

2023 Eighth International Conference on Informatics and Computing (ICIC 2023)

**Manado, Indonesia
8-9 December 2023**



**IEEE Catalog Number: CFP23G52-POD
ISBN: 979-8-3503-4261-1**

**Copyright © 2023 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:	CFP23G52-POD
ISBN (Print-On-Demand):	979-8-3503-4261-1
ISBN (Online):	979-8-3503-4260-4

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

Table of Contents

Regression Based Machine Learning Model for Rainfall Forecasting on Daily Weather Data.....	1
<i>Evi Triandini, I Nyoman Rudy Hendrawan and Agus Yarcana</i>	
Implementing Minimum Message Length to the Modelling of Denpasar City Inflation Rate	7
<i>Yudi Agusta</i>	
On Improving Widyantoro's Dynamic Programming for Forward-Backward Combination Method	13
<i>Mochamad Nizar Palefi Ma'Ady</i>	
Analysis of CNN Method for Image Classification of Coconut Ripeness Levels	18
<i>Luthfi Luthfi, Imam Muslem R, Dedy Armiady, Sriwinar Sriwinar, Riyadhul Fajri and Iqbal Iqbal</i>	
Combining Haar transform and row-column directional RLE in image compression.....	24
<i>Anik Das Emon, Pronab Chandra Roy, Laiphrakpam Dolendro Singh and Anish Kumar Saha</i>	
Social Media Platforms Utilization Influence on The Vocational High School Students' Learning Interests and Learning Outcomes in Computer Network Subjects.....	30
<i>Admaja Dwi Herlambang</i>	
Feature Selection Implementation on High-Dimensional Data using Firefly Algorithm.....	37
<i>Tessy Badriyah, Iwan Syarif and Danang Jehan Lukmanto Prakoso</i>	
Neural Network for Classification of Student Performance in Exams	42
<i>Nur Azmi Karim and Yudi Ramdhani</i>	
Content is Fire and Virtual Reality is Gasoline: Understanding Users Attention, Comprehension, and Attitude in Destination Promotion	48
<i>Halim Budi Santoso, Andhika Galuh Prabawati, Jyun-Cheng Wang, Nila Armelia Windasari, Gabriel Indra Widi Tamtama and Lussy Ernawati</i>	
Singular Value Decomposition with Optimal Rank Thresholding and RUSTICO in Burr Classification.....	55
<i>Valerie Vanora Susilo, Naramia Wijaya, Vachell Christiansen Chai and Dyah Erny Herwindiati</i>	
Harvesting Natural Disaster Reports from Social Media with 1D Convolutional Neural Network and Long Short-Term Memory	61
<i>Irwan Budiman, Mohammad Reza Faisal, Dodon Turianto Nugrahadi, Muliadi, Mera Kartika Delimayanti and Septyan Eka Prastyana</i>	
Exploring Customer-based Determinants of Social Media Marketing Activities for Local Brands.....	67
<i>Tatik Suryani, Mochamad Nurhadi and Abu Amar Fauzi</i>	
Implementation Of Hierarchical Finite State Machine for Controlling 2D Character Animation in Action Video Game	73
<i>Euis Nur Fitriani Dewi, Andi Nur Rachman and R. Haitsam Zahir Hartadji</i>	

Comparison of Air Quality Prediction using Random Forest and Gradient Boosting Tree..	79
<i>Triando Hamonangan Saragih and Muhammad Itqan Mazdadi</i>	
Data Augmentation Method on Drone Object Detection with YOLOv5 Algorithm	84
<i>Ariel Yonatan Alin, Kusri Kusri and Kumara Ari Yuana</i>	
Design And Build A Hijaiah Letter Recognition Application For Early Children Using The Markerless Method Based Augmented Reality	90
<i>Assaf Arief, R. Dwi Nurani and Syarifuddin N Kapita</i>	
Particulate Matter Indoor Data Analysis Related to South Jakarta Temperature and Relative Humidity	94
<i>Soni Rudi Hartanto, Ramadhani Ulansari, Desmiwati Desmiwati, Andi Susilo, Muhammad Agni Catur Bhakti and Wandy Wandy</i>	
Optimizing Random Forest Classification Using Chi-Square and SMOTE-ENN on Student Drop-Out Data	99
<i>Andri, Roni Yunis and Tanti</i>	
Implementation of Sentiment Analysis of Shopee E-Commerce Reviews using Naïve Bayes, N-Gram, and Information Gain	104
<i>Andriana Sunjaya, Novresia Wijaya, Poi Wong Ng and Sunaryo Winardi</i>	
IndoBerea: Evolving Semantic Search in Theological Context	110
<i>Feliks Victor Parningotan Samosir and Serius Mendrofa</i>	
GRU for Overcoming Seasonality and Trend in PM2.5 Air Pollution Forecasting	116
<i>Aji Gautama Putrada, Nur Alamsyah, Mohamad Nurkamal Fauzan, Ikke Dian Oktaviani and Doan Perdana</i>	
Thorough Evaluation of the Effectiveness of SMOTE and ADASYN Oversampling Methods in Enhancing Supervised Learning Performance for Imbalanced Heart Disease Datasets	122
<i>Anis Fitri Nur Masruriyah, Hilda Novita, Cici Emilia Sukmawati, Ahmad Fauzi, Deden Wahiddin and Hanny Hikmayanti Handayani</i>	
Comparison analysis of Jetpack Compose and Flutter in Android-based application development using Technical Domain	129
<i>Mandahadi Kusuma, Ahmad Haris Rifani and Bambang Sugiantoro</i>	
Quality of Service Analysis for Internet of Vehicle	134
<i>Dewanto Rosian Adhy, Mohd Fairuz Iskandar Othman and Yahaya Abd Rahim</i>	
Artificial Intelligence in Natural Disaster: Data Crawling and Text Mining-Based Literature Review	140
<i>Zhafran Ramadhan and Ariana Yunita</i>	
Neutral Class Handling for Customer Sentiment Analysis: A Comparative Study of Machine Learning Algorithm in Binary Classification	146
<i>Murahartawaty Arief and Noor Samsudin</i>	
Split-Conv: 1HD Depth Estimation Deep Learning Model	154
<i>Henokh Lugo Hariyanto, Arif Wicaksono Septyanto and Haidar Dzaky Sumpena</i>	

Survey of Feature Selection in Imbalanced Data for Software Defect Prediction	160
<i>Frieyadie Frieyadie, Munaisyah Abdullah and Foni Agus Setiawan</i>	
Unveiling Motivations behind Purchasing Loot Boxes: A Study on the Online Gaming Behavior toward Micro-Spending Game-Items	166
<i>Brian Thio and Christian Haposan Pangaribuan</i>	
Video Object Motion Tracking using Dense Optical Flow Techniques	172
<i>Hari K.C., Sushil Shrestha and Manish Pokharel</i>	
Bee Colony Algorithm for Flow Shop Scheduling Problem	176
<i>Samuel Lukas, Dion Krisnadi, Eric Jahja and Petrus Widjaja</i>	
Stunting Malnutrition Classification Using Hybrid Grey Wolf Optimization-Random Forest	180
<i>Ramdhansyach Sasmita, Muhammad Sam An, Luqman Assafaat, Akhmad Faturrohman and Safuan Safuan</i>	
Optimizing Computational Efficiency in Feature Selection for Machine Learning Models: A Study Crime Detection Based on Criminal Data	187
<i>Nur Alamsyah, Budiman Budiman, Venia Restreva Danestiara, Imannudin Akbar and Elia Setiana</i>	
Lord Forgive Me for I Have Shopped: An Online Impulsive and Compulsive Buying Analysis	193
<i>Alifa Khadijah and Christian Haposan Pangaribuan</i>	
Enhancing Password Manager Application Security By Root Detection with Usability and Security Evaluation	199
<i>Galih W. W. Mukti and Rusdianto Roestam</i>	
Poultry Disease Detection in Chicken Fecal Images Through Annotated Polymerase Chain Reaction Dataset Using YOLOv7 And Soft-Nms Algorithm	206
<i>Devi Fajar Wati and Rusdianto Roestam</i>	
AHP-TOPSIS-Based Decision Support System(DSS) for Assessing The Salt Quality for Indonesian Salt e-Farming	213
<i>Makhjud Efendy, Aang Kisnu Darmawan, Kartini Kartini, Busro Akramul Umam, Anik Anekawati and Agus Komarudin</i>	
The Effect of Adding the Heuristic Evaluation Method to the Usability Evaluation Method of Design Thinking in the UNSIL Vclass Application	220
<i>Faisal Al Isfahani, Alam Rahmatulloh, Rahmi Nur Shofa and Irfan Darmawan</i>	
License Plate Localization and Character Recognition using YOLOv8 and Convolutional Neural Network	226
<i>Ilham Mafani Nadif and Kusrini Kusrini</i>	
Stock Price Prediction using Long-Short Term Memory and Temporal Convolutional Network	232
<i>Caroline Caroline, Ronsen Purba and Muhammad Fermi Pasha</i>	
Comparison of Dynamic Weighted Centroid and Optimization Model to Predict Mobile Device Location	238
<i>Rifki Kosasih and Ahmad Sabri</i>	

Developing Conceptual Design of Internet Network for Digital Village	242
<i>Darius Antoni, Dedy Syamsuar, Mariska Putri Pratiwi, Febrianty Febrianty, Astuti Astuti and Andi Agusman</i>	
Implementation of Support Vector Machine Method for Customer Segmentation.....	249
<i>Jefri Junifer Pangaribuan, Okky Putra Barus, Fiona Tjia, Romindo Romindo, Jusin Jusin and Ade Maulana</i>	
Preserving Individual Privacy from Inference Attack in Transaction Data Publishing.....	255
<i>Dedi Gunawan, Diah Priyawati, Yusuf Sulistyo Nugroho, Fatah Yasin Al Irsyadi, Ilham Andreansyah and Syful Islam</i>	
Model Prediction Using Random Forest Algorithm and Time Series Analysis Parts Distribution with in Indonesia Automotive Industry	261
<i>Andy Achmad Hendharsetiawan, Arief Ramadhan, Warnars Harco Leslie Hendric and Widodo Budiharto</i>	
Response Time Prediction of M/M/1SRPT Queuing System Using Simulation Modeling and Artificial Intelligence.....	267
<i>Ahmad Saikhu, Rully Soelaiman, Sheinna Yendri and Wahyuddin S</i>	
Customer Behavior Using RFM Model and K-Means Algorithm in Aesthetic Clinic	272
<i>Sinarring Laga, Iqbal Ramadhani Mukhlis, Deny Hermansyah, Gaguk Suprianto, Mochammad Anang Karyawan and Hariadi Yutanto</i>	
Virtual Avatar Representation in the Digital Twin: A Photogrammetric Three-Dimensional Modeling Approach.....	277
<i>Nugrahardi Ramadhani, Mochammad Fachri, Didit Prasetyo, Fardani Annisa Damastuti, Mochamad Hariadi and Intan Rizky Mutiaz</i>	
Topic Modeling of Natural Disaster in Indonesia Using NMF	284
<i>Muhammad Zhafran Ghaly and Arif Dwi Laksito</i>	
Usability Analysis of "SiPasar", a Web-Based Application for Mapping Traditional Markets in Yogyakarta	290
<i>Agata Filiana, Maria Nila Anggia Rini and Andhika Galuh Prabawati</i>	
Implementation of Environmental Monitoring and Controlling for The Oyster Mushroom Based on The Internet of Things.....	296
<i>Rian Ferdian, Rifki Abdullah Fattah and Tati Erlina</i>	
Digital Twin Framework for Human to Environment Interaction in Interactive Spaces	301
<i>Didit Prasetyo, Moch Fachri, Nugrahardi Ramadhani, Fardani Annisa Damastuti, Mochamad Hariadi and Intan Rizky Mutiaz</i>	
K-Means Using Dynamic Time Warping For Clustering Cities in Java Island According to Meteorological Conditions	307
<i>Teny Handhayani and Zyad Rusdi</i>	
Myocardial Infarction Classification with 15 Lead Electrocardiogram (ECG) Signal using Hybrid Convolutional Neural Network (CNN) and Bidirectional Long Short-Term Memory (BiLSTM)	313
<i>Ahmad Haidar Mirza, Siti Nurmaini, Radiyati Umi Partan and Muhammad Izman Herdiansyah</i>	

Predictive Modeling for Disaster Event Detection using Support Vector Machine.....	319
<i>Anas Fikri Hanif and Arif Dwi Laksito</i>	
Design and Evaluation of a Similarity Checking Tool for Indonesian Documents	326
<i>Kusrini Kusrini, Alva Hendi Muhammad, Irwan Oyong and Arif Nur Rohman</i>	
Automated Congestive Heart Failure Detection Using XGBoost on Short-term Heart Rate Variability.....	332
<i>Gregorino Al Josan, Alhadi Bustamam, Devi Sarwinda, Hermawan, Astuti Giantini, Wibowo Mangunwardoyo and Firdaus Rosean Rony</i>	
Classification of Alzheimer’s Disease Using Random Oversampling and Alumentations on Convolutional Neural Network	338
<i>Calvin Kamardi, I Kadek Perry Bagus Laksana, Maria Susan Anggreainy, Nora Fitriawati, Michiko Amaya Yonatan, Tesalonika Abigail Eikwine Mangkang and Vianny Pangesa</i>	
Prediction of Hypertension in the Upcoming Year: Feature Correlation Analysis and Handling Imbalanced Based on Random Forest.....	344
<i>Nur Ghaniaviyanto Ramadhan, Adiwijaya Adiwijaya, Warih Maharani and Alfian Akbar Gozali</i>	
Improvement of Imbalanced Data Handling: A Hybrid Sampling Approach by using Adaptive Synthetic Sampling and Tomek links	350
<i>Fhira Nhita, Adiwijaya and Isman Kurniawan</i>	
Comparing Decentralized File Storage on Ethereum with InterPlanetary File System	355
<i>Pujianto Yugopuspito, Eugene Ekaputra and Julinda Pangaribuan</i>	
Analysis of User Behavioural Intentions on Receiving Health Information from TikTok Short Videos.....	361
<i>Mutia Maulida, Yuslena Sari, Nurul Fathanah Mustamin, Andreyan Rizky Baskara, Eka Setya Wijaya and Siti Sheilawati</i>	
Evaluating the Effects of Mobility Restrictions during COVID-19 on Land Surface Temperature with GIS and Satellite Data	367
<i>Herlawati Herlawati, Rahmadya Trias Handayanto, Ika Dewi Sartika Saimima, Muhammad Khaerudin, M. Hadi Prayitno, Prio Kustanto, Ismaniah Ismaniah, Ajif Yunizar Pratama Yusuf and Arman Andrian</i>	
Transforming Tradition: Utilizing MUNIT for Sasirangan Fabric’s Color Pattern Generation.....	372
<i>Nurul Fathanah Mustamin, Mutia Maulida, Yuslena Sari, Andreyan Rizky Baskara, Eka Setya Wijaya and Irvan Aulia Luthfi</i>	
Signal Strength, Delay, and Throughput Performance Comparison of 4G, 5G, and 6G Networks in VANET	378
<i>Asoni Asoni, Selo Sulistiyo, Sigit B. Wibowo, Ronald Adrian and Harry Nur Hidayat</i>	
The New Smart Government Software Quality Framework Uses Modifications to ISO/IEC 25010	384
<i>Winny Purbaratri, Kristoko Dwi Hartomo, Hendry Hendry and Johan J.C Tambotoh</i>	

Decision Support System of Sustainable Supplier Selection for Micro Small Medium Enterprise in Apparel Industry	390
<i>Ari Basuki, Andharini Dwi Cahyani, Hanifudin Sukri, Faikul Umam, Ika Oktavia Suzanti and Bain Khusnul Khotimah</i>	
Classification of User Reviews for Software Maintenance in Indonesian Language Using IndoBERT-BiLSTM (Case Study: MyPertamina)	396
<i>Andreyan Rizky Baskara, Muhammad Ardhy Satrio Jati, Mutia Maulida, Yuslena Sari, Nurul Fathanah Mustamin and Eka Setya Wijaya</i>	
Optimal Decision Tree for Early Detection of Bipolar Disorder based on Crowdsourced Symptoms	402
<i>Ni Luh Putu Satyaning Pradnya Paramita, Hasri Wiji Aqsari, Wilda Melia Udiatami, Ayu Sadewo, Whinda Yustisia, Dwy Bagus Cahyono and Putu Hadi Purnama Jati</i>	
A Comprehensive Framework of Role Data Governance in Ensuring Data Quality: Literature Review	408
<i>Fadhil Rozi Hendrawan, Tien Fabrianti Kusumasari and Dhata Praditya</i>	
Dental Patient Chief Complaint Classification	414
<i>Aryo Handono and Ade Romadhony</i>	
Respinos Health: A Mobile Health App Designed Using User-Centered Design Method to Use with Respinos	418
<i>Difa Habiba Rahman, Jonet Wira Murti, Muhammad Raihan Iqbal, Ayu Purwarianti and Trio Adiono</i>	
Spelling Correction in Rule Based Virtual Assistant for a MSME Business	424
<i>Viny Christanti Mawardi, Valerie Vanora Susilo and Vachell Christiansen Chai</i>	
Mechatronic System for ESP32CAM OpenCV Rice Plant Pest Detection	429
<i>Tukino Tukino, Rizki Aulia Nanda, Ahmad Fauzi, Ade Suhara and Muhammad Khaerudin</i>	
A Mobile Application CODEC (Color Detection) for Color-blind People using KNN	435
<i>Karisa Zihni Lutfian, Anggilia Nur Safitri, Khairun Nisa Maulani, Eko Didik Widiyanto and Arseto Satriyo Nugroho</i>	
Enhancing Restaurant Recommendations through User-Based Collaborative Filtering	441
<i>Moch Kautsar Sophan, Iwan Santoso and Kurniawan Eka Permana</i>	
Assessment of External Factors on the Accuracy of Ultrasonic Sensors for Water Level Measurement in Peatlands	445
<i>Yuslena Sari, Yudi Firmanul Arifin, Novitasari Novitasari, Ferry Pratama, Eka Setya Wijaya, Ricardus Anggi Pramunendar, Mutia Maulida, Nurul Fathanah Mustamin, Andreyan Rizky Baskara and Erika Maulidiya</i>	
Performance Analysis of Face Verification through the Decision Fusion using Several of Face Recognition Models	452
<i>Munawarah Munawarah, Taufik Fuadi Abidin and Kahlil Muchtar</i>	
Interaction Design of Academic Analysis Module Mobile App to Enhance Student Academic Performance Monitoring	458
<i>Herman Tolle, Retno Indah Rokhmawati and Erika Khoirunisa</i>	

Design of Job Placement Center Dashboard for Monitoring Alumni Performance in Job Fair Application	464
<i>Herman Tolle, Lutfi Fanani and Septia Andriani Pasaribu</i>	
Advancing Towards IT Maturity Governance Excellence: COBIT 2019 in Higher Education (Indonesia).....	470
<i>Widia Febriyani, Fadhil Rozi Hendrawan and Tien Fabrianti Kusumasari</i>	
ABC-optimized deep learning approach to rainfall forecasting in Serang City	476
<i>Albaar Rubhasy, Andrianingsih Andrianingsih and Rayyan Rayyan</i>	
User Satisfaction Factors Self-Service Technology In Fast Food Restaurants Using The Heuristic Evaluation Method	482
<i>Shinta Oktaviana R, Eni Heni Hermaliani, Nurmalasari Nurmalasari, M Rangga Ramadhan Saelan and Eggie Pandu Tamara</i>	
Transfer Learning Method for Malaria Identification	487
<i>Cecilia Audrey Herli, Daniel Zerge Wijaya, Hansen Hansen, Michelle Angela, Zakaria Berlam Pragusma, Maria Susan Anggreainy and Ajeng Wulandari</i>	
E-Learning and Organizational Support: Investigation of Quality and Behavior	493
<i>Leni Susanti and Doni Purnama Alamsyah</i>	
Student Enrollment Performance of Telkom Schools in 23/24 schoolyear using k-Means Clustering	499
<i>Tora Fahrudin, Ibnu Asror and Yanuar Firdaus Arie Wibowo</i>	
Harnessing The Power of Random Forest in Predicting Startup Partnership Success	504
<i>Chandra Lukita, Ninda Lutfiani, Arop Ria Saulina Panjaitan, Bhima Bhima, Untung Rahardja and Muhamad Lutfi Huzaiyah</i>	
Consumer Adoption of Artificial Intelligence in Air Quality Monitoring: A Comprehensive UTAUT2 Analysis	510
<i>Rahmat Salam, Qurotul Aini, Betari Ayu Almadania Laksmiingrum, Bintang Nandana Henry, Untung Rahardja and Ananda Alifia Putri</i>	
Usability Measurement of Aswaja Chatbot with System Usability Scale (SUS)	516
<i>Arief Hidayat, Ma'As Shobirin and Akhmad Pandhu Wijaya</i>	
APPLICATION OF DEEP LEARNING FOR MOBILE-BASED DETECTION OF LEAF DISEASES IN AMORPHOPHALLUS MUELLERI BLUME USING SSD-MOBILENET	521
<i>Rossy Nurhasanah, Fikri Fadhlillah, Niskarto Zandrato and Melly Bangun</i>	
Visualizing Attitudinal Dynamics of Moving Objects via Android: Capturing Pitch, Roll, and Yaw Parameters	527
<i>Purnawarman Musa, Suhartini Suhartini, Remi Senjaya, Puji Sularsih, Witari Aryunani and Novrina Novrina</i>	
Enhancing Educational Innovation: A Comparative Analysis of Blockchain Adoption Strategies in Smart Learning Environments	535
<i>Mochamad Heru Riza Chakim, Daelami Ahmad, Umi Rusilowati, Fitra Putri Oganda, Yulia Putri Ayu Sanjaya and Po Abas Sunarya</i>	

Implementation of Deep Learning Using Convolutional Neural Network for Skin Disease Classification with DenseNet-201 Architecture	541
<i>Evita Pramesti, Achmad Benny Mutiara and Rina Refianti</i>	
Implementation of Convolutional Neural Network With EfficientNet-B0 Architecture for Brain Tumor Classification	547
<i>Vinsensius Haryo Bhaskoro Hadi, Achmad Benny Mutiara and Rina Refianti</i>	
Analysis of Factors that Influence Non-Fungible Token (NFT) Digital Content Purchase Intention	553
<i>Erwin Halim, Abrar Arkananta Putra Denny, Kevin Samuel Pratama Simanjuntak, Christian Christian and Richard Richard</i>	
Hybridization of Whale Optimization Algorithm for Multi-objective Flow Shop Scheduling Problems	559
<i>Cecilia Esti Nugraheni, Luciana Abednego and Craven S. Saputra</i>	
Why People Want To Use E-money Card based On RFID Technology ?	565
<i>Freza Fathur Nur Purnomo and Cadelina Cassandra</i>	
Understanding Factors Influencing the Adoption of AI-enhanced Air Quality Systems: A UTAUT Perspective	571
<i>Mochamad Heru Riza Chakim, Qurotul Aini, Po Abas Sunarya, Nuke Puji Lestari Santoso, Dhiyah Ayu Rini Kusumawardhani and Untung Rahardja</i>	
The Digital Revolution of Startup Matchmaking: AI and Computer Science Synergies	577
<i>Ari Pambudi, Ninda Lutfiani, Marviola Hardini, Achani Rahmania Az Zahra and Untung Rahardja</i>	
Blockchain for Transparent Academic Records: Implications for Higher Education Institutions	583
<i>Chandra Lukita, Nana Sutisna, Abdul Hamid Arribathi, Fitra Putri Oganda, Sheila Aulia Anjani and Adam Faturahman</i>	
From Desire to Purchase: Uncovering the Influencing Factors on Impulse Buying of Augmented Reality Photocard Featuring Korean Artists	589
<i>Zaenal Abidin and Cholilah Lateefa Bambang</i>	
Comparison of Support Vector Machine (SVM) and Linear Regression (LR) for Stock Price Prediction	594
<i>I Putu Candra Purnama, Ni Luh Wiwik Sri Rahayu Ginantra, I Wayan Agus Surya Darma and I Putu Agus Eka Darma Udayana</i>	
Classification of COVID-19 Disease From Chest X-Ray Images Using the SqueezeNet and Bayesian Optimization Methods	600
<i>Rima Tri Wahyuningrum, Ach. Halimi Firdaus Zuhron, Cucun Very Angkoso, Budi Dwi Satoto, Amillia Kartika Sari and Anggraini Dwi Sensusiati</i>	
Resolving Artificial Intelligence Hallucination In Personalized Adaptive Learning System .	606
<i>Decwind Skylar Susanto, Erwin Halim, Richard Richard, Anderes Gui and Nelly Nelly</i>	

Overcoming Language Barriers in MOOCs with Artificial Intelligence: An AI-based Approach for Multilingual Education	612
<i>David Kennedy, Erwin Halim, A Raharto Condrobimo, Dedy Syamsuar and Ferdianto Ferdianto</i>	
Software Effort Estimation with Use Case Point Approach on Website Builder Project: A Systematic Performance Evaluation	618
<i>Khairun Nisa Meiah Ngafidin, Yudha Saintika and Sena Wijayanto</i>	
Identification of Waste in Program Management at the IT Department of a Higher Education Institution (HEI) through Lean Six Sigma (DMAIC)	624
<i>Devi Pratami, Mochammad Doddy Al Fawzi, Sigit A. Wibowo and Nor Hasrul Akhmal</i>	
Improving Land Cover Segmentation Using Multispectral Dataset	631
<i>Herlawati Herlawati, Rahmadya Trias Handayanto, Yaya Heryadi, Edi Abdurachman, Haryono Soeparno, Edy Irwansyah and Eka Miranda</i>	
Construction Formula for Biological Age Estimation using Principal Component Analysis in Imbalanced Dataset	636
<i>Annisa Zahra, Angelica Patrica Djaya Saputra, Devvi Sarwinda, Alhadi Bustamam, Agian Jeffilano Barinda and Rheza Meida Marliau</i>	
Exploring COVID-19 Vaccine Hesitancy Through Topic Modeling: A Systematic Literature Review	642
<i>Tedo Hariscandra, Sri Handika Utami and Achmad Nizar Hidayanto</i>	
Cluster Analysis and Seismicity of The Samosir Using Machine Learning Approach	648
<i>Marzuki Sinambela, Eva Darnila, Indra Kelana Jaya, Indra M Sarkis and Alex Rikki</i>	
Deep Learning Approach for Aspect-Based Sentiment Analysis on Indonesian Hospitals Reviews	654
<i>Muhamad Fahmi, Faturahman Yudanto, Naurah Nazhifah, Yunita Sari and Afiahayati</i>	
ArchiMate's Strengths and Weaknesses as EA Modeling Language : A Systematic Mapping Study	660
<i>Aisha Edna Alicia Sanyoto and Mochamad Chandra Saputra</i>	
Fire Detection System Using Transfer Learning Mobiledets with Google Coral USB Accelerator Based on Raspberry Pi 4	666
<i>Nenny Anggraini, Aulia Rahman, Anif Hanifa Setianingrum and Saepul Aripriyanto</i>	
Tackling an Unbalanced Dataset for Classifying Indonesian E-Commerce Reviews Using Multi Word Embedding Model	672
<i>Rizky Adi, Bassamtiano Renaufalqi Irnawan and Jiyi Li</i>	
Evaluation of User Experience on Learning Management System for Programming Course Through User Experience Questionnaire Method	678
<i>Wahyu Nur Hidayat, Tiara Amalia Putri, Nazhiroh Tahta Arsyillah, Muhammad Aslam Bahriss, Hary Suswanto and Achmad Hamdan</i>	
E-Readiness of North Penajam Paser Regency Regional Apparatus as Supporting City of Indonesian New Capital City	684
<i>Sri Rahayu Natasia, M. Gilvy Langgawan Putra, Aidil Saputra Kirsan and Tazkya Humaira</i>	

U-Net Based Vegetation Segmentation for Urban Green Space (UGS) Regulation in Yogyakarta City.....	691
<i>Delfia Nur Anrianti Putri, Raden Bagus Muhammad Adryanputra Adhy Wijaya, Nailfaaz and Wahyono</i>	
Modeling Urban-Suburban-Rural (USR) Segmentation and Mapping of Special Capital Region of Jakarta and West Java, Indonesia: A Geospatial Big Data Approach	697
<i>Widhelia Echa Pramesthy, Salwa Rizqina Putri and Arie Wahyu Wijayanto</i>	
Classification Driver Emotion with Deep Learning Method for Driver Safety Detection....	703
<i>Kurniawan Indra Jaya and Fitra Abdurrachman Bachtiar</i>	
The Use of LSTM Model with Lagged Daily Inputs for Waste Disposal Prediction	709
<i>Maimunah Maimunah, Joko Lianto Buliali and Ahmad Saikhu</i>	
Integrated Academic Service Digitalization at Universities Utilizing Blockchain Technology.....	715
<i>Chandra Lukita, Marsani Asfi, Sudadi Pranata, Amroni Amroni, Taufan Huneman and Chairun Nas</i>	
Land classification based on drone observations using Depth-Wise Separable Convolution with Residual Network Connection	721
<i>Budi Dwi Satoto, Tutuk Dwi Indriyani, Budi Irmawati, Muhammad Yusuf, Devie Rosa Anamisa and Mochammad Kautsar Sophan</i>	
Design and Development of the Aceh Biodiversity Android Application.....	728
<i>Muhammad Subianto, Alim Misbullah, Razief Perucha Fauzie Afidh, Essy Harnelly, Muhammad Irfan and Zulfan Zulfan</i>	
Optimizing CNNs for Facial Paralysis Detection: A Hyperparameter Tuning Approach ...	734
<i>Salamet Nur Himawan, Adi Suheryadi and Muhamad Mustamiin</i>	
Key Challenges and Recommendation in Managing Hybrid Work Collaboration for Agile Teams: A PRISMA Systematic Literature Review	739
<i>Wiwin Nur'Aini and Teguh Raharjo</i>	
Virtual Reality-Based Traffic Sign Education for Early Childhood	745
<i>Taufiqurrakhman Nur Hidayat, Fendi Aji Purnomo, Eko Harry Pratisto, Ksatria Tirta Nusantara and Yudho Yudhanto</i>	
Internet of Things on Automatic Watering Systems for Papuan Black Orchids	750
<i>Sukarwoto Sukarwoto, Ayub Wimatra, Jemi V Palpialy, Indri Sulistianingsih, Ahmad Akbar and Darmeli Nasution</i>	
UI/UX Prototype of Visually Interactive Communication and Reading Aid for Autistic Children with Speech Disability	757
<i>Lely Hiryanto, Marchella Angelina, Jonathan Jonathan, Hersinta Hersinta, Olivia Deliani Hutagaol and Tony Tony</i>	
Factors Influencing Participation in Data Crowdsourcing: A Systematic Literature Review	763
<i>Re. Miracle Panjaitan and Budi Darma Setiawan</i>	

Analysis of the Best Optimizer Used by Convolutional Neural Network Algorithms in Detecting Masked Faces	769
<i>Syahida Usama Firdaus, Silvy Zafira Putri, Lailil Muftikhah and Pradiptya Kahvi Sugiharto</i>	
IoT-based Smart Irrigation for Allium ascalonicum using Fuzzy Logic	774
<i>Henning Titi Ciptaningtyas, Irzal Ahmad Sabilla and Mohammad Ibadul Haqqi</i>	
LSTM Variants Comparison for Exchange Rate IDR/USD Forecasting with Rolling Window Cross Validation	780
<i>Nurhayati Nurhayati, Fitri Mintarsih, Muhammad Ashlah Rasyidi, Wilda Nurjannah, Dewi Khairani and Husni Teja Sukmana</i>	
Waste Bank Information System Integrated with IoT-Based Scales	784
<i>Isna Wardiah, Subandi Subandi, Agus Setiyo Budi Nugroho, Bryan Teven, Dicky Hananta and Rifqi M Gani</i>	
The Importance of E-Leadership in Higher Education Institutions Determined by Advanced Information Technology	790
<i>Herlino Nanang, Husni Teja Sukmana, Yusuf Durachman, Viva Arifin, Dewi Khairani, Siti Ummi Masruroh, Muhamad Azhari and B. Herawan Hayadi</i>	
Binary PSO-GWO for Feature Selection in Binary Classification Using K-Nearest Neighbor	795
<i>Dwi Kartini, Muhammad Itqan Mazdadi, Irwan Budiman, Fatma Indriani and Rahmat Hidayat</i>	
Design Parental Involvement Monitoring Students' Academic Performance on University Mobile Apps	801
<i>Nabila Adelia Yusuf, Herman Tolle and Ismiarta Aknuranda</i>	
Harnessing DNA Cryptography with the Kyber Algorithm for Enhanced Data Security ...	807
<i>Harjito Bambang, Faisal Rahutomo, Dwiko Satriyo. U. Y. S and Heri Pras</i>	
Smart Food Box Design with IoT Based Android Monitoring System	813
<i>Hendro Widiarto, Iwan Koswara, Darmeli Nasution, Sri Wahyuni and Indri Sulistianingsih</i>	
Capacity of Multi-layered Cellular Networks of Beyond 5G with Fractional Frequency Reuse	819
<i>Muhammad Yaser, Khoirul Anwar, Iskandar and Mohammad Sigit Arifianto</i>	
Machine Learning Structure for Box-plus Operation with Soft Information Processing	825
<i>Okzata Recy, Khoirul Anwar and Gelar Budiman</i>	
Predicting Consumer Secondhand Luxury Preferences for Marketing Strategy in Post Pandemic Using Machine Learning: A Case Study of Consumer in Indonesia	830
<i>Mutiara Auliya Khadija, Abdul Aziz and Wahyu Nurharjadmo</i>	
Developing an Expert System for Mobile-based Gastroenteritis Detection Using ESDLC and Best First Search Methods	836
<i>R. Rizal Isnanto, Catur Edi Widodo, Ike Pertiwi Windasari and Misik Puspajati Saputri</i>	

LoRa-Based Waste Bin Monitoring for Making Decision Waste Disposal Using C 4.5 Method	841
<i>Aa Zezen Zaenal Abidin, Mohd Fairuz Iskandar Othman, Aslinda Hassan, Yuli Murdianingsih, Usep Tatang Suryadi and Muhammad Faizal</i>	
DC - DRC Optimization using Load Balancer (Case Study: Karawang Regional Hospital)	848
<i>Lila Setiyani and Cutifa Safitri</i>	
Energy Efficiency Strategies in Information-Centric Networking	854
<i>Feri Fahrianto, Firman Munthaha, Siti Ummi Masruroh, Ahmad Fadlan Ramadhan, Dewi Khairani and Waki Ats Tsaqofi</i>	
Classification of Popular Music Genre Using Convolutional Neural Network Method with Data Augmentation	859
<i>Siti Ummi Masruroh, Aditya Sidhiq Pratama, Luh Kesuma Wardhani, Feri Fahrianto, Waki Ats Tsaqofi and Rizka Amalia Putri</i>	
Expert System Using Forward Chaining to Determine Freshwater Fish Types Based on Water Quality and Area Conditions	863
<i>Hidayati Mustafidah, Bagus Restu Alfiansyah, Suwarsito Suwarsito, Purnomo Purnomo and Nurul Hidayat</i>	