

2023 6th International Conference of Computer and Informatics Engineering (IC2IE 2023)

**Lombok, Indonesia
14-15 September 2023**



**IEEE Catalog Number: CFP23JVF-POD
ISBN: 979-8-3503-4517-9**

**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:	CFP23JVF-POD
ISBN (Print-On-Demand):	979-8-3503-4517-9
ISBN (Online):	979-8-3503-4516-2

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 CONTENT

IC2IE23-001	Sensitivity Analysis of Decision Support Systems For Selection Of Achievement Students Using The Topsis Method	1-6
IC2IE23-002	Critical Understanding Performance of Huffman and Lempel Zip to Pattern Audio Data 16-bit	7-12
IC2IE23-003	Secure Authentication in An IoT-Based Healthcare Environment with Strong Anonymity and Unclonable Device	13-18
IC2IE23-006	Fine-tuning Deep Learning Model for Detecting Indonesian Traffic Accident Tweet	19-24
IC2IE23-007	Improving Indonesian Informal to Formal Style Transfer via Pre-Training Unlabelled Augmented Data	25-29
IC2IE23-009	Indonesian Hate Speech and Abusive Tweets Classification with Deep Learning Pre-trained Language Models	30-35
IC2IE23-014	Progress on 6G Technology: A Short Review	36-41
IC2IE23-018	Pedal Assist Torque Performance of Electric Bikes Driven by BLDC Motors on Uphill Roads	42-46
IC2IE23-019	A Systematic Literature Review of Cyber Security And Privacy In IoT Devices	47-52
IC2IE23-021	Black Box Testing With Equivalence Partitions Techniques In Transcrop Applications	53-58
IC2IE23-025	A Systematic Literature Review: Object Detection in Semi-Autonomous Car	59-63
IC2IE23-029	Analyzing Microservices and Monolithic Systems: Key Factors in Architecture, Development, and Operations	64-69
IC2IE23-030	Ransomware Extraction Using Static Portable Executable (PE) Feature Based Approach	70-74
IC2IE23-034	Analysis and Design of Information Systems for Vehicle Driver Service Applications	75-80
IC2IE23-036	Sprinkler Irrigation System for Pakcoy Cultivation Using LoRa Communication Based on MIT App Inventor	81-86
IC2IE23-038	Factors Influencing Knowledge Sharing in Indonesian Prison: A Review	87-93
IC2IE23-039	Risk Management of Bank and FinTech Collaboration: A Phenomenological Research	94-100
IC2IE23-040	Smartphone Fundus Photography Enhancement for Retinopathy of Prematurity Disease Diagnosis using Deep Learning	101-108
IC2IE23-041	Implementation of the Grey Wolf Algorithm in Optimization of Artificial Neural Network Method for Fingerprint-based Toxicity Prediction	109-114
IC2IE23-042	Performance Measurement of ResNet-34 in Convolutional Neural Network Method for Classification of Mask Type Usage	115-120
IC2IE23-043	Cloud Computing Based Server Infrastructure Analysis For Payment Machinery Needs	121-124

2023 6th International Conference on Computer and Informatics Engineering (IC2IE)

IC2IE23-044	Analysis of Apilyg.id Email Domain Security Status Using DMARC (Domain-Based Message Authentication, Reporting, and Conformance)	125-130
IC2IE23-045	Mobile-based Monitoring Application for Self-Isolation of COVID-19 Patients	131-136
IC2IE23-047	Information System Strategic Planning for Vocational Higher Education: A Case Study at State Polytechnic of Malang	137-144
IC2IE23-051	Discriminant Model Exploration for Clasification Stingless Honey Fluorescence Data Spectra with Principal Component Analysis (PCA)	145-150
IC2IE23-053	Evaluation of User Experience in Code Learning Platform Using User Experience Questionnaire	151-156
IC2IE23-054	Tukerin: Battery Exchange for Electric Motorcycles	157-162
IC2IE23-055	Comparison of Transformer Based and Traditional Models on Sentiment Analysis on Social Media Datasets	163-168
IC2IE23-056	Optimization of SVM Classification Accuracy with Bayesian Optimization Utilizing Data Augmentation	169-174
IC2IE23-057	Optimizing the Performance of Sentiment Analysis on Social Media Data Through Feature Selection in Preprocessing Techniques	175-180
IC2IE23-061	Designing an e-Wallet Solution for Users with Visual Impairment: A Design Thinking Perspective	181-185
IC2IE23-062	Mental health sentiment analysis on social media TikTok with the Naïve Bayes Algorithm	186-191
IC2IE23-063	Addressing Wireless Network Capacity Challenges: A Novel Mobile System with WOLA and NOMA	192-197
IC2IE23-065	IoT Monitoring System for Temperature, Vibration, and Motor Speed on Overhead Crane	198-202
IC2IE23-067	Systematic Literature Review of Transformer Model Implementations in Detecting Depression	203-208
IC2IE23-068	Exploring Recurrent Neural Network Models for Depression Detection through Facial Expressions: A Systematic Literature Review	209-214
IC2IE23-069	A Systematic Literature Review of Deep Learning Application in Multiclass Anomaly Detection for Chest Medical Imaging	215-220
IC2IE23-070	Machine Learning Algorithm and Modeling in Solar Irradiance Forecasting	221-225
IC2IE23-071	A Systematic Literature Review of CNN Approaches in Classifying Brain Tumor	226-231
IC2IE23-072	Pap Smear Medical Image Classification Using Deep Learning: A Systematic Review	232-237
IC2IE23-073	Implementation of Face Patterns and Smile Recognition for Intelligent Class Attendance Systems	238-243
IC2IE23-075	Making Sense of Developing Artificial Intelligence-based System in Software Development Life Cycle Manner and Risk Factors	244-249
IC2IE23-076	Mobile Educational Game "IMUNO" to Teach Human Immune System	250-255

2023 6th International Conference on Computer and Informatics Engineering (IC2IE)

IC2IE23-078	Deep Learning for Safety: Helmet Detection in Construction Site using YOLOv8	256-261
IC2IE23-079	The Effects of L2 Regularization in EfficientNet for Human Skin Disease Multi-Class Classification	262-265
IC2IE23-082	Cybersecurity of Sensors on Smart Vehicles: Review of Threats and Solutions	266-270
IC2IE23-084	Agile Leadership Cost Estimation Model in Software Development Project (Case Study: Public Service Applications)	271-275
IC2IE23-086	Questions Classification Based on Revised Bloom's Taxonomy Cognitive Potential Researches of GAN in Fashion Areas	276-281
IC2IE23-087	Stochastic Dynamic System Implementation to Predict Nisab Values in Zakat Application	282-286
IC2IE23-088	Analyzing Student Perspectives on Learning Experience using Latent Semantic Indexing Algorithm	287-291
IC2IE23-089	Salt Hash Password using MD5 Combination for Dictionary Attack Protection	292-296
IC2IE23-090	Facial Palsy Detection Through Changes In Facial Muscle Functionality Using CNN Algorithm	297-302
IC2IE23-091	Enhancing Data Quality Management: A Case Study of Screening and Handling Stunting Toddlers in Big Data Applications	303-308
IC2IE23-095	Glaucoma Classification using Deep Learning	309-313
IC2IE23-096	A Comparison of Prediction Algorithms in Food Sales with Different K-Folds Cross-Validation	314-318
IC2IE23-098	Digital Forensics to Identify Damaged Part of Palm Leaf Manuscript	319-323
IC2IE23-099	Predicting Tourist Preferences Using Naive Bayes Classifier for Tourism Promotion: A Study of Hotel Service Reviews	324-328
IC2IE23-100	Artificial Intelligence in Credit Risk Management of Peer-to-Peer Lending	329-334
IC2IE23-102	SMOTE on Numeric Breast Cancer Dataset to Overcome Imbalance Class	335-339
IC2IE23-103	How's Metaverse Applied to Support Business - Literature Review	340-345
IC2IE23-104	Morphology Approach for Segmentation of Blood Vessels in Retinal Images	346-350
IC2IE23-105	Development of an Educational Game Visual Novel Introduction to Traditional Dance Based on Android: Case Study of Typical Dance of Lombok Island	351-355
IC2IE23-106	Evaluation of the Effectiveness Mitigation of Distributed Denial of Service in Software-Defined Networking Using the Nearest Centroid Classification	356-361
IC2IE23-110	Enterprise Modeling for Improving Company Core Business using Business Process Re-engineering	362-367
IC2IE23-123	Usability Evaluation on Mercu Buana Jakarta Library Website Using The Usability Scale (SUS) System	368-373

2023 6th International Conference on Computer and Informatics Engineering (IC2IE)

IC2IE23-124	Development of an Internet of Things-Based Air Temperature and Humidity Control System for Swiftlet Houses Using Microcontroller ESP32	374-380
IC2IE23-128	The Tuning of Machine Learning Models For The Classification Of Cardiovascular Disease	381-384