

2025 5th International Conference of Science and Information Technology in Smart Administration (ICSINTESA 2025)

**Yogyakarta, Indonesia
29 November 2025**

IEEE Catalog Number:
ISBN:

CFP25CN6-POD
979-8-3315-5700-3



Copyright © 2025, IEEE

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:	CFP25CN6-POD
ISBN (Print-On-Demand):	979-8-3315-5700-3
ISBN (Online):	979-8-3315-5699-0

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

TABLE OF CONTENTS

The Exponential Smoothing Model for University Enrollment in East Java	1
<i>Muhammad Mansur Yafi, Achmad Wahyudi, Elsa Rosyidah, Untung Usada</i>	
Sentiment Analysis of Twitter App Reviews from Google Play Store	5
<i>Vallery Efryliant, Alven Tan, Muhammad Rafa Abyananda, Daven Karim, Evaristus Didik Madyatmadja</i> <i>Daffa Farras PutraTarigan</i>	
Spatial Analysis of HIV/AIDS Cases: Comparison of Five Spatial Models	11
<i>Khalida Aurora Amanda Putri, Achmad Choiruddin</i>	
Classification of Rice Leaf Diseases from Digital Images using Convolutional Neural Network	17
<i>Monica Widiarsi, Joko Siswanto, Putu Pramodia Suka Pratama</i>	
Blank Spot Analysis and Provincial Clustering for Determining Base Transceiver Station (BTS) Expansion Priorities Using Spatial Regression and Clustering Approaches	23
<i>Diandra Shafira Paramita, Hafidz Ridho, Effi Latiffianti, Diesta Iva Maftuhah</i>	
BGP Model: Optimized Feature Engineering for Batik Parang Classification Using GLCM and PCA	29
<i>Haryanto, Husna Sarirah Husin</i>	
A Comparative Analysis of YOLOv12 and RFDETR for Weapon Detection in CCTV Footage	35
<i>Muhammad Syafiq Aqilla, Muhammad Khozy Abdurahman, Arnoldus Bryan Hendry</i> <i>Muhammad Rafly Arjasubrata, Mahmud Dwi Sulistiyo</i>	
Eye Health and Posture Warning System for Computer Users Using the Fuzzy Logic Method	41
<i>Maria Agustin, Prihatin Oktivasari, Indra Hermawan, Sinantya Feranti Anindya, Rayhan Atthala</i> <i>Berliana Upik Nurniarti</i>	
Spatial Attention-Guided Feature Refinement in Quality-Adaptive Face Recognition against Occlusion	47
<i>Rabibisoa Giovanni, Zahir Zainuddin</i>	
Real-Time Anomaly Detection in Microservices	53
<i>Krishna Kandi</i>	
ResNet18-Based Binary Classifier for Rice Seed Quality: Achieving Production-Ready Status	57
<i>Joseph R. Del Carmen</i>	
Deterministic Robust Gap-Closing for Animation Line-Art Colorization	61
<i>Siera Maulida Asrin, Zahir Zainuddin, Ingrid Nurtanio</i>	
Comparative Study of PCA–RBFNN and Convolutional–RBFNN Models for Handwritten Mathematical Symbol Recognition in Indonesian Elementary Education	67
<i>Naldi Ahmad Nur Patty, Zahir Zainuddin</i>	
Monitoring Student Mood for Early Detection of Mental Health Issues Using Learning Vector Quantization	73
<i>Desy Intan Permatasari, Umi Sa'adah, Nailussa'ada, Adam Shidqul Aziz, Maulidan Bagus Afridian Rasyid</i> <i>Verent Flourencia Irene, Dzikri Mutawakkil Al Hamdika, Muhammad Fajrul Falah Subakti</i> <i>Nicholaus Adhyatma Surya Kusuma, Dimas Fahrul Putra Arismanto</i>	

User Experience Evaluation of the Tuberculosis Information System Using In Person Usability Testing and the User Experience Questionnaire	79
<i>Rizki Qorilah, R. Rizal Isnanto, Sutikno</i>	
From Public Evidence to Reproducible Royalty Settlement: A Rights-Aware Approach	85
<i>Farel Ramadhana, Andry Alamsyah, Sunu Puguh Hayu Triono</i>	
ANFIS-Augmented Adaptive Extended Kalman Filter for Robust UWB Indoor Localization under NLOS Conditions	91
<i>M. Fadhil Nur Hidayat, Azkario Rizky Pratama, Agus Bejo</i>	
Edge-AI for Adversarial IoT: A Resilient Framework for Mission-Critical Intelligence	97
<i>Kapil Kumar Goyal</i>	
Design and Development of a Gas Leak and Fire Detection System Using the Internet of Things (IoT) with Telegram Notification	103
<i>Anna Nur Nazilah Chamim, Djibran Syabil Ahzan Pratama, Kunnu Purwanto, Karisma Trinanda Putra</i>	
<i>Devy Putri Mantikha, Nadindra Hayfa</i>	
An IoT-Integrated Smart Sensor and Control Automation System for Oyster Mushroom Cultivation Environment	108
<i>Ade Nur Fatimah Subir, A. Ejah Umraeni Salam, Faizal Arya Samman</i>	
An Analysis of an ESP32-Based IoT System for Soil Moisture, Nutrient, and pH Control in Black Betel Cultivation	114
<i>Fathoni Satrio Utomo, Ardhi Wijayanto, Hasan Dwi Cahyono, Dewi Wisnu Wardani, Haryono Setiadi</i>	
<i>Rini Anggrainingsih, Afrizal Doewes, Brilyan Hendrasuryawan</i>	
Classification of Cervical Cytology Images based on Morphological Features	120
<i>Yessi Jusman, Raden Ajeng Dhea Namyra Alissa, Wikan Tyassari, Anani Aila Mat Zin</i>	
<i>Siti Nurul Aqmariah Mohd Kanafiah</i>	
Detecting Man-in-the-Middle (MitM) Attacks in IoT Environments using the XGBoost Algorithm	125
<i>Isna Agustina, Syifa Nurgaida Yutia, Rana Zaini Fathiyana</i>	
Aircraft Position Detection using Yolo Algorithm as Signal Guide on Marshaller Robot	131
<i>Budi Setiyono, Ahmad Farruq Fadlul Karim, Achmad Hidayatno</i>	
Real-Time Mining of Router Domain Logs for Temporal and Behavioural Analysis in Smart Network Environments	137
<i>Budi Sunaryo, Muhammad Ilhamdi Rusydi, Ariadi Hazmi, Ridza Azri Ramlee</i>	
Untangling Ambiguity: Predicting Diabetes with BRFSS 2023 Using Cramer's V-Guided Imputation and Resampling Strategies	143
<i>Daniel Yohanes, Andry Chowanda</i>	
Bayesian-Optimized LSTM, XGBoost, and Hybrid Models: A Comparative Study on Financial Time Series Forecasting	149
<i>Shinta Amalia, Achmad Choiruddin</i>	
A DistilBERT-Based Framework for Generating Questions and Answers from Fictional Narratives	155
<i>Rizki Elisa Nalawati, Dewi Yanti Liliana, Ratna Widya Iswara, Andra Rizki Pratama, Riandar Farhan</i>	
<i>Gerry Satria Halim</i>	

AI-Enhanced Deep Learning Framework for Customer Churn Prediction In Indonesian Mobile Commerce Platforms	160
<i>Sabar Aritonang Rajagukguk, Faisal Binsar</i>	
News vs Public Framing of SDG 13: A Dual Analysis of Discourse Divergence and Emotional Traits	166
<i>Anjawati Manihuruk, Andry Alamsyah, Dian Puteri Ramadhani</i>	
Exploring Prompt-Based Classification Using Large Language Models for Indonesian E-Commerce Sentiment Analysis	172
<i>Dennis Tandelon, Andry Chowanda</i>	
Evaluating Public Sentiment on the US-China Trade War via SVM and Random Forest Sentiment Analysis	178
<i>Agnes Wijaya, Patricia Stephanie Budiono, Therenita Agustin, Evaristus Didik Madyatmadja</i>	
Evaluating Feature Extraction Model for Extracting Semantic Information from Game Engine Documentation	184
<i>Fritz Gradiyoga, Juwita Nethania Chandra, Ivan Sebastian Edbert, Diana</i>	
Disturbance Detection to Maintain Transient Stability in Electrical Systems Using the Negative Selection Algorithm with Affinity Matching	190
<i>Nursyifa Natsir, Indar Chaerah Gunadin, Syafruddin Syarif</i>	
Machine Learning Approaches for Multi-Label Classification of Nutritional Content in Food Recipes	196
<i>Ratih Nur Esti Anggraini, Dwi Sunaryono, Muhammad Azka Aysar Santoso</i>	
Hybrid Predictive Model for Plant Growth Using LSTM and Classification Algorithms Based on Environmental Sensor Data	201
<i>Khansaa Yaseen, Omar Muayad Abdullah</i>	
Machine Learning Based Predictive Model for Diabetic Patients	207
<i>Ayman Sabih, Rumana Islam, Mohammed Tarique</i>	
Comparative Evaluation of AI Translation Models for Mandarin Business Communication	211
<i>Adli Abdillah Nababan, Yi Ying, Edwin Tsung-Rong Yang, Jefri Junifer Pangaribuan, Evawaty Tanuar</i>	
Short-Horizon Forecasting of Daily PM2.5 with Tree-Based Models and Seasonal Features	217
<i>Dhiyaussalam Dhiyaussalam, Ahmad Yusuf</i>	
Security Analysis Of Optimized Modern Steganography With The Use Of Encryption, Compression, And Anti-Steganalysis	222
<i>Angki, Ady W Paudu, Mukarramah Yusuf</i>	
City-Level Prediction of Heart Attack Risk in Indonesia Using Ensemble Machine Learning Models	228
<i>Josel Linus, Wiradharma Budiardjo, Jeklin Harefa</i>	
Smart Analytics for a Motivated Workforce: Machine Learning Approaches to Employee Engagement Among Contractual Instructors	234
<i>Jennifer Edytha J. Lagrazon, Pitz Gerald G. Lagrazon</i>	
Sentiment Analysis On Tourist Attraction Reviews In Purwokerto Using Naive Bayes Algorithm	240
<i>Shafar Satya Nugraha, M. Yoka Fathoni, Mahazam Afrad</i>	

Evaluating Information Retrieval Models for Indonesia's Government Legal Documents	246
<i>Rizki Triyani Pusparini, Noval Hudiya, Dhika Rizki Anbiya, Mukti Wibowo, Hendro Subagyo Muhammad Arief, Insan Ramadhan</i>	
Machine Learning and Deep Learning Approaches for Classifying Machine Failures in Industrial Maintenance	252
<i>Hanna Marchela Stephanie Tampubolon, Evaristus Didik Madyatmadja</i>	
RacistDetect: A Racism Prediction Ensemble Model using DistilBERT and Logistic Regression	258
<i>Eduardo Miguel M. Cortes, Liam Michael A. Jones, Christine F. Peña</i>	
Ensemble Learning Models for Predicting Production and Prices of Strategic Crop Commodities	264
<i>Zulaikha Ulhaq Ridha, Diana Purwitasari, Ilham Gurat Adillion</i>	
Data-Driven Discovery of Brand Personality Traits Using Word Embedding and WordNet	270
<i>Dedy Suryadi, Ilmor Sonata Mahardika</i>	
Prediction of Student Admission in Higher Education Using Deep Learning and Oversampling Method	275
<i>Dini Adni Navastara, Tsabita Putri Ramadhany, Chastine Fatichah, Yusna Millaturrosyidah, Nanik Suciati</i>	
Development and Comparative Analysis of Deep Learning Models for Multiclass Classification of Liver Conditions in Ultrasound Imaging	281
<i>Mamun Mahmud, Muhammad Muhtasim Shahriar, MD. Najmus Sakib, Ferry Wahyu Wibowo</i>	
Traffic Pattern Analysis At Medan Intersection Using Video Processing Techniques Using CNN Method	287
<i>Andi Supriadi Chan, Juneidy, Rezha Destiadi</i>	
Explainable CNN-LSTM for Coffee Sales Forecasting: Benchmarking against SARIMAX with Exogenous Features	293
<i>Masbahah, Yusuf Fadlila Rachman, Darmawan Lahru Riatma, Rifa Khoirunisa, Nur Azizul Haqimi Ahmad Faisal Sani</i>	
Hybrid Statistical-Deep Learning Framework for Modeling Food Price Volatility Using ARIMA, LSTM, and Transformer Networks	299
<i>Rachmat Destriana, Syepri Maulana Husain, Rohmat Taufiq, Hamdani</i>	
Sentiment Analysis on Social Media X Related to Emission Mitigation Using IndoBert and Support Vector Machine Hyperparameters	305
<i>Nur Azizul Haqimi, Darmawan Lahru Riatma, Masbahah, Yusuf Fadlila Rachman, Rifa Khoirunisa Ahmad Faisal Sani</i>	
An Optimized Deep Learning Pipeline for Used IC Classification Integrating DenseNet121 with Fine-Tuning	311
<i>Iman Fushshilat, Achmad Rizal, Willy Anugrah Cahyadi</i>	
Analyzing In-Game Purchase Behavior Using Predictive Analytics and Machine Learning	317
<i>Yusuf Fadlila Rachman, Akhmad Syarif, Darmawan Lahru Riatma, Rifa Khoirunnisa, Nur Azizul Haqimi Ahmad Faisal Sani</i>	
Generation of Variability in Multivariate Barley Grass Dataset through Latent Space Analysis of Variational Autoencoders	323
<i>Ferry Wahyu Wibowo, Akhmad Dahlan, Muhammad Kopravi, Wihayati</i>	

Classification of West Java Traditional Weapons Using Fine-Tuned MobileNetV3	329
<i>Malisa Huzaifa, Rizki Elisa Nalawati, Asep Taufik Muharram, Noorlela Marcheta Muhammad Yusuf Bagus Rasyiidin, Dhaifan Satriaji</i>	
Enhancing User Intention for Blockchain-based Food Security with Modified TAM	334
<i>Tasya Felicia Wijaya, Stephanie Lauwinsky, Rudy Tjahyadi</i>	
The Impact of Digital Nudges on Cart Abandonment on E-Commerce Platforms	340
<i>Selvi Apriliya, Dyah Wahyu Sukmaningsih</i>	
YOLOv8s Detection and Classification Models with AdamW Optimization for Yogyakarta Kraton Batik Motif Recognition	346
<i>Ahmad Syarifullah Daulay, Nurul Ilmi, Deny Haryadi</i>	
Modified GAN-U-Net for Enhanced Image Colorization and Restoring Old Photos	352
<i>Olivia Putri, Emily Wilkinson, Liona Loren, Nikita Ananda Putri Masaling, Andry Chowanda</i>	
Comparing Causal Loop Diagram Algorithms with Machine Learning Approaches for Enhancing Sustainable Performance in SMEs	358
<i>Muhammad Faiz Rohadi, Ardiansyah Ramadhan, Fandi Achmad, Camellia Adelsa Indranie Dzikry Ilham Anandaputra</i>	
Multi Palm Oil Tree Identification Using Geo-Referenced Deep-SORT for Unmanned Aerial Vehicle	364
<i>Ardiar Diandra Putra Suharsono, Ronny Mardiyanto, Djoko Purwanto</i>	
Comparative Analysis of Information Technology Infrastructure Challenges Across Four Key Sectors in West Java, Indonesia	369
<i>Jack Febrian Rusdi, Sri Kuswayati, Yucki Prihadi, Ari Adhiwibowo, Sri Erina Damayanti Yudi Limbar Yasik</i>	
Development of a Computer Vision Deep Learning System for Position Detection to Control a Gantry Robot	375
<i>Ahmad Sahro, Eko Mursito Budi, Vebi Nadhira</i>	
QR Code Phishing Detection: A Multi-Modal Ensemble Learning Framework Combining URL and Image Analysis	381
<i>Nadeline Aprillini, Jessica Seren Sutrisno, Jocelyn Marcella, Franz Adeta Junior</i>	
Application of Yolov8 Algorithm for Detecting Cocoa Leaf Diseases Enhanced by Clahe on Drone-Captured Images	386
<i>Putri Nurainun Yusuf, Indrabayu</i>	
Implementation of the Content Based Image Retrieval Method for Classifying Citrus Fruit Diseases	392
<i>Budi Sunarko, Muhammad Rozy, Apriansyah Wibowo, Yudha Andriano Rismawan</i>	
Towards Accurate Brain Tumor Detection: Comparative Analysis on MRI Images	397
<i>Jason Dwiseptian Sutjipta, Chatarina Vania Michaeline, Rhio Sutoyo</i>	
Performance Comparison of Pretrained Deep Learning Models on Wayang Kulit Image Recognition	404
<i>Vincent Tanjaya, Bryan Eugene, Karto Iskandar</i>	
Optimizing YOLOv11 for Vehicle Detection in Low-Visibility CCTV Footage	410
<i>Rudi Firdaus, William Eka Chandra, Rafi Andhika Putra Pratama, Felix Corputty</i>	

Deep Learning–Enhanced Computer Vision Approach for Autism-Related Behavior Detection from Image Data	416
<i>Sadek Al Prince, Muhammad Muhtasim Shahriar, Gazi Mehraj Sakib, Mohammed Shorfuddin</i>	
Service Oriented Architecture For Encryption In Small And Medium-Sized Health Centers	422
<i>Japhet Ngwono Gesairo, Aris Tjahyanto</i>	
Intelligent Spatial Count Modeling with Geographically Weighted Poisson-GIG Regression	428
<i>Yusrianti Hanike, Purhadi Purhadi, Achmad Choiruddin</i>	
Classification of Arabica Bali Coffee Using Optimized Deep Learning Models	434
<i>Gede Andi Utama Giri, Putu Sugiartawan, Kadek Suryati, Made Suci Ariantini, Wayan Sudiarsa</i>	
Depression Detection on Multimodal Data from Social Media X with FastText Feature Expansion using Hybrid Deep Learning Model CNN-BiLSTM	440
<i>Yesi Sukmawati, Erwin Budi Setiawan</i>	
Oversampling and Undersampling Techniques to Improve the Accuracy of Audio Mood Classification of Indonesian Songs	446
<i>Thoyyibah T, Imam Ahmad, Sanusi Sanusi, Muhammad Usman</i>	
Analyzing User Perception of The M-Paspor Application through Aspect-based Sentiment Analysis with SVM and Decision Tree	451
<i>Elbert, Thoyyibah T</i>	
Leveraging IndoBERT for Aspect-Based Sentiment Analysis: A Comparative Study with SVM on Access by KAI Reviews	457
<i>Ambar Nabilah Fuzaini, Thoyyibah T</i>	
Sentiment Analysis of Public Perceptions toward Finance Minister Purbaya on Social Media Platform X Using the IndoBERT Model	463
<i>Rizky Bayu Prasetyo, Thoyyibah T</i>	
AI-Driven Retail Replenishment: Deriving Patterns and Adaptive Policies from Sales and External Data Streams	469
<i>Dhivya Guru</i>	
Quantum-Driven Reinforcement Learning for Financial Market Prediction and Risk Management	476
<i>Dhivya Guru</i>	
The Impact of Augmented Reality (AR) on the Purchase Intention for Furniture Purchases in E-Commerce	483
<i>Steven Suryadi, Jonathan Chen, Devin, Hendro Nindito</i>	
Hybrid Ensemble Machine Learning for Multidimensional Poverty Prediction	489
<i>Terttiaavini, Ali Ibrahim, Lukita Tripermata, Tedy Setiawan Saputra</i>	
Comparison of Deep Learning Algorithms Performance In Diabetes Prediction	495
<i>Tominanto, Fakhrudin Nasrul Sani, Agung Suryadi</i>	
Hypertension Risk Detection Using Deep Neural Network and Random Forest	501
<i>Mayla Safana Nabila, Achmad Udin Zailani, Nurul Ilmi</i>	
Implementation of IndoBERT and Random Forest Algorithms for TikTok User Review Classification	507
<i>Nevan Syah Akbar, Deny Haryadi, Nurul Ilmi</i>	

Random Forest–Based Risk Classification of Anemia in Pregnant Women: A Case Study in Banjarbaru City	513
<i>Yasmina Arethaya Hanjani, Putu Harry Gunawan</i>	
Carl Jung's Brand Archetype Classification for Brand Persona using Optimized RoBERTa with Differential Learning	519
<i>Muhammad Fikri Hasani, Hendra, Amia Luthfia</i>	
DEXTER: A Dual Extractor of Complex Tabular Elements and Adaptive Markdown Generation for RAG	525
<i>Bryan Alexander Tama, Muhammad Akmal Kharrazi, Rakha Widiaksa Adhitama, Muhammad Fikri Hasani</i>	
Context-Aware Risk-Based Authentication: A Hybrid Approach with LLM Integration	531
<i>Fernando Morientes, Fachry Altair Gantari Amaludin, Griffin Koh, Christopher Limawan</i>	
Model Fit and Determinants of Maternal Mortality Using Zero-Inflated Poisson Generalized Inverse Gaussian Regression	537
<i>Laila Qadrini, Purhadi, Achmad Choiruddin</i>	
Round Key Modification with AES-NTRU Hybrid	543
<i>Purwanto Simamora, Poltak Sihombing, Mohammad Andri Budiman, Jos Timanta Tarigan</i>	
Head Gesture Recognition Based on Normalized Facial Landmarks for Smart Wheelchair Control	549
<i>Eko Mulyanto Yuniarno, Arief Kurniawan</i>	
Detection and Classification of Healthy and Diseased Moringa Leaves Using Convolutional Neural Networks	555
<i>I Gusti Ngurah Adi Widya Dharma, Putu Sugiartawan, I Nyoman Anom Fajaraditya Setiawan</i> <i>I Dewa Ayu Sri Murdhani</i>	
Evaluation of Artificial Neural Networks and Adaptive Neuro-Fuzzy Inference Systems for Postgraduate Admission Prediction	560
<i>Jafar Ismail Mohamed, Abdirizak Abdullahi Khalif, Hafso Mohamed Mohamoud, Abdinasir Hirsi</i> <i>Abubakar Abdi Warsame, Mohamed Elmi Ahmed, Mohamed Ahmed, Mohamed Osman Omar</i> <i>Abdirahman Hassan Mohamud, Mohamed Ahmed Aden, Abdullahi Saylici Hussein</i>	
Hybrid CNN-BiLSTM Attention Framework for Emotion Detection in Imbalanced Twitter Data	566
<i>Hafso Mohamed Mohamoud, Md Moniruzzaman</i>	
AI Decision Strategy: Machine Learning Identification of Job titles and experience levels based on Skills and Responsibilities	572
<i>Said Almaqbali</i>	
Adaptive Weighting with Multi-Agent Reinforcement Learning for Lecturer Performance Recommendation	578
<i>Rangga Satya Tarigan, Diana Purwitasari, Ilham Gurat Adillion</i>	
A Decision Support System for Tuition Fee Exemption Eligibility Using the Simple Multi Attribute Rating Technique	584
<i>Euis Oktavianti, Iga Yudisti, Ahmad Muharam Jiddan Wahono, Farhan Adi Nugraha, Ayres Pradiptyas</i> <i>Ariawan Andi Suhandana</i>	
Impact of Model Architecture and Optimizer on MRI-Based Detection of Alzheimer's Disease: EfficientNetB1, EfficientNetB5, and NASNet-Large	590
<i>Rani Puspita, Thoyyibah T</i>	

Comparative Analysis of Logistic Regression Algorithms and Decision Tree in Heart Disease Diagnosis	596
<i>Fuzy Yustika Manik, Anandhini M Nababan, Nur Wulan, Muhammad Rifki Munir</i>	
Combination of Differential Entropy and Relative Difference Methods for Electroencephalogram Signal Feature Extraction Optimization in Imagined Spelling Recognition of Balinese Script	602
<i>I Dewa Gede Mahesta Parawangsa, I Made Agus Wirawan, Made Windu Antara Kesiman Kadek Teguh Dermawan</i>	
Predicting Success in the Objective Structured Clinical Examination for Medical Students Using General Regression Neural Network	608
<i>I Made Dwiki Arta Kusuma, Aniek Suryanti Kusuma, Ni Wayan Sumartini Saraswati</i>	
Improving Minority Class Detection in YOLO11: An Augmentation-Based Approach for Limited and Class-Imbalanced Traffic Datasets	613
<i>Dwi Ahmad Dzulhijjah, Bima Sena Bayu Dewantara, Setiawardhana Setiawardhana, Abdullah Sonhaji Indra Kristiawan, Kusrini Kusrini</i>	
Malware Classification Using Transfer Learning on Image Representations	619
<i>Iik Muhamad Malik Matin, Indra Hermawan, Susana Dwi Yulianti, Layla Rosyida, Ummu Athiya Zahra Azizah</i>	
PID-Based Automated Hydroponic Nutrient Mixing System with Effluent Water Integration at Pangeran Diponegoro Boarding School	624
<i>Imam Muchlisin, Irwan Novianto, Gandeve B Satrya</i>	
Emotion Detection in Indonesian Music Comments Using BERT, Traditional Machine Learning and Their Hybrid Model	630
<i>Kevin, David Malcom Maximillian, Edrick Louis, Kartika Purwandari</i>	
Enhanced Resilience of Hill Cipher through LWE-Based Probabilistic Ensemble Key Generation Scheme	636
<i>Mahdianta Pandia, Poltak Sihombing, Mohammad Andri Budiman, Erna Budhiarti Nababan</i>	
Automatic Detection of Potholes using an Enhanced Faster R-CNN for Improved Traffic Safety	640
<i>Asep Insani, Uus Khusni, Toto Haryanto, Suherlan Suherlan, Yasmin Yasmin, Asep Rahmat Hidayat Nurdina Gita Pratiwi, Novitasari Novitasari, Wuwus Ardiatna, Siddiq Wahyu Hidayat</i>	
CNN-Based Framework for Gender Classification from Text Data	646
<i>Haneen Tamim Abd Ali, Dhamyaa A. Nasrawi</i>	
Real-Time Transmission Line Fault Detection and Multi-Class Classification via DWT-CNN-BiLSTM: A Comparative Study with Classical Machine Learning Baselines	653
<i>Abdirizak Abdullahi Khalif, A.S. Nazmul Huda, Shameem Ahmad</i>	
Dynamic Cloud Based Modelling of 5G Networks During Climate-Driven Severe Weather Events	659
<i>Rushikesh Suresh Badgujar, Rian Rasmussen, Komal Sandeep Rane, Sheila Fallon, Enda Fallon Joss Armstrong</i>	
Application of the Spectral Clustering Method for Identifying Commodity Price Patterns	666
<i>Jefri Junifer Pangaribuan, Adli Abdillah Nababan, Ince Ahmad Zarqan, Dimas Yudistira Nugraha Scherly Hansopaheluwakan, Fernando Sihotang</i>	
Analysis of the performance of the detection of cassava leaf diseases using YOLO versioning	672
<i>Safiatou Sore, Moustapha Bikienga, Ouedraogo Tounwendyam Frédéric</i>	

A Comparative Study of LSTM and DLinear for Multi Horizon Multivariate Traffic Forecasting	678
<i>Mustafa Kamal, Fandisya Rahman, Qori Afiata Fiddina, Sulthan Rafif, Riza Akhsani Setyo Prayoga</i>	
Deep Learning System for Network Anomaly Detection based Attention Mechanism and Sparse Autoencoder	684
<i>Fatima Haider Jassim, Ameer Kadhim Hadi</i>	
Comparative Performance Analysis of Sentence Segmentation on the NLTK Brown Corpus	690
<i>Daffa Gusti Ramadhany, Alexander Agung Santoso Gunawan</i>	
Multi-Objective Resource Allocation in Power Line Communication Networks	695
<i>Ghaith A. Mukhlif, A.Z.Yonis</i>	
Blockchain-Powered Document Management System: Enhancing Efficiency and Security with eDocChain	701
<i>Andrei-Sebastian Nicula</i>	
Kidney Tumor Segmentation on CT Images Using SE-ResUNet with a ResNet-50 Backbone	707
<i>Mikhail Lim Mattagati, Irmawati</i>	
Domain-Aware Classification of Terms of Service Clause Fairness Using BERT	713
<i>Jonathan Theofilus Emmanuel, Steven Soeseno, Bryan Alvis Xavier Halim Chandra, Henry Lucky</i>	