

2025 International Conference on Advancement in Data Science, E-learning and Information System (ICADEIS 2025)

**Bandung, Indonesia
3-4 February 2025**

Pages 1-473



**IEEE Catalog Number: CFP25W96-POD
ISBN: 979-8-3315-1333-7**

**Copyright © 2025 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:	CFP25W96-POD
ISBN (Print-On-Demand):	979-8-3315-1333-7
ISBN (Online):	979-8-3315-1332-0

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

Table of Contents

<i>A Systematic Literature Review of Transfer Learning for Eye Tracking</i> Achmad Solaeman; Syukron Abu Ishaq Alfarozi; Sunu Wibirama	1
<i>Analyzing the Impacts of Dynamic Game Balancing in a Survival Roguelike Chess Game</i> Mario Mario; Yulyani Arifin	8
<i>Digital Transformation of Micro Business in Retail Sectors: a Systematic Literature Review</i> Noerma Pudji Istyanto; Mahendrawathi ER	16
<i>A Comparative Study of Traditional and Deep Learning Models Using Emotional Customer Data in Automotive Sales Forecasting</i> Gempar Godata; Irmawati Irmawati	22
<i>Using CNN and Transformer Model for Unimodal Speech Emotion Recognition on MELD and IEMOCAP</i> Clarence Aurelio; Andry Chowanda	28
<i>Optimizing Shapelet Lengths for Effective Time Series Classification</i> Wahyuddin S; Ahmad Saikhu; Agus Budi Raharjo	35
<i>Image Processing System for Providing Sound Information as an Assistive Tool for the Visually Impaired</i> Tilfi Sari; Beni Wijaya; Helfy Susilawati; Sifa Nurpadillah; Ginaldi Ari	41
<i>Application of Bidirectional Gated Recurrent Unit and Stacked Gated Recurrent Unit Algorithms for Stock Price Prediction</i> Nasya Melyani; Mustakim Mustakim; Angraini Angraini; M Afdal	46
<i>Evaluation of Diversity and Novelty of Recommendation System on Digital Learning Platform Based on User Usability and Satisfaction</i> Elsam Rafi Saputra; Dana Sulistyo Kusumo	52
<i>A Comparative Study of VGG16, MobileNet, and Ensemble Methods on Fundus Image-Based Cataract Detection</i> Tabina Nabila Syahda; Mochamad Nizar Palefi Maady; Berlian Rahmy Lidiawaty	59
<i>Sentiment Analysis of Public Complaints: a Machine Learning Comparison of SVM, Naive Bayes, Random Forest, and XGBoost</i> Iqbal Hafidz; Agus Sulistya; Berlian Rahmy Lidiawaty	65
<i>Prioritization of Data Governance Frameworks Using a Fuzzy MCDM Approach: a Case Study</i> Mohammad Nikbakht; Vahideh Mojtahed	71

<i>Topic Recommendation With Article Metadata Using Collaborative and Content-Based Filtering on Author Activeness Profiling</i>	77
Ilham Gurat Adillion; Muhammad Farras Pangestu; Dini Adni Navastara; Yudhi Purwananto; Rully Soelaiman; Diana Purwitasari	
<i>Detecting Early Signs of Overtourism in Bali: Sentiment and Multiclass Analysis Using BERT and LSTM</i>	83
Dini Khairina; Herry Irawan	
<i>Blockchain Adoption in Financial Audit: a Review</i>	90
Mochamad Daffa Fahrezy; Rudy Tjahyadi; Heny Kurniawati	
<i>Forecasting Tax Revenue in Indonesia Using Single and Hybrid Methods</i>	96
Desy Jayanti; Selo Sulisty; Paulus Insap Santosa	
<i>Challenges and Recommendations for Improving Logistic Skills Through Simulation-Based Learning Technology</i>	102
Tamsir Sirait; Meyliana Meyliana; Yulyani Arifin; Budi Yulianto	
<i>Enterprise Architecture Framework in Smart Village: a Systematic Literature Review</i>	108
Muhammad Ilham Alhari; Erma Suryani; Reny Nadlifatin	
<i>Myocardial Infarction Identification in Electrocardiogram Signals Using Long Short Term Memory Transfer Learning (LSTM-TL)</i>	113
Nugroho Rahmanto; Satria Mandala	
<i>Implementation of Komodo Mlipir Algorithm in Encoder-Decoder Optimization of IMFF-Net Architecture for Retinal Vessel Segmentation</i>	119
Prins Nuzeren; Isman Kurniawan	
<i>RAHBA-Net: Implementation of RandAugment and Hybrid Bat Algorithm to Optimize Convolutional Neural Network Performance in Classifying Coffee Plant Diseases</i>	125
Yusnita Putri; Prins Nuzeren; Isman Kurniawan	
<i>Multi-Label Classification of Al-Qur'an Verses Using Ensemble Method and BERT</i>	131
Fauzan Rizqi; Moch Arif Bijaksana; Bunyamin Bunyamin	
<i>Classification of Hadith Authenticity Based on Sanad Using BERT</i>	136
Muhammad Luthfi Khusyasy; Moch Arif Bijaksana; Kemas Muslim Lhaksmana	
<i>A Systematic Review of Smart Farming: Technology, Process and People</i>	142
Yudhi Kurniawan; Mahendrawathi ER	
<i>Improvement of Small Object Detection of Handwritten Answer Sheet</i>	148
Nur Ayu Farahgta Fansab; Syukron Abu Ishaq Alfarozi; Igi Ardiyanto	

<i>A Design Thinking Approach to the Development of Digitalized Hotel Valet Services</i>	154
Muhammad Al Makky; Tito Pandu Raharjo; Sheina Fathur Rahman; Rahmat Yasirandi	
<i>Design of Monitoring and Battery Swapping System at Public Electric Vehicle Battery Charging Stations</i>	160
Aji Akbar Firdaus; Deny Arifianto; Ananthyo Whisnu Wardhana; Prihadi Murdiyat; Dwiana Hendrawati; Aditya Trias Putra Yanuar	
<i>News Sentiment-Enhanced GRU Encoder-Decoder for Advanced USD/IDR Exchange Rate Forecasting</i>	166
Nathaniel Susianto Sutanto; Henry Lucky	
<i>Utilizing CTAT Cognitive Tutor for Learning Fraction Multiplication and Division With Adaptive Feedback</i>	172
Ida Bagus Indrabudhi Kusuma; Selly Meliana; Dade Nurjanah	
<i>Impact of Smart Home-Based Artificial Intelligence Implementation to Facilitate Household Activities in Indonesia</i>	178
William Kusuma; Melina Andriana; Neola Diva Putri Siringoringo; Sulistyo Heripracoyo	
<i>Implementation of Prioritized Experience Replay and Noisy Network on DQN for Fertilization Management in Soybeans</i>	184
Alfian Fakhrezi; Doan Perdana; Gelar Budiman	
<i>Activity Monitoring and Detection of Rabbit Livestock Using Internet of Things (IoT) With Naïve Bayes (NB)</i>	190
Reinhard Otniel; Hilal Huda; Muhammad Al Makky	
<i>Activity Monitoring and Detection of Rabbit Livestock Using Internet of Things (IoT) With Classification Tree (CT) Method</i>	194
Sebastianus Eagan Lilo; Hilal Huda; Muhammad Al Makky	
<i>Development of a Laravel-Based Backend Application Server to Support Farm Animal Information Management at Sein Farm Bandung City</i>	199
Aryo Bhagaskoro; Muhammad Al Makky; Hilal Huda	
<i>On-Edge Device Optimization Using Multiple Classification Method for Cat and Dog Audio Classifier</i>	205
Wicaksono Leksono Muhamad; Dwi Ahmad Dzulhijjah; Fathin Difa Robbani; Dyah Aruming Tyas	
<i>Machine Learning Solutions for Stunting Classification in Karya Jaya: a Case Study Using KNN and SVM</i>	211
Virdi Rizky Elnanda; Indwiarti Indwiarti; Putu Harry Gunawan	
<i>A Systematic Literature Review on Document Verification With Blockchain</i>	216
Agung Trisnandar; M. Kurniawan; Nur Ichsan Utama; Muharman Lubis	
<i>Optimizing Distributed Generator Placement in Distribution Networks Using Flower Pollination Algorithm With Self-Healing Integration</i>	222

Vicky Kusuma; Rony Wibowo; Dimas Uman Putra	
<i>AI-Generated Text Detector for English Written Essay Using Ensemble RoBERTa</i>	228
Annalia Alfia Rahma; Kemas Muslim Lhaksmana	
<i>System Identification for Yaw Dynamics Prediction Model of an Autonomous Underwater Glider: Comparison of N4SID and ARX Models Using Preprocessed Data</i>	234
Yansha Ramadhan Pratama; Muhammad Hanif Hibatullah; Bambang Riyanto Trilaksono; Egi Hidayat; Simon Siregar; Yansen Dwiputra	
<i>Comparison of Machine Learning Methods for Air Quality Prediction Based on Particulate Matter (PM2.5)</i>	240
Farhanna Mar'i; Susi Marianingsih; Rifqi Abdillah; Ersha Aisyah Elfaiz; Riza Akhsani Setyo Prayoga; Muhamad Fahmi	
<i>Development of a Deep Learning Hybrid Model for Classification of Plastic Waste Objects in the Coastal Environment</i>	246
Imran Djafar; Indrabayu Indrabayu; Syafruddin Syarif	
<i>Enhancing Missing Data of Water Level With Artificial Intelligence: a Case Study on the Kretek, Opak Watershed, Yogyakarta</i>	252
Amelia Febrina; Lukito Nugroho; Indriana Hidayah	
<i>Comparative Study to Find the Best Deep Learning Feature Extraction Models and Machine Learning Classification Algorithm to Detect Monkeypox Disease</i>	258
Hasna Salsabilla Abdullah; Tammy Visca Tjitra; Vanessa Kwandinata; Said Achmad	
<i>Refining Words for Improved BERT Model Performance in User Review Classification</i>	264
Lauretha Vantie; Siti Rochimah	
<i>Click Count Forecasting With Bi-Directional LSTM and Temporal Feature Fusion</i>	270
Rifqi Abdillah; Farhanna Mar'i; Moch Deny Pratama; Muhammad Sonhaji Akbar; Monica Cinthya; Anggraeni Widya Purwita	
<i>House of Risk Phase 1: a Tool for Identifying and Prioritizing Software Development Risk Agents</i>	276
Setya Uswatun Hasanah; Paulus Insap Santosa; Ridi Ferdiana	
<i>Belle: Large Language Model-Based Conversational Recommender Systems for Beauty Products</i>	282
Elvira Wulandari; ZK Baizal	
<i>Carfin: Car Recommender System Based on Conversational Recommender System Using Large Language Model</i>	288
Alfiessa Widya Wirawan; ZK Baizal	
<i>Unveiling the Truth: Detecting Fake News Using SVM and TF-IDF</i>	294

Randi Rizal; Ade Faturahman; Ali Impron; Irfan Darmawan; Erna Haerani; Alam Rahmatulloh	
<i>Optimizing Learning Rates and Feature Expansion With FastText in Hybrid CNN-BiGRU for Indonesian Cyberbullying Detection on X</i>	300
Rexcel Pabian; Erwin Setiawan	
<i>Hands-on Gaming: Real-Time Gesture Detection in Rock-Paper-Scissors Using Mediapipe and CNN</i>	308
Irfan Darmawan; Aulia Melda Meldiawati; Randi Rizal; Alam Rahmatulloh; Erna Haerani; Rohmat Gunawan	
<i>Deletion Attacks on Database Watermarking for Tracing Partial Data Breach</i>	313
Riki Achmad; Baskoro Pratomo; Diana Purwitasari	
<i>Predicting the Future: Using AdaBoost to Forecast Food Commodity Prices Across Indonesian Markets</i>	319
Erna Haerani; Selmi Aulia; Irfan Darmawan; Alam Rahmatulloh; Randi Siliwangi University; Rohmat Gunawan	
<i>Implementation of Zero Knowledge Proof and Smart Contract for E-Voting System on Polygon Blockchain</i>	324
Ichsan Nur Ahmad; Parman Sukarno; Aulia Arif Wardana	
<i>Vehicle Detection and Tracking Techniques Using Yolo Detection and Kalman Filter Optimization</i>	330
Ahmad Hunain; Indrabayu Indrabayu; Amil Ahmad Ilham	
<i>Sentiment Analysis on 2024 Regional Elections Using Hybrid CNN-SVM With Semantic Features and Word2Vec</i>	336
Syabbilla Andinny; Erwin Setiawan	
<i>Hybrid Approach of LDA, ROS-NCL, and CNN for Topic Mining in Fintech User Reviews</i>	343
Pieter Chang Hartono; Albertus Dwiyooga Widianoro; Bernardinus Harnadi; Erdhi Widyarto Nugroho	
<i>EduGym Post-Mortem: Open Educational Resource for Educational Game</i>	349
Jos Tarigan; Elviawaty Zamzami; Niskarto Zandrato; Anandhini Nababan	
<i>Conversational Recommender System Using a Combination of Fine-Tuned GPT-4o and Retrieval-Augmented Generation for Laptop Recommendations</i>	355
Fathan Askar; ZK Baizal	
<i>Indonesian Fake News Classification Using Bi-LSTM With IndoBERT and Data Augmentation</i>	362
Tsania Millatina Aghnia Fariha; Kemas Muslim Lhaksmana	
<i>Web Penetration Testing Using Collaborative Multi-Agents and Integrated Reporting</i>	368
Rizki Juliadi; Parman Sukarno; Aulia Arif Wardana	
<i>Indonesian People's Readiness for Blockchain Adoption in E-Commerce</i>	374
Fransiskus Hermanto; Glorious Hermawan; Robertus Atmojo	

<i>A Bayesian Filtering Approach to Power System Dynamic State Estimation</i> Azka Hariz Sartono; Husni Rois Ali; Adha Imam Cahyadi	381
<i>Disaster Recovery Strategy: RTO and RPO Analysis on on-Premises and Cloud Infrastructure</i> Tego Suyatno; Ridi Ferdiana; Widy Widyawan	388
<i>Machine Learning Method for Carbon Stock Classification With Drone and GEE Data</i> Mohammad Daffa Setiawan; Erwin Budi Setiawan	394
<i>Depression Detection Using Hybrid Model BiLSTM - CNN With Glove as Feature Expansion in X</i> Bintan Artamevia; Erwin Setiawan	401
<i>Comparative Analysis of Ensemble Techniques for Bone Fracture Detection From X-Ray Images Using HOG Features</i> Abyan Farrel Muzakki; Simeon Yuda Prasetyo; Eko Setyo Purwanto	408
<i>Facial Age Estimation With Deep Convolutional Neural Network Architecture</i> Jalaludin Wiliam Tchín; Alvin Winata; Simeon Yuda Prasetyo; Eko Setyo Purwanto	414
<i>Leveraging Eager Learning for Retinal Abnormality Classification With Local Binary Pattern Features</i> Eric Silvanus Harianto; Benny Chandra Setiawan; Simeon Yuda Prasetyo; Eko Setyo Purwanto	420
<i>AI and Civic Engagement: a Brief Exploration of Applications and Opportunities</i> Dimitrios Sarafis; Konstantinos Karamitsios; Kalliopi Kravari	426
<i>Leveraging Segformer for Precision Segmentation of Optic Cup and Optic Disc in Fundus Imaging for Glaucoma Detection</i> Iga Novinda Rantaya; Syukron Abu Ishaq Alfarozi; Hanung Adi Nugroho	432
<i>Anomaly Detection on Gas Pipeline Operational Data Using Classic Seasonal Decomposition and Level Shift Anomaly Detection Architecture</i> Akmal Muzakki Bakir; Aditya Firman Ihsan; Widi Astuti	438
<i>Optimization of Object Relational Mapping: Query Profiling Integration Based on Frequency and Timestamps Implementation in LRU</i> Nur Rahmat Riyanto; Siti Rochimah	444
<i>Implementation of Semantic Search Based on Vector Database for Personal Documents</i> Namira Salsabilla; Kemas Wiharja	450
<i>Optimized FLOPs-Aware Knowledge Distillation for TinyML Applications in Agriculture</i> Arjay Alba; Jocelyn Villaverde; Amor Lacara; Jovita Domingo; Dennis Aguirre	456

<i>Classification of Vehicle Classes at Toll Gates Using YOLOv9 and Resnet50</i>	462
Abdul Aziz Febriyansah; Gamma Kosala	
<i>Exploring Connectivity Pattern, Wealth Distribution, and Market Behavior: Insights Into Decentralized Finance Network</i>	468
Ki Anisa Zahria Salsabila; Andry Alamsyah; Nora Amelda Rizal	
<i>Attention Mechanisms in Semantic Convolutional Neural Networks for Flood Area Segmentation</i>	474
Muhammad Banin Basit; Muhammad Shidqi; Simeon Yuda Prasetyo; Eko Setyo Purwanto	
<i>Detection of Depression on Social Media X With FastText Feature Expansion Using Hybrid Deep Learning CNN-GRU</i>	480
Wahyu Nata Mahendra; Erwin Budi Setiawan	
<i>A Sentiment-Augmented Machine Learning Approach to Forecasting IHSG Prices Using XGBoost</i>	490
Muhammad Rizki Wiratama; Narita Aquarini; Putu Harry Gunawan	
<i>Brain Tumor Detection Using YOLO Models in MRI Images</i>	496
Muhammad Fikri Wahidin; Gamma Kosala	
<i>Enhancing Emotion Detection With Bidirectional GRU Networks: a Deep Learning Approach Using Dropout and Batch Normalization</i>	502
Marvin Luckianto; Renaldi Addison; Alexander Agung Santoso Gunawan	
<i>Applying Ensemble Tree-Based Models and Explainable AI for IoT Botnet Detection in Heterogeneous Device</i>	508
Parman Sukarno; Muhammad Ilham Yushronni; Aulia Arif Wardana	
<i>Personalized Recommender System for e-Commerce Grocery Using Time-Based Collaborative Filtering</i>	514
Sintia Dwi Cahya; ZK Baizal	
<i>Abnormal Trajectory Type Loitering Detection Using YOLOv9 and CNN</i>	520
Abdul Khair; Gamma Kosala	
<i>Time-Based Collaborative Filtering for Movie Recommendation Using Implicit Feedback</i>	526
Alicia Kristina Parinussa; ZK Baizal	
<i>Implementation of Camel Algorithm-Support Vector Machine in Predicting Angiotensin Converting Enzyme (ACE) Inhibitor as Antihypertensive Agent</i>	532
Raihan Fathul Bayan; Isman Kurniawan	
<i>Predicting Toxicity of Ionic Liquids Toward Acetylcholinesterase Enzymes by Using Firefly Algorithm-Support Vector Machine</i>	538
Andhika Rangga Dwi Guntara; Isman Kurniawan	

<i>Data Augmentation Using Multi-Turn Dialogue Prompting for Sentiment Analysis</i> Syifa Fatimah Azzahrah; Ade Romadhony	544
<i>Progressively Trained Deeply Supervised Network for Brain Tumor Segmentation</i> Evan Kusuma Susanto; Handayani Tjandrasa; Chastine Fatichah	550
<i>Stunting Classification Among Toddlers Using Decision Tree C4.5 in Berastagi City</i> Hygea Saveria; Putu Harry Gunawan	555
<i>Modelling of Significant Wave Height Time Series Prediction Using CatBoost With a Case Study in Pacitan, Indonesia</i> Osa Nastiyar Maulani; Didit Adytia; Hendri Bhirowo Dwi Hananto; Indra Aditya	561
<i>Prediction of Wave Height Time Series Using Temporal Convolutional Network Approach: a Case Study in Pacitan, Indonesia</i> Imam Akbar Nugraha; Didit Adytia; Hendri Bhirowo Dwi Hananto; Indra Aditya	567
<i>Edge-IoT DistilBERT: Fine-Tuning DistilBERT for Multi-Class Classification of Network Packet Attacks</i> Valentino Setiawan; Benfano Soewito	573
<i>Mobile Banking Security: Relationship Between Trust, Risk Perception, and Security Based on UTAUT</i> Reza Aulia Desri; Rio Guntur Utomo	579
<i>Analyzing Issues and Challenges in Standard LMS Functions and Evaluation Methods</i> Rafian Ramadhani; Muharman Lubis; Rd. Rohmat Saedudin	585
<i>ElGamal Homomorphic Encryption With SMOTE for PET in Occupancy Monitoring by XGBoost</i> Mikail Asadel Rafif Tarigan; Aji Gautama Putrada; Ryan Lingga Wicaksono	593
<i>Design and Development of a Dashboard System to Enhance Monitoring in People's Business Credit</i> Made Darma Kusumayuda; Ikrar Adinata Arin; Wendy Endrianto	599
<i>Utilizing Large Language Models for Developing Automatic Question Generation in Education</i> Ardiansyah Jaya Winata; Daniel Jahja Surjawan; Viny Christanti Mawardi	606
<i>A Combined ResNet50 - Restricted Boltzmann Machine for Multilabel Eye Diseases Classification</i> Nurul Fadhillah; Ingrid Nurtanio; Syafaruddin Syafaruddin	612
<i>Comparative Analysis of Multiclass Classification Using AE-CNN Method Combination on Nail Diseases</i> Andi Herdiansyah Palloge; Zulkifli Tahir; Syafaruddin Syafaruddin	618
<i>The Effect of News Sentiment on Jakarta Composite Index Prediction Using Support Vector Regression Method</i>	625

Widha Dwiyantri; Narita Aquarini; Putu Harry Gunawan	
<i>Zero Trust Network Access (ZTNA) to Secure Website Applications Based on ISO 25023</i>	630
Zain Maulana Azmi; Iqbal Fadhil; Devita Dwitama Putri Baron; Ary Mazharuddin Shiddiqi	
<i>Semantic Segmentation of Land Cover in Multisource Aerial Imagery Using U-Net</i>	636
Sayid Rayhan Mulachela; Erwin Setiawan; Gamma Kosala	
<i>Fraud and Anomaly Detection in Electricity Usage Patterns Using Bi-LSTM</i>	642
Agus Haryadi; Syukron Abu Ishaq Alfarozi; Azkario Rizky Pratama	
<i>Attack Detection on Edge IIot Using Ensemble Learning and XAI Model Transparency</i>	648
Hussain Randika; Parman Sukarno; Aulia Arif Wardana	
<i>Exploring Corporate Law Violations Through Data-Driven Clustering Approaches</i>	654
Nipa Akter; Mohammad Abu Sufian; Nur Nahar Rimi; Afrin Ive Rinky; S M Shadul Islam Rishad ; Md Tanvir Rahman Tarafder	
<i>Modified Karvonen Formula and SMOTE-LSTM for Cycling Pose Monitoring With Imbalanced HAR Dataset</i>	660
Fauzan Zikril Ikhsani; Muhamad Irsan; Aji Gautama Putrada	
<i>Comparative Model Evaluation of Lightweight Transformer-Based and CNN-Based Architecture for Degenerative Lumbar Spine Classification</i>	666
Jennifer Ardelia Limicia; Wilbert Chandra; Alexander Agung Santoso Gunawan; Jeffrey Junior Tedjasulaksana	
<i>The Implementation of Knowledge Management for Enhancing Employee Competence</i>	672
M Diego Bryllian; Lukito Edi Nugroho	
<i>Enhancing Python Object-Relational Mapping Performance Using Just-in-Time Compiler</i>	678
Aldi Setiawan; Dana Sulisty Kusumo	
<i>Optimizing Technical Telecommunication Assessment Evaluation With Large Language Models</i>	684
Fatkul Chorib; Gelar Budiman; Khilda Afifah	
<i>A Theoretical Framework for Fault Tolerance in Distributed Deep Learning: From Containers to Clusters</i>	690
Prashanth Josyula; Sethuraman Ulaganathan	
<i>Seamless High Availability in MySQL Database Systems: an Advanced Implementation of ProxySQL, Orchestrator, and Keepalived</i>	698
Jeremy Loa; Benfano Soewito	
<i>Recognizing Indonesian Sign Language (BISINDO) Alphabet Using Optimized Deep Learning</i>	704
Ridla Aliya Gani; Tjokorda Agung Budi Wirayuda	

<i>Emotion Classification Based on Social Media Text Upload Patterns Using the ALBERT Method</i> Made Rido Paramartha; Warih Maharani	712
<i>Improving Cyberbullying Detection With Graph Neural Network Approaches</i> Syaiikha Amirah Zikrina; Fitriyani Fitriyani	718
<i>The Effect of Awareness, Trust, Privacy, and Security on Students Adoption of Digital Banking</i> Radhitia Maulida Putri; Rio Guntur Utomo	724
<i>Rule-Based Dialect of Tulang Bawang Stemmer</i> Zaenal Abidin; Akmal Junaidi; Wamiliana Wamiliana; Favorisen Rosyking Lumbanraja; Dian Kurniasari; Rohmat Indra Borman	730
<i>A Hierarchical Approach to Identify Snake Species With Resemble Visual Features</i> Eva Putriany; Arief Setyanto	736
<i>Visualization of River Flow Velocity Modelling Using Bernoulli's Equation With HSV Color Representation</i> St Arafah; Zahir Zainuddin; Mukarramah Yusuf	745
<i>Optimizing Laboratory Security With IoT-Based Emergency Monitoring</i> Erika Loniza; Kurnia Chairunnisa; Febryadi Mokodompis; Sigit Widadi; Irvan Eko Kris Maryanto; Bambang Untara	751
<i>A Novel Computer Vision Classifier Identifying Alzheimer's Stages From MRI Scans</i> Fatimah Solaiman; Maryam Solaiman; Kelly Neary	756
<i>Classification of Stunting in Toddlers From Karyajaya Using eXtreme Gradient Boosting and K-Nearest Neighbors</i> Raihan Abdurrahman; I Wayan Palton Anuwiksa; Putu Harry Gunawan	760
<i>Exploring Models Approach for Real-Time Hand Gesture Recognition</i> Nurma' Asih; Bimo Sunarfri Hantono; Indriana Hidayah	766
<i>Remote Sensing Scene Classification Based on Hybrid Convolutional Neural Network and Attention Module</i> Muhammad Yusuf Kardawi; Alexander Gunawan	773
<i>Comparative Network Dynamics of Ethereum and Polygon: Insights Into NFT Ecosystem Structures and Behaviors</i> Nurdiana Safitri; Andry Alamsyah; Dian Puteri Ramadhani	779
<i>Technology-Enhanced Learning for User Security Awareness Using AI-Based Naive RAG: a Design and Prototype</i>	785

I Putu Agus Eka Pratama; I Made Oka Widyantara; Linawati Linawati; Nyoman Gunantara; Sinung Suakanto; Eka Tresna Irawan	
<i>Analysis of Artificial Intelligence Technology Adoption in an Educational Environment: Open AI Case Study Using the Innovation Diffusion Theory Framework (IDT)</i>	791
Yandi Putra Pangestu; Rio Guntur Utomo; Muhammad Faris Fathoni	
<i>Analyzing of the Alignment Between Course Learning Outcomes (CLOs) and Program Learning Outcomes (PLOs) Using Textual Similarity-Based Methods</i>	797
Afra Mahendra Prasetyawati; Werihisfenli Saragih; Mariana Frima; Ade Romadhony	
<i>Development English Qualification Test Try Out Website for Non-ESL Speaker</i>	803
Iqbal Fadhil; Daffa Barin Tizard Riyadi; Darlis Herumurti; Imam Kuswardayan	
<i>A Comparative Study of State-of-the-Art Object Detection Algorithms for Autonomous Vehicles in DonkeyCar Simulator</i>	809
Naoby Prawira; Nungki Selviandro; Gia Septiana Wulandari	
<i>Ontology-Based Low Glycemic Index Menu Recommender System for Patients With Diabetes</i>	815
Athalia Malika Najah; ZK Baizal	
<i>Microservices Enterprise Architecture Design With AI-Powered OCR for Improving Fixed Broadband Complaint Handling: a Telco Company Case Study</i>	821
Inka Sharatu Puspardarma; Iqbal Yulizar Mukti; Luthfi Ramadani	
<i>Integration of STRIDE and MITRE ATT&CK Frameworks for Enhanced Cyber Threat Modeling: a Case Study of Digital Merchant Banking Application</i>	827
Muhamad Akdzan Angganegara; Iqbal Yulizar Mukti; Muhammad Fathinuddin	
<i>Music Recommender System Using Non-Negative Matrix Factorization</i>	833
Syafreza Hanif Athari; ZK Baizal	
<i>Simulating the Effectiveness of Wolbachia-Based Vector for Dengue in Bandung Using Disease Spread Model</i>	838
Lutfiah Sania Sumardi; Irma Palupi; Hilda Fahlana	
<i>Skincare Recommender System Using Content-Based Filtering Method</i>	846
Tiara Novri Zamroni; ZK Baizal	
<i>Financial Feasibility Study of New Electricity Installations With Line Expansion Based on Machine Learning</i>	851
Dhudhik Hadiyanto; Selo Sulistyo; Guntur Dharma Putra	
<i>Utilizing TOGAF 10 to Design Enterprise Architecture for BPRBCo SME Digital Transformation</i>	857
Farisa Fikri Mumtaza; Rahmat Mulyana; Iqbal Yulizar Mukti	

<i>Blockchain-Based Carbon Credit Tokenization Model: Enhancing Market Transparency and Trust</i> Elsaniat Laoli; Andry Alamsyah	864
<i>A Statistical-Temporal Framework for Evaluating Missing Value Imputation on Daily Waste Data</i> Maimunah Maimunah; Joko Lianto Buliali; Ahmad Saikhu	870
<i>Harnessing YOLO for Loose Fruits Detection: Boosting Productivity in Palm Oil Plantations</i> Elly Warni; Indrabayu Indrabayu; Andani Achmad; Aldilah Rezki Rhamadani Syahsir	876
<i>Real-Time Vehicle Damage Classification Based on Accident Detection From CCTV Footage Using Two-Stage Approach</i> Ichwan Rizky Wahyudin; Ema Rachmawati	882
<i>Respiratory Rate Measuring System Using Accelerometer and Gyroscope Sensor in Android Smartphone With Variational Mode Decomposition (VMD)</i> Baginda Mi'raj Williamsyah; Farsha Abyan Abiyyi Hadiwidjaja; Achmad Rizal; Muhammad Hablul Barri; Alfridsyah Alfridsyah; Rahmawati Hidayah	888
<i>A Data-Driven Web Application for Village Information Management Using the Morphogenetic Approach</i> Nisrina Febriyanti; Sinung Suakanto; Edi Triono Nuryatno; Iqbal Yulizar Mukti; Hilda Nurhaliza	894
<i>Synergistic Approach to Enhancing Financial Transparency and Fraud Prevention With Blockchain and Data Science</i> Md Farhad Kabir; Arun Kumar Gharami ; Md Masudur Rahman; Iffat Sania Hossain; Ashequr Rahman; Zakir Hossain	900
<i>Mapping Seasonal Potential Fishing Zone of Skipjack Tuna in Biak Numfor Using Remote Sensing Data</i> Jordy Wira Arta; Eka Miranda	906
<i>Remote Sensing Approach for Estimating Vegetation Aboveground Biomass Affected by Land Conversion in South Malang Regency</i> Aisya Rabbania; Sinung Suakanto; Faqih Hamami; Erfan Rohadi; Nia Ambarsari	912
<i>Spatial and Temporal Analysis of Mangrove and Forest Change Based on Pre-Segmented Land Cover Data in Malang Regency</i> Danish Ayudya; Sinung Suakanto; Faqih Hamami; Erfan Rohadi; Nia Ambarsari	919
<i>Predictive Analytic for Investment Target Selection in Startup Companies Using Logistic Regression and K-Means Algorithms</i> Ida Bagus Putu Ariartha; Dadan Rahadian	925
<i>Object Detection for Occluded Medical Equipment in Hospital Environments Using YOLOv8</i> Muhammad Fahmi Hidayat; Sinung Suakanto; Faqih Hamami; Anis Farihan Mat Raffei; Edi Triono Nuryatno	932