

2024 2nd International Conference on Technology Innovation and Its Applications (ICTIIA 2024)

**Medan, Indonesia
12-13 September 2024**

Pages 1-470



**IEEE Catalog Number: CFP24BZ7-POD
ISBN: 979-8-3503-5162-0**

**Copyright © 2024 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:	CFP24BZ7-POD
ISBN (Print-On-Demand):	979-8-3503-5162-0
ISBN (Online):	979-8-3503-5161-3

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

2024 2nd International Conference on Technology Innovation and Its Applications (ICTIIA) Table of Contents

Title Page 1	ii
Title Page 2	iii
Table of Contents	iv
Preface	xv
Organizer & Committees	xvi
Keynotes Speech 1	xviii
Keynotes Speech 2	xix
Keynotes Speech 3	xx

Econometric Insights Through Eviews: Decoding The Macroeconomic Factors in Shaping ASEAN-6 Exchange Rates Using Software Technology Application	1
<i>Raka Agfial, Adiska Sanfa and Benny Tjandrasa</i>	
Trajectory Analysis of Inter-Island Logistics Transportation for Aggregate Material Using Web-Based Information	7
<i>Aji Suraji, Syarifuddin Ishak, Prabowo Prabowo, Muhammad Fatkhurrozi, Gholiqul Amroddh Alawy and Rangga Pahlevi Putra</i>	
Literature Study: Intelligent Character Recognition (ICR) Technology for Learning Innovation	12
<i>Sunaryo Winardi, Gunawan, Frederic Davidsen, Farrell Rio Fa and Frans Mikael Sinaga</i>	
Plagiarism on Mobile Programming Assessments: Automated Detection	18
<i>Oscar Karnalim, Erico Darmawan Handoyo, Meliana Christianti Johan and Daniel Jahja Surjawan</i>	
The Use of Markerless Augmented Reality Flash Card for English Vocabulary Building	23
<i>Sulaeman Santoso and Daniel Jahja Surjawan</i>	
Utilization of K-Means Clustering to Examine Library User Segmentation's Impact on Student Graduation Rates	28
<i>Ihdi Ritonga, Ade Candra and Mohammad Andri Budiman</i>	
Systematic Literature Review: On Measuring the Level of Emotional Experience Based on EEG Signals	34
<i>Yudo Devianto, Adi Setiawan, Christine Dewi, Ade Iriani, Hindriyanto Purnomo and Irwan Sembiring</i>	
Examining The Effect Of Financial Literacy Variables In UTAUT2 Model On The Use Of E-wallet	39

Bobby Garcia Tanura and Erwin Setiawan Panjaitan

Analysis of Closing Stock Price Predictions Energy Sector in Indonesia Using Convolutional Neural Network	45
<i>Jennifer Utomo, Angeline Putri Wijaya, Kenji Nicholas Adinata, Karin Natania Huang, Helena Margaretha and Ferry Ferdinand</i>	
Deep Learning-Based Web Application for Flower Recognition and Status Monitoring	51
<i>Theophilus Chidalu Onyejiaku, Cosmas Ifeanyi Nwakanma and Bernard Chukwuemeka Ekeoma</i>	
Comparison of Operations in Fuzzy Approximate Reasoning and Centroid of Membership Function	57
<i>Takashi Mitsuishi</i>	
Enhancing Warehouse Inventory Management through IoT Tools for Monitoring Stock Items	62
<i>Sunaryo Winardi, Apriyanto Halim, Sunario Megawan, Poi Wong Ng and Arifin</i>	
Modeling Plagiarism Prevention in Scientific Publication Using Enhanced Blockchain	68
<i>Poi Wong Ng, Carles Juliandy and Darwin Darwin</i>	
Usability Evaluation of Microsoft Teams Applications for Higher Education	76
<i>Murdiaty Murdiaty, Handoko Handoko and Joosten Joosten</i>	
GoEliTool Usability Level Evaluation	82
<i>Joko Purwadi and Rosa Delima</i>	
Enhancement of Indonesian Language Learning Motivation Using Trivia Game.....	88
<i>Louis Khrisna Putera Suryapranata and Giovanni Ivander Gozali</i>	
Bitcoin Cryptocurrency Price Prediction Using IFA-BiLSTM.....	94
<i>Andre Pratama</i>	
Deep Learning Approach for Stunting Classification in Toddlers	100
<i>Wulan Sri Lestari, Caroline Caroline and Yuni Marlina Saragih</i>	
On Block Lattice Architecture Platform, an Extraordinary of Lattice Cryptography	105
<i>Loso Judijanto, Dwi Liestyowati, andiyan andiyan, Iin Arianti, Galih Aripawira and Mohamad Aghust Kurniawan</i>	
Imputation Missing Stock Prices using Generative Adversarial Networks and Attention Mechanism.....	113
<i>Agus Tri Haryono, Riyanarto Sarno, Ratih Nur Esti Anggraini and Kelly Rossa Sungkono</i>	
Unlocking Nutritional Insights: Exploring Meal Analysis for Enhanced Dietary Choices with Multinomial Logistic Regression.....	119
<i>Yohanssen Pratama and Tegar Prasetyo</i>	
Deep Learning for Predicting Food Commodity Prices in Traditional Markets	125
<i>Fajar Kamaludin Akhmad, Sudianto Sudianto and Dasril Aldo</i>	
User Experience Design of Mobile Application for Tuberculosis Care and Prevention in Indonesia	131
<i>Felix</i>	
Business Closure Prediction Based on Users Rating and Review Using H2O	136
<i>Enjelin Enjelin, Ronsen Purba and Muhammad Fermi Pasha</i>	
Can Pixel-based Approach Achieve Similar Performance to Area-based Approach in Crop Yield Forecasting using Sentinel-2 Imagery and Deep Neural Networks? A Probabilistic Analysis	142
<i>Khadija Meghraoui, Imane Sebari, Saloua Bensiali and Kenza Ait El Kadi</i>	
Dangerous Objects Detection and Segmentation in X-ray Images of Passenger Goods using YOLOV8	148

<i>Timothy Kristanto and Evan Tanuwijaya</i>	
System Design for Therapist Retention Analysis in an Online Mental Healthcare Application Based on MapReduce	154
<i>Iwan Santosa, Panji Yudasetya Wiwaha, Hapnes Toba, Andreas Widjaja, Giezka Veby Agustin and Katrine Katrine</i>	
A Novel Activity Recommendation System of Financial Balance Scorecard for COBIT 2019 Based on Company Strategy	160
<i>Lukman Sanjani, Ulima Shabrina, William Phedra, Riyanarto Sarno and Kelly Sungkono</i>	
Transformative Human Resources: Mapping Future Directions for Innovation in Information Technology and Multidisciplinary Applications	166
<i>Natalia Noya and Marcellia Susan</i>	
Comparative Study of Statistical, Machine Learning, and Deep Learning for Rice Retail Price Forecasting in West Java.....	172
<i>I Nyoman Gde Mahaputra Wardhiana, Muhammad Ghufro, Riyanarto Sarno, Agus Haryono, Shoffi Izza Sabilla, Fadilatul Taufany, Sholiq . and Kelly Sungkono</i>	
A Comparative Analysis of Macroeconomic Indicators in Optimising Credit Risk Prediction	178
<i>Evelyn Sierra, Erick Delenia, Eric Lays, Riyanarto Sarno and Agus Haryono</i>	
Multi-class Oil Palm Trees Condition Detection from UAV Images using Faster R-CNN with EfficientNetV2	184
<i>Arinal Haq, Eko Sugeng Cahyadi, Muhammad Shafhi Kasyfillah, Riyanarto Sarno and Agus Haryono</i>	
Process Mining For Evaluating Hospital Billing System Based On DSS01 Domain COBIT 2019 Framework	190
<i>Muhammad Yusuf, Arinal Haq, I Nyoman Gde Mahaputra Wardhiana, Riyanarto Sarno and Kelly Sungkono</i>	
Integrating Class Imbalance Solutions into Fraud Detection Systems: A Systematic Literature Review .	196
<i>Wowon Priatna, Hindriyanto Purnomo, Irwan Sembiring and Theophilus Wellem</i>	
Identifying Non-Conforming Process in Automobile Insurance Claims using Process Mining and COBIT 2019	202
<i>Rizqy Ahsana Putri, Lauretha Fajar Vantie, Kelly Sungkono and Riyanarto Sarno</i>	
A Recommendation System for Internal Business Processes of COBIT 2019 Using Graph Algorithm and Similarity Methods.....	208
<i>I Gusti Lanang Agung Oka Cahyadi Pradipta, Rizky Damara Ardy, Riyanarto Sarno and Kelly Sungkono</i>	
Automated Extraction of Microservice Architecture Using a Rule-Based Approach	214
<i>Rizqy Ahsana Putri, Muhammad Nevin, Dwinanda Bagoes Ansori, Abdullah Faqih Septiyanto and Riyanarto Sarno</i>	
Modeling Indonesian Thesaurus on Simple Knowledge Organization System	220
<i>Budi Susanto, Michael Himawan Handoko and Gloria Virginia</i>	
A Deep Learning Approach for Word Segmentation in Javanese Letter Manuscript Transliteration	226
<i>Muhammad Nevin, I Kadek Agus Ariesta Putra, Dwinanda Bagoes Ansori, Riyanarto Sarno and Agus Haryono</i>	
Transforming Digital Identity through Smart Contract as Identity	232
<i>Yustus Eko Oktian, Kei Patrick Hilton and Christian</i>	
Enhancing Agricultural Pesticide Application through a Custom-Built Hexacopter Equipped with Advanced Control and Navigation Systems.....	238

<i>Albert Sagala, Petrus Sinaga, Irfan Manik and Sandro Siagian</i>	
Gamification Design for Temple Tourism Application	244
<i>Yurri Wagiu, Andi Emanuel and Pranowo Pranowo</i>	
Utilization of GC-MS in Determination of Electronic Nose Sensor Array for Classification of Gambung Green Tea Quality	249
<i>Rini Handayani, Riyanarto Sarno, Dedy Rahman Wijaya, Kelly Sungkono and Daniel Yeri Kristiyanto</i>	
Enhancing Organizational Performance Through Strategic Knowledge Sharing: Insights and Models...	255
<i>Nathania M. Lisandi, Riswan E. Tarigan, Calandra A. Haryani, Hery and Andree E. Widjaja</i>	
A Multi-Perspective Process Explorer Method to Identify Anomaly of An Education ERP	261
<i>I Made Murwantara and Kristina Wulandari</i>	
Data-Driven Exploration: Analyzing Triage Data's Role in Predicting Intensive Care Unit Transfers within 24 Hours	267
<i>Andrian Crispin, Muhammad Atqa Adzkia Zaldi, Victor Hulu and Abdi Dharma</i>	
Enhancing Endless Runner Gameplay: Integrating Brainwave-Based Natural Interaction with Rule-Based Management System	272
<i>Matahari Bhakti Nendya, Lailatul Husniah, Hardianto Wibowo, Syahri Mu'min and I Kadek Dendy Senapatha</i>	
Improving SVM Performance in Determining Cost and Kernel Parameter Values through Grid Search	277
<i>Visca Sylvia, Maya Silvi Lydia and Benny Benjamin Nasution</i>	
Performance Improvement Of Support Vector Machine With Firefly Algorithm For Public Complaints Classification	283
<i>Alfi Rahman, Elviawaty Zamzami and Sawaluddin Sawaluddin</i>	
A Novel Deep Learning-Based Multi-Model Ensemble Approach for the Prediction of Non-Small Cell Lung Cancer (NSCLC) Metastasis via Integration of Multi-omics Data	288
<i>Akshay Karthik and Michael Donovan</i>	
Word Segmentation Task for Southeast Asian Abugida Scripts: A Systematic Literature Review	294
<i>Baskoro Adi Wicaksono, Bimo Sunarfri Hantono and Teguh Bharata Adji</i>	
Optimizing IT Governance and Project Management in Software Development through AI Integration and COBIT 2019 Framework	300
<i>Andy Teguh, Joko Slamet, Hartono Saputro, Kelly Sungkono and Riyanarto Sarno</i>	
Twitter Data Extraction for Food and Beverage Business Analytics	306
<i>Muhammad Atqa Adzkia Zaldi, Opim Salim Sitompul, Erna Budhiarti Nababan and Andrian Crispin</i>	
Data Preprocessing on Triage Data for Predicting ICU Transfer within 24 Hours	312
<i>Andrian Crispin, Ade Candra and Opim Salim Sitompul</i>	
Tourist Route Recommender System Using Whale Optimization Algorithm (A Case Study of Yogyakarta)	318
<i>Vivi Fitriani and Z. K. A. Baizal</i>	
Analysis of AI's Impact on Purchase Intention on Social Media Platforms	324
<i>Cristanto Sidharta, Nathaniel Ardyana Putra, Jonathan Chandra and Marisa Karsen</i>	
Identifying Suspicious Financial Transaction Using Machine Learning and Phytogorean Tree	330
<i>I Made Murwantara and Pricilia Fiesta Gricce Prasethio</i>	

Safety Helmet Detection Based on YOLOv7 With Super-Resolution Reconstruction.....	336
<i>Justin Yap and Trianggoro Wiradinata</i>	
Unlocking Customer Loyalty: A Study of User Experience in Tokopedia	342
<i>Naomi Natania Magdalena, Elfindah Princes and Desman Hidayat</i>	
Architecting Multisite Database Proxy using ProxySQL	348
<i>Jefri Abdurrozak Ismail</i>	
A Study of The Implementation of Paylater Feature for Customer Satisfaction Using the Servqual Method in Marketplace Applications in Indonesia	354
<i>Hery Hery, Andree Widjaja, Calandra Haryani and Riswan Tarigan</i>	
The Role of Data Visualization in Improving the Sustainability of Smallholdings	359
<i>Ahmad Maulana, Ade Candra and Amalia Amalia</i>	
Machine Learning-based Application for Predicting Hearth Disease Risk using CreateML	364
<i>Theresia Ratih Dewi Saputri and Edwin Kurniawan</i>	
Exploring Ethical Implications: Unraveling Factors Influencing Data Governance Awareness Behavior in Generative AI Chatbot	369
<i>Roger Amendi, Erwin Halim and Hendry Hartono</i>	
Chatbot for Complex Questions in University Admission using Bidirectional Long-Short Term Memory and Convolutional Neural Network	375
<i>Djoni Setiabudi, Gregorius Budhi and Alfons Sampurno</i>	
Enhancing High School Students Admission Process Through Web-Based Information System	380
<i>Michael Chandra and Stephanus Eko Wahyudi</i>	
Secured e-Voting System Leveraging Blockchain Technology	385
<i>Elizabeth Witanto</i>	
GIS-based Disaster Preparedness and Mitigation Applications: A Systematic Review on Methods, Features, and Visualization.....	391
<i>Aditya Bimo Pitandoyo, Lukito Edi Nugroho and Bimo Sunarfri Hantono</i>	
Techniques for Handling Missing Values in Customers Electricity Data: A Systematic Literature Review	398
<i>Mahda Dina Alam Rusbandi, Silmi Fauziati and Guntur Dharma Putra</i>	
UX Law Implementation at Sevima edLink from Design Science Research Perspective	404
<i>Indri Rozas and Aris Tjahyanto</i>	
IoT Gateway Design for Real Time QR-Code Display Device in Security Monitoring System.....	410
<i>Laurentius Kuncoro Probo Saputra, Restyandito Restyandito, Willy Sudiarto Raharjo, Anthonius Adi Nugroho, Samuel Ricky Saputro and Bryan Rama Putra</i>	
Design and Development of a Guitar Learning Mobile Web for the Music Department of Rose of Sharon Church.....	416
<i>Nico Prasetyo and Kartika Gianina Tileng</i>	
Design and Development a Web-Based System for Recording Transactions of Contracted Service for Industrial Machine Repair at CV. Elmectro Mandiri	421
<i>Pravangasta Wahyudi and Rinabi Tanamal</i>	
Analyzing The Effect of Ease of Use towards Continous Use Intention and Satisfaction on E- Government Services in Indonesia	426
<i>Erwin Halim, Decwind Susanto, Annisa Zahri and Willy Candra</i>	
Analysis of Customer Satisfaction of Using Kios-K Machine in Fast Food Services: Case of Indonesian.	432

Erwin Halim, Michael Jonathan, Archibald Matthew Kribiantoro and Christian Johanes

American Sign Language to Text Translation using Transformer and Seq2Seq with LSTM	438
<i>Gregorius Guntur Sunardi Putra, Adifa Widyadhani Chanda D'Layla, Dimas Wahono, Riyanarto Sarno and Agus Haryono</i>	
Evaluating the Efficacy of Sentinel-2B and Landsat 8 OLI Satellite Imagery for Accurate Mangrove Mapping in Bengkulu City, Indonesia.....	444
<i>Ayub Sugara, C C Hanami, A H Lukman, Aninda W Rudiastuti, Zamdial Zamdial, Deddy Bakhtiar, Ari Anggoro, R Zulhendri and R T Utami</i>	
Consumer Trust and Brand Reputation: Driving Mechanical Keyboard Purchase Intention on Instagram	450
<i>Hanif Akbar Ramadhan, Elfindah Princes and Desman Hidayat</i>	
Connected Automated Vehicles Entry Capacity on Roundabouts- Case Study Hungary	455
<i>Haitham Al Hasanat, Omar Alharasees and Dania Alothman</i>	
Public Perception of Autonomous and Shared Autonomous Vehicles: Case Study of Amman.....	461
<i>Omar Alharasees, Haitham Al Hasanat and Dania Alothman</i>	
Long Short-Term Memory (LSTM) Improvement Accuracy Using FastText and Glove for Language Translation Batak – Indonesian	466
<i>Atikah Rahayu Mandasari, Erna Budhiarti Nababan and Herman Mawengkang</i>	
The Influence Of Sales Promotion, Attractiveness of Internet Advertising, and App Quality Features on Impulse Buying Decisions for Batik Fashion Products At Tiktok Shop	471
<i>Fadilla Kardika Putri , Mochammad Rizki Pratama, Muhammad Raihan Rafi Al Azharr, Yuniarty Yuniarty and Ferry Hartono</i>	
Minimally Invasive Motor Function Rehabilitation through Digital Twin Technology: A Review	477
<i>Brain Harlan and Hendra Tjahyadi</i>	
Analysis of public views of the motor vehicle financing services information system	482
<i>Ikrar Arin, Bryan Bryan and James Wibawa</i>	
Analysis of the impact of ChatGPT utilization on the levels of laziness and productivity	488
<i>Ikrar Arin, Arsyil Farkhan, fahmi muhamad and Fairuz Thahirah Anjani</i>	
Comparison of Clustering Results using K-Means, Gaussian Mixture Models, Based on Seven Sectors of Country Electricity and Correlation with Gross National Income	495
<i>Samuel Lukas, Regina Maureen Suryaputri and Petrus Widjaja</i>	
Assembly Line Balancing Optimization using Genetic Algorithm Method Compared to Heuristic Method	499
<i>Christopher Nata, Nathaniel Frederick and Priskila Rahayu</i>	
Detection of Cyberbullying Incidents on the X Social Network	505
<i>Azka Elhan, Deo Chuanito, Henry Lucky and Derwin Suhartono</i>	
Application of Used Car Price Predictor in Indonesia along with Machine Learning Model Comparison and SMOTE.....	511
<i>Rafael Wibowo, Alvino Vallian, Henry Lucky and Derwin Suhartono</i>	
Performance Analysis of Regression Models on Predicting Movie Ratings	516
<i>Ignatius Kennard, Hansel Hartono, Henry Lucky and Derwin Suhartono</i>	
The Influence of Automotive Brand Awareness on Purchase Interest through Social Media Usage of TikTok Case Analytics.....	522

Farabi Alghifari and Rido Sarwono

Brute Force Algorithms for Job Shop Scheduling Problem	528
<i>Samuel Lukas and Aditya Mitra</i>	
Reveal the Power of E-Filing and Transform Tax Reporting in Indonesia : using UMEGA analysis.....	533
<i>Levana Dhia Prawati, Mahda Karina, Graciella Cherrysca Addy Putri and Ismi Fathia Rachmi</i>	
Movie Success Prediction Using Machine Learning Models	539
<i>Michael Kristianto, Deastri Anggie Shanovera, Janette Mirna Putri Trijono, Ivan Sebastian Edbert and Derwin Suhartono</i>	
Fake Job Vacancy Detection Using Ensemble Voting Classifier	545
<i>Torian Ariel Yaphet, Made Adhiaksena Wikrama Putra, Vicensia Charitas Avianny, Ivan Sebastian Edbert and Derwin Suhartono</i>	
The Mediating Effect of Digital Payment Tools in the Relationship Between Digitalization and Use of Technology to Increase Sales on MSMEs	552
<i>Danang Prihandoko, M Hamsal, Arta Sundjaja and Willy Gunadi</i>	
Region-Based People Counting with Embedded System in Smart Building Environment	558
<i>Raden Mas Benediktus Suryo Wicaksono, I Wayan Mustika and Selo Sulisty</i>	
Comparing AI and Expert Opinion for Detecting Technological Trends in Indonesia's Transportation and Storage Industry	564
<i>Nopriadi Saputra, Thedy Karuna Ernesto, Salma Indah Pangesti Pangesti, Natalia Natalia, Faustina Nethania and Elrika Indra</i>	
The Road to Digitalization : Exploring the Impact of Using Digital Payments and Marketing on Business Sustainability in MSMEs	569
<i>Wahyu Setyobudi and Raja Dava</i>	
Systematic Literature Review: Disease Classification Modeling Using Deep Learning Algorithms	575
<i>Wawan Gunawan, Hindriyanto Purnomo, Christine Dewi, Ade Iriani and Irwan Sembiring</i>	
Customer Segmentation Using Generated Coffee Export Transaction Data	581
<i>Syarifah Chaira Zulfa, Erna Budhiarti Nababan and Mohammad Andri Budiman</i>	
Stock Price Prediction on LQ45's Banking Sector Using Long-Short-Term Memory and Convolutional Neural Network	587
<i>Shannen Surya Wibisono, Karissa Leviana, Timothy Sean Muliadiredja, Helena Margaretha, Ferry Ferdinand and Jennifer Utomo</i>	
Streamlining Meatball Manufacturing: Lean Principles and Efficiency Improvements	592
<i>Anthony Matthew and Laurence</i>	
Innovative Climate Solutions: Simulating the Future with En-ROADS	598
<i>Christopher Alfredo, Laurence and Agustina Christiani</i>	
Gender Classification Based on Fingerprint Using Sobel Filter and Artificial Neural Network	603
<i>Sri Suwarno and Lukas Chrisantyo</i>	
Exploring The Impact of Social Media Adoption to Small Medium Enterprises (SMEs) Performance	608
<i>Erwin Halim, Pandu Darmawan, Sudiana Sudiana, Yuliana Lisanti , Liana Sugandi and Placide Poba-Nzaou</i>	
Exploring the Nexus of Website Security and Design for Superior Service Quality, Customer Satisfaction, and Loyalty	614
<i>Erwin Halim, Decwind Susanto, Sudiana Sudiana, Yuliana Lisanti, Jessicania Windari and Ai Ping</i>	

Teoh	
Actor and Network Analysis: The Existence of Virtual Public Sphere on YouTube.....	620
<i>Frederik Gasa, Sidharta Sidharta, Bhekti Setyowibowo, Yongkie Angkawijaya, Adellya Triagustin and Norfarizah Bakhir</i>	
Study on Object-Relational Mapping (ORM) Data Model Performance Effects in the Oil and Gas Industry	626
<i>Darren Mannuela Pangesa, Maria Seraphina Astriani and Ida Manuaba</i>	
The Relationship between Social Media Marketing, Product Innovation, and Brand Equity with Mediated Customer Engagement in the Indonesian Packaged Tea Industry	632
<i>Indra Raharja, Sarah Qonitah and Dicky Syahchari</i>	
Comprehensive Monitoring of Asthma: Evaluating Vital Signs, Sleep Quality, Air Quality, and Psychological Factors	638
<i>David Hareva and Sherly Nathasya</i>	
Exploring Penetration Testing: A Comparative Analysis of Brute Force Directory Tools in Vulnerability Analysis Phase.....	644
<i>Naufal Seira Muhammad Farras, Jason Loderick, Hanis Amalia Saputri and Azani Cempaka Sari</i>	
Node-Based Mapping for Augmented Reality Indoor Navigation	650
<i>Felix Nathanael Tjahjono, Matahari Bhakti Nendya, I Kadek Dendy Senapatha, Tasya Setyo Harwati and Kenny Ivander Jovan</i>	
Usability Evaluation Of Augmented Reality Indoor Navigation : A System Usability Scale Approach	655
<i>Tasya Setyo Harwati, Matahari Bhakti Nendya, I Kadek Dendy Senapatha, Yuan Lukito, Felix Nathanael Tjahjono and Kenny Ivander Jovan</i>	
Automatic Question-Answer Generation for Education on Indonesian Texts : A Review of Methodologies, Dataset and Evaluation Metrics	660
<i>St Tuhpatussania, Ema Utami, Kusrini Kusrini and Kumara Ari Yuana</i>	
Feature Extraction Techniques for Patterned Images: A Systematic Literature Review	666
<i>Wenti Wahyuni, Arief Setyanto, Ema Utami and Kusrini Kusrini</i>	
Enhancing Heart Rate Detection Accuracy Through the Kalman Filter Algorithm	672
<i>Mangasa A. S. Manullang, Poltak Sihombing and Mahyuddin K. M. Nasution</i>	
Digital Marketing Benchmark Between Cafes in Asean: A Systematic Literature Review	678
<i>Daffa Prakoso Hadi and Rido Sarwono</i>	
An Adaptive Electric Field Stereotaxis Method for Brain Surgical Navigation	684
<i>Yuxin Fang, Fan Yang, Wei He, Pengbo Wang, Zhenyou Liu and Wei Zhang</i>	
Customer Segmentation Based on Recency, Frequency, Monetary, Variety and Duration (RFMVD) ...	688
<i>Agus Sundari, Maya Silvi Lydia and Muhammad Anggia Muchtar</i>	
Optimizing Sarcasm Detection through Various Input Methods in Text Data.....	693
<i>Nicholaus Jeremy, Matthew Alam, Justin Tristan Tirtawijaya and Jonathan Samuel Lumentut</i>	
American Sign Language Alphabet Recognition Using Convolutional Neural Network	698
<i>Jefri Pangaribuan, Romindo Romindo, Aditya Mitra, Okky Barus and Sai Prashanth</i>	
Rice Disease Detection and Classification Using Mask R-CNN and DenseNet.....	704
<i>Nicholaus Jeremy, Nicole Minar Widjaja, Bryan Alvis Xavier Halim Chandra and Jonathan Samuel Lumentut</i>	
The Prospect of Combining NFC Technology with Hologram Projection for Early Childhood Education	710

Maria Seraphina Astriani

Optimizing User Experience: Evaluation of Usability and Cognitive Walkthrough on Web DECART	714
<i>Ranty Deviana Siahaan, Arlinta Barus, Paulina Panjaitan and Vistar Rajagukguk</i>	
Deciphering Key Features in Online Buying Session Prediction Using Logistic Regression and Naive Bayes	720
<i>Arnold Aribowo and I Made Murwantara</i>	
Blockchain-based Coal Mining Concession Production Monitoring System	726
<i>Mutiara Marpaung and Pujianto Yugopuspito</i>	
Utilizing Augmented Reality to Improve Customers' Purchase Intention in Retail Furniture Applications in Indonesia.....	730
<i>Gwenda Tannia Suryasamudra, Nurul Farhanah Bt Mohd Idres, Jolin Lee, Valentheresia Valentheresia, Gunawan Wang and Anderes Gui</i>	
Fake News Classification Using SVM And Logistic Regression Methods	736
<i>Ferawaty Ferawaty, Mangasa A. S. Manullang, and Richard Hanitio</i>	
Enhancing Diabetes Management through Mobile Applications: A Comprehensive Approach to Health Management	741
<i>David Habsara Hareva, Vanessa Chriszella Rasubala and Benny Hardjono</i>	
Early Identification of Potential Heart Abnormalities with Decision Tree Method	746
<i>Mardi Turnip, Imanuel Putra, Desta Telaumbanua, Albert Nicol, Abdi Dharma and Delima Sitanggang</i>	
CoRun: Application for Coaching in Indorunners Community	752
<i>Lily Puspa Dewi</i>	
Application Of Decision Tree Algorithm In Classifying The Level Of Impulsivity In EEG Signals	756
<i>Yennimar, Dhanny Rukmana Manday, Anita Christine Sembiring, Nurima Lumbantoruan, Arico Sempama Ginting, Ruth Marsaulina Simanjuntak, Delima Sitanggang</i>	
Utilizing Fine-Tuning ResNet-18 For Acute Leukemia Diagnosis From Blood Smear Images	762
<i>Triandes Sinaga, Ade Candra and Bedy Purnama</i>	
Obesity Prediction: K-Nearest Neighbor vs. Support Vector Machine	768
<i>Okky Barus, Felix Billie, Jusin Jusin, Jefri Pangaribuan and Ade Maulana</i>	
Prevalence, Devices Used, Reasons for Use, Trust, Barriers, and Challenges in Utilizing Generative AI among Tertiary Students.....	773
<i>John Paul Miranda, Joseph Alexander Bansil, Emerson Fernando, Almer Gamboa, Hilene Hernandez, Myka Cruz, Roque Francis Dianelo, Dina Gonzales and Elmer Penecilla</i>	
Deep Learning in Image Classification Using Modified ResNet50 and Texture Features for Lung Cancer Detection	779
<i>Evander Banjarnahor, Jefri Pangaribuan, Okky Barus and Romindo Romindo</i>	
Development of RLE Scorer Web App for College of Nursing at Tobruk University	785
<i>James Neil Mendoza, Dorothy Buhat-Mendoza and Jocelyn Ampaguey</i>	
The Effect of Mobile Service Quality Dimensions in Food and Beverage Mobile Applications on Customer e-Satisfaction in Indonesia.....	791
<i>Ricky Satria, Jonathan Timothy Christian, Kelven Jaya Kristanto and Tanty Oktavia</i>	
Information Technology, Organizational Culture, and Portfolio Management: A Measurement Model ...	797
<i>Faros Zaim and Apol Subriadi</i>	
Gold Price Administration and Prediction Application using Moving Average Method.....	803

Alexander Setiawan

Prediction of Land Use and Land Cover (LULC) Changes for 2030 Using Time Series Data and Random Forest Algorithm 809

Evta Indra, Dheo Putranta Pandia, Tengku Nabila and Dennis Jusuf Ziegel

Effects of Social Media Marketing Towards Online Purchase of Local Perfumes in Indonesia 815

Lim Sanny

HCI Approach to Increasing E-Learning Using a Combination of Cognitive Walkthrough and User Centered Design 821

Baenil Huda, Kristoko Hartomo, Yessica Nataliani and Irwan Sembiring

Improving Credit Score Classification Using Long Short-Term Memory and Support Vector Machines Tuned with Whale Optimization Algorithm 827

Sebastianus Radhya, Yeremia Toemali, Francesco Jovan and Abram Prabowo

Forecasting the Stock Price of Bank Central Asia using Singular Spectrum Analysis Based Model 833

Etik Zukhronah, Winita Sulandari, Sri Subanti, Isnandar Slamet, Sugiyanto Sugiyanto and Irwan Susanto

Analyzing the Performance of Golang Web Frameworks Utilizing GORM in the Oil and Gas Industry ... 839

Karsten Lie, Maria Seraphina Astriani and Ida Manuaba

A Comprehensive Evaluation of the AR Budur Application: A TELOS Analysis 845

Audrianne Gunawan, Felix Nathanael Tjahjono, Danny Sebastian and Restyandito Restyandito

AI-Powered Badminton Shot Classification 851

Michael Salim, Winly Williamdy and Eden Steven

Optimising Plastic Waste Management: YOLO-NAS-Based Robotic Sorting and Mobile App Prototypes for Adaptive Model Training 857

Vihaan Jain, Aria Amadeus Salim and Eden Steven

Comparison Research: YOLO (You Only Look Once) Model for Indonesian Sign Language Detection Reducing Communication Inequalities..... 863

Brandon Steven, Calista Vannia Nathalie, Christopher Gerry Johanes and Puti Andam Suri

Tracking and Predicting CO2 Emission Transportation in Toba Regency 869

Humasak Simanjuntak, Esphi Hutabarat, Sintia Silaen, Agnes Marpaung and Susi Purba

Optimizing Walking Routes for Step Goals using Knapsack Algorithm 877

Susi Eva Maria Purba, Sarah Rosdiana Tambunan and Chandro Pardede

Diversity Focused Content-Based Filtering Recommendation System 881

Chandro Pardede, Parmonangan R. Togatorop, Ary Aritonang and Rosni Lumbantoruan

Prototyping an IoT-Based Smart Controlled Poultry Farm System 887

Indra Tambunan and Noel Riki Apryanto

SparkFlow: A Simple Big Data Analysis Application over Apache Spark 892

Henry Novianus Palit, Andre Gunawan and Daniel Jeremia

Blockchain-Enabled Analytics in Banking Enhancing Risk Management for the Future of the Industry.. 898

Rusdi Pratomo, Marviola Hardini, Dwi Julianingsih, Dedeh Suprianti and Qurotul Aini

The Role of User Behavior Patterns in Enhancing Fraud Detection in Online Banking: A Bibliometric Analysis 904

Pita Silvia, Qurotul Aini, Efa Ayu Nabila, Henderi Henderi and Hardjanto Nusantara

Exploring the User Satisfaction of Gamification in Promoting Savings Among Millennials	910
<i>Ariya Jati Kusumo, Qurotul Aini, Shofiyul Millah, Tuti Nurhaeni and Lusyani Sunarya</i>	
Big Data Analytics for Proactive Financial Fraud Detection and Prevention	916
<i>Yehezkeil Hasudungan, Fitra Putri Oganda, Maria Daeli, Raihan Raihan and Nesti Anggraini Santoso</i>	
Exploring User Experience and Challenges with Mobile Wallet Adoption in Emerging Markets	922
<i>Priandito Priandito, Ninda Lutfiani, Natasya Aprila Yusuf, Thomas Sumarsan Goh and Muchlisina Madani</i>	
The Role of Financial Literacy and Fintech in Promoting Financial Inclusion	928
<i>Tri Widiyatmoko, Untung Rahardja, Nanda Septiani, Dewi Immaniar Desrianti and Muhammad Faizal Fazri</i>	
Evaluating the Effectiveness of Gamification in Mobile Banking to Increase Savings Rates	933
<i>Tubagus Wahyu Rafiuddin, Ninda Lutfiani, Agung Rizky, Mulyati Mulyati and Galih Putra Cesna</i>	
Application of Projection Mapping and RFID in Assembly Process	939
<i>Novie Theresia Br. Pasaribu, Markus Tanubrata, Vivi Arisandhy, Erwani Merry Sartika, Audyati Gany</i>	

Author Index