meri Mayang Sari

Sustainable Competitive Advantage Through Market and Entrepreneurial Orientation in Indonesian Retail MSMEs During the COVID-19 Recovery Stage.....303

Mochamad Heru Riza Chakim, Mulyati, Cintia Komalasari, Muchlishina Madani and Raihan

IoT-Based Indoor Air Quality Using Esp32.....309

Qurotul Aini, Untung Rahardja, Danny Manongga, Irwan Sembiring, Marviola Hardini and Harry Agustian

Prediction of Length of Stay and Cost for Diabetes Inpatient using C4.5 Algorithm.....314

Seffiera Fauziah, Faiza Renaldi and Irma Santikarama

Application Fitting Room using Virtual Technology: A Systematic Literature Review.....319

Edbert Junus, Clarissa Jocelyn, Daffa Irsyad Adilah, and Alexander Agung Santoso Gunawan

Building Geographic Information System Story Maps for Jakarta's Local Community Health Infrastructures Awareness.....324

Ivan Austen Suryajaya, Ryan Christian, Billy Wibowo, Risma Yulistiani, Samsul Arifin and Faisal

Smart Tourism using Attractive and Safe Travel Recommendation Technology.....330

M. Edo Syahputra, Said Achmad, Fahrain, Andrew Julian Mackenzie, Fepri Putra Panghurian and Alexander Agung Santoso Gunawan

Cross Department's Elective Course Recommendation for University Students using Hybrid Filtering.....335

Nisa Singgih Lestari, Faiza Renaldi and Irma Santikarama

The Assessment of Human Development Index in West Java Province of Indonesia using Regression and R Programming Technology.....341

Ronan Franciscus, Widhi Pradhana, Jonathan Kingsley Halim, Syarifah Diana Permai, Yulyani Arifin, Fabian Surya Pramudya and Bakti Amirul Jabar

Projection of COVID-19 Jakarta using CHIME Technology (Covid-19 Hospital Impact Model for Epidemics) Application.....349

Henry Lucky, Alva Davian Trisanto, Muhammad Rizky Noval, Azizah Dinda Yukadifa, Santy and Edy Irwansyah

Analysis of Service Areas using Public Transportation for Tourist Destinations in Jakarta using ArcGIS Technology.....353

Edy Irwansyah, Fahar Julian Kautsar, Rakha Fawwaz, Henry Lucky and Santy

Combining Medical Records, Daily Diets, and Lifestyle to Detect Early Stage of Diabetes using Data Mining Random Forest Method.....358

Asiva Siti Fauziah, Faiza Renaldi and Irma Santikarama

Spatial Autocorrelation Test on the Average Unemployment in Indonesia.....363

Marsa Ariqi Gustiandza, Dinda Alisya, Syarifah Diana Permai and Muhamad Keenan Ario

The Relationship Between COVID-19 Cases and ArcGIS Technology to Present in Indonesia.....368

Maria Susan Anggreainy, Zaky Ahmad Hanif Raksakusumah, Tan Jonathan Budiman Tantoro, Said Achmad and Mikhael Theone Airis

Stemming Algorithm for the Indonesian Language: A Scientometric View.....373

Aries Maesya, Arief Ramadhan, Edi Abdurachman, Agung Trisetyarso and Muhammad Zarlis

E-Procurement: Implementation Models in Indonesia Frontier, Outermost, and Least Developed Regions (3T).....379

Muhd Ar. Imam Riauan, Yerli Sitanggang and Zeti Azreen Ahmad

Digital Dashboard for College Management Business Intelligence Analysis with ROI Method.....384

Muhammad Sar'I, Giandari Maulani, Celine Rahardja, Lista Meria, Dedeh Supriyanti and Agung

Implementation of E-Planning System for Preparation of Work Plans among Local Government in Indonesian 3T Regions.....392

Muhd Ar. Imam Riauan, Nanang Dwi Cahyono and Aini Maznina A.Manaf

A Bitcoin Blockchain-Based Educational Digital Assets Management System.....401

Henderi, Qurotul Aini, Irwan Sembiring, Po Abas Sunarya, Viola Tashya Devana and Fitra Putri Oganda

Analysis of the Design of Hospital Management Optimization Models in Uncertain Situations.....N/A

Poningsih, Poltak Sihombing, Muhammad Zarlis and Tulus

Implementation of Cluster Initial Center on K-Means Algorithm using Coefficient of Variance and Correlation in E-Government Mapping.....407

Taqwa Hariguna, Sarmini and Andhika R. Hananto

CS-SCHT Sequences for Asynchronous Multicarrier Communications System.....412

Zi-Chen Fan and Susanto Rahardja

Sentiment Analysis of User Review on Indonesian Food and Beverage Group using Machine Learning Techniques.....418

Yanfi, Yaya Heryadi, Lukas, Wayan Suparta and Yulyani Arifin

CCTV Camera with Intelligence Technology to Minimize Chicken Mortality Due to Hazardous Gas.....N/A

Mukti Budiarto, Hindriyanto Dwi Purnomo, Budhi Kristianto, Henderi and Ananda Alifia Putri

Strategic Information System Planning in the Industry 4.0 Era: A Systematic Literature Review.....423

Irfan Mahendra, Arief Ramadhan, Agung Trisetyarso, Edi Abdurachman and Muhammad Zarlis

Telematics Work Field Review Text Classification using the Naïve Bayes Method.....430

Aries Maesya, Yaya Heryadi, Yulyani Arifin, Lukas and Wayan Suparta

Processing Near-Infrared Spectroscopy Signal to Calculate Soil Macronutrient: A Comparison of Some Machine Learning Approaches.....435

Yudha Putra Arisandy, Kudang Boro Seminar, Y. Aris Purwanto and Yayat Hidayat

The Deep Learning Approach For American Sign Language Detection.....444

Gusti Pangestu, Yaya Heryadi, Lukas, Wayan Suparta and Yulyani Arifin

Regression Analysis on Indonesian Stock Exchange Movement after Increased Gas Price.....N/A

Herman Setiadi, Yaya Heryadi, Yulyani Arifin, Lukas and Wayan Suparta

Mobile Intellectual Property Marketplace Model for Commercialization of Intellectual Property Rights.....449

Yoga Prihastomo and Anisa Aurum Ningtyas