

## Dissertations

| No | Name             | Dissertation Title   | Ethics AI  |
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| 1  | Relly Andayani   | Development of a Classification Method for Concrete Compressive Strength and Slump Based on Fresh Concrete Texture Features          | Low Ethical Potential: Applications in materials engineering do not involve human data or socially impactful decisions.                        |
| 2  | Sigit Widiyanto  | Development of GLCM and Wavelet Based Texture Feature Extraction Method for Beef Tenderness Classification                           | Low Ethical Potential: Application for quality control of food products, does not involve personal data.                                       |
| 3  | Fikri Budiman    | Method for Determining the Optimal Value of SVM-RBF Kernel Space Parameters in Multi-Class Classification of Indonesian Batik Motifs | Positive Ethical Potential: Application for cultural preservation. Does not touch sensitive data.  |
| 4  | Titin Winarti    | Development of Automatic Stemming Algorithm with Affix Removal to Improve the Performance of Text Document Clustering Process        | Medium Ethical Potential: Depends on the type of document. If it contains personal data, privacy and data security issues become relevant.     |
| 7  | Edi Surya Negara | Dual Mode Identification For Detecting Communities On Social Networks  | High Ethical Potential: Regarding user data privacy, social network analytics can be misused for surveillance or profiling.                    |
| 8  | Dolly Indra      | Development of Bisindo Sign Letter Recognition Method Based on Similarity of Shape Features  | Positive Ethical Potential: Applications for inclusivity and helping the deaf community. The main ethical issues are accuracy and reliability. |
| 9  | Naeli Umniati    | Development of Offline Signature Identification Method Based on Global and Local Feature Extraction                                  | High Ethical Potential: Relating to biometric security. Ethical issues include data privacy, consent, and reliability.                         |
| 13 | Rina Refianti    | Development of Affinity Propagation Algorithm for Data Clustering  | Medium Ethical Potential: Depends on the data used. If to group consumer or citizen data, issues of profiling and bias may arise.              |
| 14 | Cahyawati D. K.  | Development of Global and Local Shape Feature Extraction Methods and Algorithms as a Basis for Online Signature Identification       | High Ethical Potential: Online data is more vulnerable to hacking. Privacy, security, and consent issues are crucial.                          |
| 15 | Tata Sutabri     | Development of Corpus-Based Sentiment Analysis Method and Multinomial Naïve Bayes Classifier   | High Ethical Potential: Can be used to monitor public opinion, raising privacy and surveillance issues.  |
| 16 | Ire Puspa W.     | Development of Video Search Methods and Algorithms Based on Similarity of Color Feature Content                                      | Medium Ethical Potential: If applied to surveillance or personal video, privacy issues become relevant. Risk of individual tracking.           |

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| 17 | Marliza Ganefi G. | User Preferences to User Interface Description Transformation Method for Building Adaptive OPAC   | Medium Ethical Potential: Relates to personalization and collection of user preference data.   |
| 18 | Andreas H.        | Sentiment Assessment and Topic Classification Method for Online Media Analysis Based on NLP and DBN   | High Ethical Potential: Related to public opinion analysis, data privacy, and possible information manipulation or censorship.                                     |
| 19 | Dina Anggraini    | Indonesian Official Document Text Summarization System Using Extractive Techniques...   | Medium Ethical Potential: Summary accuracy is essential for official documents to avoid causing misinformation.  |
| 20 | Diana Ikasari     | "Development of Novel Classification Method Using Matrix Factorization Based on Rating, Review and Expertise"                                 | Low Ethical Potential: Application to literature, minor ethical issues related to potential bias in rating data.   |
| 21 | Irwan Bastian     | Text Document Classification Method Based on Topic Modeling and Deep Learning   | Medium Ethical Potential: Depends on the source of the text. If analyzing emails or personal documents, privacy and data security issues are very high.            |
| 22 | Mochamad Karjadi  | Infrasonic Infinite Impulse Response (IIR) Digital Filter Design for Fetal Heartbeat Detection  | High Ethical Potential: Medical applications. Ethical issues include privacy of health data, diagnostic accuracy, and tool reliability.                            |
| 23 | Ilmiyati Sari     | Principal Component Based Moving Object Extraction and Limited Memory Block Subspace Krylov Optimization on Dynamic Background Videos         | High Ethical Potential: Can be used for surveillance. Privacy issues, unauthorized tracking, and potential bias are major concerns.                                |
| 24 | Fikri Saleh       | Adaptive Ontology Method in Dynamic Interoperability Environment in Higher Education Data Reporting System                                    | Medium Ethical Potential: Related to academic data management. The main issue is the integrity and security of student and institutional data.                     |
| 26 | Agung Slamet R.   | Detection of Fetal Head and Abdomen on Ultrasonography (USG) Images for Birth Weight Prediction Using the Otsu Method                         | High Ethical Potential: Medical applications. Ethical issues include prediction accuracy (can influence medical decisions), patient data privacy, and reliability. |
| 27 | Ericks Rachmat S. | Deep Learning Long-Short Term Memory Modeling for Indonesian Decimal Digit Speech Recognition   | Medium Ethical Potential: Voice recognition technology can be misused for surveillance. Voice data privacy and security issues.                                    |
| 28 | Dharmayanti       | Development of Kinematic Similarity Analysis System for Linear and Angular Motion of Taekwondo Martial Arts Using Dynamic Time Warping Method | Low Ethical Potential: Applications to sports analytics for performance enhancement. Athlete data privacy issues may be relevant.                                  |
| 30 | Sutresna Wati     | Consistent and Distributed Document Processing Framework Based on Knowledge Graph   | Medium Ethical Potential: Creating a knowledge graph from documents can reveal sensitive relationships if the data is personal or confidential.                    |

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| 31 | Tjut Awaliyah Z. | Development of Tajweed Segmentation and Extraction Methods and Algorithms and Creation of Tajweed Image Dictionary for Introduction of Tajweed Laws in the Qur'an | Positive Ethical Potential: Applications for religious education. The ethical issue is accuracy so as not to teach the wrong thing.   |
| 32 | Ety Sutanty      | Development of Retinal Blood Vessel Furcation Feature Extraction Method and Algorithm as a Basis for Individual Recognition                                       | Very High Ethical Potential: Use of retina as a biometric. Data privacy issues (very unique and permanent), security, and potential for abuse for mass surveillance.                  |
| 33 | Fauziah          | Identification of Shoulder Joint Motion Range in the Frontal Plane Using the Moment Invariant Method and Artificial Neural Network Based on the Skeleton Model    | Medium Ethical Potential: Applications to medical or sports analytics. Privacy issues of individual health and fitness data.  |
| 34 | Eka Miranda      | Satellite Imagery Land Cover Classification in Ontology Interpretation  | Moderate Ethical Potential: Satellite imagery analysis could be used to monitor activity on private property without permission, raising privacy issues.                              |
| 35 | Siti Saidah      | Development of String Similarity Level Based Retrieval Method Measured Using Edit Distance Adaptation in Drug Information Search System                           | High Ethical Potential: Drug information search is a critical area. Errors or inaccurate results can be harmful to the health of users.   |
| 38 | Weda Adistianaya | Development of Competency Competency Examination Framework between Higher Education Curriculum and Competency Needs in the IT Industry...                         | Medium Ethical Potential: May impact curriculum design and student career paths. Potential bias in "industry needs" may overlook broader aspects of education.                        |
| 39 | Indah Dwi M.     | Development of MDA (Aesthetic Dynamic Mechanics) Gamification Model with Naïve Bayes Classification Based Recommendation System for Lecturer Career System...     | Medium Ethical Potential: Gamification can manipulate behavior. Career recommendation systems can introduce bias and pressure on faculty to follow certain metrics.                   |
| 40 | Ida Astuti       | Method of Creating Annotated Bullying Corpus on Social Media Using Deep Neural Network  | High Ethical Potential: Involves highly sensitive data (bullying). Ethical issues include victim/perpetrator privacy, trauma, consent, and model fairness.                            |
| 42 | Rifiana Arief    | Multilevel Classification Method Based on Convolutional Neural Network and Regular Expression for Scanned Document Search Based on Content                        | Medium Ethical Potential: Depends on the content of the document. If the document is confidential or personal, issues of privacy, security, and unauthorized access become important. |
| 43 | Iyan Mulyana     | "Development of Indonesian Language Stemming Algorithm through Modification of Affix Groups, Order and Method of Morphophonemic-Based Affix Deletion"             | Low Ethical Potential: This is a basic component in NLP. Its ethical potential only emerges when applied in larger applications.  |

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| 46 | Hasma Rasjid    | ""Contour - Base Line"" Algorithm for Detecting Edge Curvature and Twist Defects in Ceramic Tiles"  | Low Ethical Potential: Application to manufacturing quality control.  |
| 47 | Irfan Humaini   | Development of Cosine Similarity Algorithm on TF-IDF Vector Space Model (VSM) to Support Information Retrieval of Al Quran and Hadith...                        | Positive Ethical Potential: Facilitates access to and understanding of sacred texts. The ethical issue is accuracy and correct interpretation.  |
| 48 | Darmastuti      | Method of Identification of Mandibular Cortical Resorption to Detect Osteoporosis on Panoramic X-Ray  | High Ethical Potential: Medical applications. Ethical issues include diagnostic accuracy, health data privacy, and patient consent.   |
| 49 | Budi Utami F.   | Development of Segmentation Algorithm and Classification Algorithm for Liver Cancer Identification in Ultrasonography Images                                    | Very High Ethical Potential: Cancer diagnosis. Model accuracy can mean the difference between life and death. Medical data privacy issues are crucial.  |
| 50 | Ias Sri Wahyuni | Development of Multi-Focus Image Fusion Method Based on Local Variability Using Dempster-Shafer Theory and Surrounding Local Variability                        | Low Ethical Potential: It is a basic technique in image processing.   |
| 51 | Miftahul Jannah | Classification of Male and Female Gait Styles Based on the Movement Features of the Center of Mass Point...   | High Ethical Potential: Gender-based classifications can reinforce stereotypes. Can be misused for surveillance and profiling without consent.  |
| 52 | Oktaviani       | Development of Plant Species Identification Method and Algorithm Based on Twelve Leaf Morphological Features...   | Positive Ethical Potential: Applications to biology and conservation.   |
| 53 | Ihsan Jatnika   | Development of Rainbow Fish Species Recognition System Based on Truss Morphometric Features Using Linear Discriminant Analysis and Convolutional Neural Network | Positive Ethical Potential: Applications to biology and conservation.   |
| 54 | Yuti Dewita A.  | Development of Kidney Stone Detection System and Calculation of Cross-Section Area on CT-Scan Images  | High Ethical Potential: Medical applications. Issues of diagnostic accuracy, patient data privacy, and system reliability.  |
| 55 | Septi Andryana  | UG-Smartrank: Development of MCDM Method for Ranking Universities in Indonesia...   | High Ethical Potential: Rankings can have significant impacts on an institution's reputation and funding. Fairness, transparency, and bias in the selection of criteria and weights are key ethical issues. |
| 56 | Baby Lolita B.  | Non-Intrusive Identification of Arrhythmia Based on Wrist Frequency Using the Eulerian Video Magnification Method   | High Ethical Potential: Health apps. Heart rate data privacy issues, diagnostic accuracy (mistakes can be fatal), and data security.  |
| 57 | Eel Susilowati  | Classification of Medan Orange Fruit Based on Similarity of HCL Color and GLCM-Wavelet Texture Features   | Low Ethical Potential: Applications to agriculture and food quality control.  |

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| 59 | Mochamad W. S.   | "Combination of Pitch, Formant, and MFCC Voice Features as a Basis for Individual Recognition Using Long-Short Term Memory (LSTM)"                                      | Very High Ethical Potential: Voice-based individual recognition. Issues of voice data privacy, biometric security, surveillance, and potential misuse (e.g. voice forgery).                            |
| 60 | Lulu Mawaddah W. | Identification Method for Benign and Malignant Tumors in Mammogram Images Based on Mass Texture Features Using Wavelet-GLCM and Artificial Neural Networks              | Very High Ethical Potential: Cancer diagnosis. Model accuracy is crucial. Issues of medical data privacy, fairness (does the model work equally well for all demographics), and decision transparency. |
| 62 | Reza Chandra     | Identification of Pornographic Web Content Using MLP and CNN Model Approaches   | High Ethical Potential: Related to censorship issues. Risk of false positives (blocking non-pornographic content) and false negatives. Freedom of expression issues are central.                       |
| 63 | Sastya Hendri W. | Development of Stemming Algorithm for Rejang Language Stemmer Based on Rejang Language Morphology   | Positive Ethical Potential: Contributing to the preservation of regional languages.  |
| 64 | Liduina Asih P.  | Exponential Accelerated Failure Time Cure Rate (AFT-CR) Optimization Using Genetic Algorithm  | Moderate Ethical Potential: Depends on the context of the application of the survival analysis model. If used on patient or credit data, issues of fairness and bias become relevant.                  |
| 65 | Trinugi Wira H.  | Development of Extraction Method of Twenty-Three Morphological Characteristics of Leaf Shape as a Basis for Identification of Medicinal Plant Types                     | Positive Ethical Potential: Applications to the preservation of botanical and herbal knowledge.  |
| 66 | July Yanto       | Development of methods and algorithms for grouping the nutritional quality of chicken eggs based on the color features of the egg yolk                                  | Low Ethical Potential: Application to the food industry.   |
| 67 | Supriyono        | Development of Method and Algorithm for Measuring Microstructure Grains in Metallographic Images as Prediction Parameters for Yield Stress of Carbon Steel Materials... | Low Ethical Potential: Application to materials science.   |
| 68 | Hanny Hikmayanti | Method and Algorithm for Extracting Global and Local Fat Size Features as a Basis for Classifying Beef Marbling Quality Levels.   | Low Ethical Potential: Application to the food industry.   |
| 69 | Rianto           | Classification of Emotions in Indonesian Text with Stemming Using Incorbiz Dynamic Corpus   | High Ethical Potential: Emotion detection can be misused for employee surveillance or consumer manipulation. Emotional privacy and model accuracy issues.  |

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| 70 | Sulardi           | "Optimal Hole Shape Prediction in Castellated Steel Beams Based on Deflection and Stress Using Shape Detection Method, 3D Mesh Approximation and Finite Elements"    | Low Ethical Potential: Application to structural engineering.  |
| 71 | Ahmad Fauzi       | "Feature Extraction Method of Height-Width Ratio of Body, Movement Speed and Rule Model as a Basis for Identification of Abnormal Activities in Surveillance Video"  | Very High Ethical Potential: Definition of "abnormal activity" can be highly subjective and biased. High risk for mass surveillance, profiling, and discrimination.    |
| 72 | Syamsi Ruhama     | Similarity Multilevel Ontology Based on Data Intensive Natural Language Processing   | Medium Ethical Potential: If applied to personal data, it can be used for profiling at a very high level of detail.  |
| 73 | Lely Prananingrum | Method of Measuring the Level of Suitability Between Study Program Curriculum and Occupational Profession  | Moderate Ethical Potential: May impact curriculum design and career paths. Potential bias in "profession" data could narrow educational scope.                         |
| 74 | Dea Adlina        | Development of Network Disintegration Methods and Algorithms Based on Covariance and Interclass Inertia Between Segments   | Medium Ethical Potential: Network analysis. When applied to social or communication networks, issues of privacy and surveillance arise.                                |
| 76 | Prihastuti H.     | Development of Harmonized System Coding Generation Method Based on Product Description   | Low Ethical Potential: Application to trade/customs administration automation.   |
| 77 | Ernianti Hasibuan | Mobile Application Development Framework for Heterogeneous Environments based on User Modeling with Benefits   | Medium Ethical Potential: User modeling requires the collection of behavioral data. Privacy issues and how that data is used are key.                                  |
| 78 | Winda Widya A.    | Temporal Topic Model Visualization in Deep Learning Based Decision Support System  | Medium Ethical Potential: Depends on the DSS domain. If for business or policy, the explainability of deep learning models becomes an important ethical issue.         |
| 79 | Yulia Darmi       | Graph Modeling of Sub-district Area Maps in Bengkulu City for Applications to Determine the Nearest Evacuation Route in GIS-Based Earthquake and Tsunami Simulations | Positive Ethical Potential: Applications to public safety and disaster management.   |
| 80 | Rahayu Widayanti  | Academic Quality Assurance System for Higher Education Using Auto-Summarizing Self Organizing Map  | Medium Ethical Potential: Automation in quality assurance can raise issues of fairness and transparency. How the model evaluates "quality" must be clear and unbiased. |
| 81 | Dwi Safiroh U.    | "Development of Association Rule Based Recommendation System with Bi-Confidence, Bi-Lift and User Experience Metrics in Recommendation Novelty Aspect"               | Medium Ethical Potential: Recommendation systems can create "filter bubbles" and limit users' exposure to new information. Transparency and user control issues.       |

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| 82 | Murniyati        | "Social Trust Network Analysis on User Behavior in Recommendation System based on Clustering Relationship, Trusted Friend and Rating" | High Ethical Potential: Analyzing "trust" in social networks is closely related to privacy and social dynamics. Can be abused for manipulation.  |
| 83 | Yuli Maharetta A | Predictive Data Analytics of Ralph Lauren Product Color Trends Using Neural Networks...   | Low Ethical Potential: Application to market and fashion trend analysis.   |
| 84 | Hariyanto        | Identification of Real or Fake Fingerprints Based on Minutiae Distance Using Neural Network and Convolutional Neural Network Methods  | High Ethical Potential: Crucial for biometric security. Issues of reliability, privacy of biometric data, and potential bias against certain demographic groups.                           |
| 85 | Linda Wahyu W.   | Detection and Classification of Lower Molar Caries Using Periapical Radiograph Images of Teeth with Growing Region Segmentation       | High Ethical Potential: Medical applications. Issues of diagnostic accuracy, patient data privacy, and system reliability.   |
| 86 | Swelandiah E. P. | Identification of Fish Freshness Based on Gill Color Features Using Neural Network Method   | Low Ethical Potential: Application to the food industry.   |
| 87 | Dewi Anggraini P | Modification of Moving Object Region Based Video Compression Algorithm in Video Surveillance Systems                                  | High Ethical Potential: Directly related to surveillance video. Increased compression efficiency could make it easier to store surveillance data on a large scale, raising privacy issues. |
| 88 | Mochamad Husni   | Adaptive Rules-Based Library Book Recommendation System to Measure and Improve Recency of Recommendation Results                      | Low Ethical Potential: Application to content recommendations. The "filter bubble" issue remains but its impact is lower than news or products.  |
| 91 | Didi Rustam      | Development of Classification Method of Scientific Field Groups Based on Scientific Publications of Lecturers Based on BERT           | Medium Ethical Potential: Can be used for lecturer performance evaluation. Issues of fairness and accuracy of classification so as not to harm certain individuals or fields of science.   |
| 92 | Jennie K.        | Development of Algorithm for Classification of Types and Assessment of Road Damage Levels on Flexible Pavement                        | Low Ethical Potential: Application to infrastructure maintenance.  |
| 93 | Asri Wulan       | Sand and Clay Soil Type Recognition System Based on Color Feature Similarities  | Low Ethical Potential: Applications in geology or agriculture.   |
| 94 | Ellysa           | Development of Methods and Algorithms for Identification of Soil Mineral Content Based on Color Feature Similarity                    | Low Ethical Potential: Applications in geology or agriculture.   |
| 96 | Rakhmi Khalida   | Utilization of Word Embedding as a GAN Guide for Batik Pattern Generation   | Positive Ethical Potential: Generative AI for creativity and cultural preservation. Minor issues related to originality and copyright.   |

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| 98  | Moehamad Adi R. | Development of an Individual Occupational Risk Assessment System using the Revised NIOSH Lifting Equation with Adaptive Anthropometric Parameters Based on Digital Image Processing. | High Ethical Potential: Individual occupational risk assessments can be used for employee monitoring and personnel decisions. Privacy, accuracy, and fairness issues are critical.                 |
| 99  | Antonius A. K.  | Development and Implementation of Multi-Discipline Classification on Documents Based on Scientific Article Abstracts Using Pre-Trained BERT Model                                    | Low Ethical Potential: Application to academic metadata. Potential bias in classification could affect research metrics.   |
| 100 | Sumaiyah F. D.  | Convolutional Neural Network for Visual Character Identification and Facade Condition of Historical Buildings in the Ancient City of Lasem   | Positive Ethical Potential: Application to cultural heritage conservation.   |
| 101 | Bonang W. L.    | Coffee Supply Chain Traceability System Based on Blockchain and Machine Learning   | Medium Ethical Potential: Increases supply chain transparency. Ethical issues relate to the accuracy of data fed into the system and its impact on smallholder farmers.                            |
| 102 | Guntur Eka S.   | Development of Detection Method and Counting of Oil Palm Trees from Sentinel 2 Imagery Using Object-Based Image Analysis (OBIA) Method   | Medium Ethical Potential: Can be used for plantation monitoring. Ethical issues relate to land use, deforestation, and potential land conflicts.   |
| 104 | Mara Nugraha    | Visual Robot Programming for Early Childhood Computing Learning  | Medium Ethical Potential: AI applications in children's education. Issues of children's data privacy, psychological impacts of interacting with robots, and ensuring learning content is unbiased. |
| 105 | Koko Bachrudin  | Vital Information Infrastructure Interdependence Analysis Framework Based on Fuzzy Causal Knowledge Graph  | High Ethical Potential: Analysis of vital infrastructure related to national security. Issues of security, reliability, and potential misuse of information are crucial.                           |
| 106 | Sandy Suryo P.  | Real-Time Image Quality Monitoring System for DVB-T2 Digital Television Broadcasting Using Objective Metrics and Subjective Metrics Based on Machine Learning                        | Low Ethical Potential: Technical applications for monitoring broadcast quality.  |
| 107 | Luqman          | Development of Polynomial Regression Model for Predicting Calorie Potential of Waste as Raw Material for Energy...   | Positive Ethical Potential: Applications to renewable energy and environmental management.   |
| 110 | Suherman        | Development of a Method for Identifying Body Movements of Kinesthetic Learning Styles Based on Student Video Data when Learning Online.  | High Ethical Potential: Involves monitoring and analyzing student behavior. Issues of privacy, consent, and potential stigmatization of students.  |
| 111 | Tri Handayani   | Classification of Fresh Concrete Compressive Strength Using Gray Level Run Length Matrix Neural Network Method and   | Low Ethical Potential: Application to materials engineering.   |



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|     |                   | Convolutional Neural Network Model   |  |
| 112 | Paranita Asnur    | Optimization of Mangrove Tree Species Identification Based on Leaf Morphological Features Through the Convolutional Neural Network Hyperparameter Tuning Process | Positive Ethical Potential: Applications to environmental conservation.  |
| 113 | Anneke A. P. S.   | Multi-Label Detection for Common and Rare Eye Diseases Using Multi-Modality and Semantic Dictionary  | High Ethical Potential: Medical applications. Issues of diagnostic accuracy, patient data privacy, and model fairness for rare diseases.                       |
| 114 | Yenniwarti R.     | Geometry Point Square Pixel Algorithm for Automatic Cumulonimbus Cloud Prediction Based on NOAA Satellite Imagery...   | Positive Ethical Potential: Applications to aviation safety.   |
| 115 | Rio Yunanto       | Optimizing Provocative Text Classification for Fake News Detection with Ensemble Learning and Pretrained Transformer Model                                       | High Ethical Potential: Complex issues regarding misinformation, free speech, censorship, and bias in the definition of "provocative."                         |
| 117 | Rehulina A.       | Implementation of Convolutional Neural Network (CNN) on land cover suitability for senior tourism areas  | Positive Ethical Potential: Applications to improve accessibility and quality of life for the elderly.   |
| 118 | Adam Huda N.      | "Development of LeNet Architecture with Convolutional Neural Network (CNN) Method in Recognizing Bandung, Bogor, and Cirebon City Accent"                        | Medium Ethical Potential: Accent recognition can be used for profiling. Fairness issues (does the model work well for all speakers) and privacy.               |
| 119 | Ahmad Rofii       | Ensemble Neural Network for Predicting Electrical Power Usage of Buildings   | Medium Ethical Potential: Predicting electricity usage may reveal occupant activity patterns, raising privacy issues.  |
| 122 | Hendri Dwi P.     | Crowd Analysis and Classification with Gene Expression Programming Algorithm for Crowd Management System   | High Ethical Potential: Crowd analysis is closely tied to surveillance. Issues of privacy, freedom of assembly, and potential misclassification of behavior.   |
| 123 | Edi Minaji        | Development of Methods and Algorithms for Detection and Quantification of Severity of Anthracnose Disease in Large Red Chili Fruit                               | Low Ethical Potential: Application to agriculture.   |
| 124 | Muhammad Firdaus  | Development of Weighted Sum Model Algorithm and Wroclaw Taxonomic into Multi Criteria Decision Making Hybrid Case Study: ERP Software Selection                  | Low Ethical Potential: Application to business decision making.  |
| 125 | I Komang Sugiarta | Development of Prescriptive Method Based on Generative Adversarial Networks for Health Center Activity and Budget Planning                                       | High Ethical Potential: Public health service budget planning. Issues of fairness of resource allocation, transparency, and accountability of model decisions. |

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| 126 | Yogi Permadi     | Development of Computer Vision-Based Robot Arm Movement Method on Collaborative Tomato Fruit Picking Robot                          | Medium Ethical Potential: Relating to automation of jobs in the agricultural sector. The main issue is the socio-economic impact on human labor.                                   |
| 127 | Desy Kristyawati | Integration of Strain Gauge Sensor and Dataset Formation for Biceps Muscle Motion Classification Using Machine Learning             | Medium Ethical Potential: Applications to biomechanical or medical analysis. Issues of physiological data privacy and accuracy.  |
| 128 | Nur Azizah       | Data Augmentation Model to Improve Accuracy of Smear-Negative Pulmonary Tuberculosis Detection Using Faster R-CNN Method...         | High Ethical Potential: Medical applications for TB diagnosis. Issues of accuracy, patient data privacy, and fairness of technology access.  |
| 129 | Ike Putri K.     | Development of Student Job Profession Prediction Method Based on Generative Adversarial Network                                     | High Ethical Potential: Career path predictions can introduce bias and limit student choices. Issues of fairness and model accuracy are critical.                                  |
| 130 | Lilis Setyowati  | Regional Health Development Index Calculation Model with Enhanced Random Forest Algorithm   | High Ethical Potential: Influencing public health policy. Issues of fairness in metrics, transparency, and potential bias that disadvantages certain areas.                        |
| 131 | Noor Vika H.     | "Development of BAUM Test Classification Model for Human Personality Assessment based on Image Proportion..."                       | Very High Ethical Potential: Assessing personality can be used in recruitment or psychological testing. Issues of scientific validity, privacy, stigmatization, and cultural bias. |
| 132 | Witta Listiya N. | "Development of Multimodal Toxicity Classification Model on Social Media Platforms Using Large Language Model (LLM)..."             | High Ethical Potential: Similar to provocative content detection. Addressing online toxicity is important, but it carries the risks of bias, misclassification, and censorship.    |
| 133 | Dina Agusten     | Development of Graph-Based Summarization Method for BAN-PT Accreditation Self-Evaluation Report Documents...                        | Medium Ethical Potential: Summary accuracy is critical. Errors may affect an institution's accreditation outcome.  |
| 134 | Rogayah          | Extractive Text Summarization System Using BERT and Cosine Similarity Methods. Case Study: PhD Qualification Proposal Assessment... | Moderate Ethical Potential: Summary accuracy may affect reviewers' perceptions of the proposal. Fairness and bias issues.  |
| 136 | Dwi Swasono R.   | Glioma Extraction on MRI Images Using a Hybrid Approach   | High Ethical Potential: Brain tumor diagnosis. Issues of accuracy, medical data privacy, and system reliability.   |
| 137 | Yusuf Sutanto    | Bayesian Analysis of Direct Acyclic Graph Model in Predicting Success Rate of Scrum-Based Software Development Projects             | Low Ethical Potential: Application to project management.  |
| 138 | Abdul Muchlis    | Development of a Prototype of an Automatic Deep Learning Based Fabric Quality Grading Device  | Low Ethical Potential: Application to textile industry quality control.  |

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| 139 | Aris Gunaryati   | Hybrid Arima LSTM Model Using Regression Smoothing Approach For Sharia Stock Price Prediction  | Medium Ethical Potential: Capital market prediction. Issues of reliability, model transparency, and potential impact on market stability.   |
| 140 | Riya Widayanti   | Integration of Fuzzy Levenshtein Search and Blockchain in MBKM Activity Assessment Data Management in Higher Education                                       | Medium Ethical Potential: Related to student assessment. Issues of fairness, data privacy, and data integrity on blockchain.  |
| 141 | Sandy Suryady    | Development of Convolutional Neural Network Algorithm for Hotspot Detection in Solar Panel Damage  | Low Ethical Potential: Application to renewable energy maintenance.   |
| 142 | Herik Sugeru     | Development of a Location-Specific Balanced Crop and Fertilization Recommendation System Using Machine Learning  | Positive Ethical Potential: Application to increase agricultural yields. The ethical impact is positive.  |
| 143 | Irvan Septyan M. | Convolutional Neural Networks Approach for Aerodynamic Performance Prediction on Low Reynolds Number Airfoils  | Low Ethical Potential: Application to aerospace engineering.  |
| 146 | Prameswari R. J. | Development of Multi-Criteria Decision Making Stress Management Model for Final Year Engineering Students with Machine Learning Approach...                  | High Ethical Potential: Related to student mental health. Issues of privacy, stress detection accuracy, and potential stigmatization.   |
| 147 | Febry Mandasari  | Identification of Soil Bearing Capacity Through Measurement of Pore Number and Soil Water Content Using Image Morphology and Capacitive Soil Moisture Sensor | Low Ethical Potential: Applications in geotechnics/construction.  |
| 148 | Fivtatianti H.   | Formation of Borobudur Temple Relief Detection Model Using Deep Learning   | Positive Ethical Potential: Application to cultural heritage preservation.  |
| 149 | Ega Julya F.     | Development of Holistically-Nested Edge Detection (HED) Algorithm for Landslide Potential Identification Based on Convolutional Neural Network (CNN)         | Positive Ethical Potential: Applications for natural disaster mitigation.   |
| 150 | Ratih Wulandari  | Visualization with Linked Data Approach on Spatial Story Map to Support Energy Planning in Food and Beverage Industry Supply Chain                           | Low Ethical Potential: Application to industrial planning.  |
| 151 | Abdul Hakim      | Development of a Smartclass Room System that Includes Face Detection and Body Movement Activities During Lecture Activities                                  | Very High Ethical Potential: Involves surveillance of students' faces and activities in class. Issues of privacy, consent, fairness (e.g., in assessing participation), and potential for "chilling effects." |

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| 152 | Moh. Yunus       | Development of Classification System and Generation of Speech to Text Description and Large Language Model (LLM) Related to Police Reporting                        | Very High Ethical Potential: Applications in the justice system. Crucial issues are transcription accuracy, bias in LLM when generating descriptions, privacy, and reliability as a law enforcement tool. |
| 153 | Risnawati        | Development of Classification Method and Algorithm of Crocidolomia pavonana Larvae Using Deep Convolutional Neural Network  | Low Ethical Potential: Applications in agriculture (pest control).  |
| 154 | Tri Djoko S. M.  | Artificial Intelligence Based Rainfall Prediction Model Optimization  | Positive Ethical Potential: Applications to disaster mitigation and agricultural planning.  |
| 156 | Indrianto        | Electric Power Demand Prediction Model Using Arima and Sarima and Power Plant Management Based on LVQ Method...   | Medium Ethical Potential: Aggregate predictions have low ethical risk, but if they are scaled down to the individual level, privacy issues of activity patterns may arise.                                |
| 158 | Doddi Yuniardi   | Thermal Image-Based Vehicle Exhaust Emission Detection Using Convolutional Neural Network Method  | Medium Ethical Potential: Can be used for emission rule enforcement. Accuracy and fairness issues in law enforcement.   |
| 160 | Andi Asnur P. M. | Machine Learning Model Development for Budget Plan Cost Prediction in Building Construction Projects  | Low Ethical Potential: Application to construction project management.  |
| 161 | Ratu Nurmalika   | Development of Longitudinal Crack Damage Level Detection System on Rigid Pavement Roads Using Convnext Model  | Low Ethical Potential: Application to infrastructure maintenance.   |
| 162 | Oni Indah C.     | Identification of Safe Zones of River Boundary Lines... Based on Satellite Imagery Using Convolution Neural Network Model   | Positive Ethical Potential: Applications to spatial planning and disaster mitigation.   |
| 163 | Nurasiah         | Classification Model for Early Mental Health Screening Through Draw A Person (Dap) Test and Self Reporting Questionnaire 20 (SRQ-20) with Machine Learning Approach | Very High Ethical Potential: Involves mental health data. Issues of privacy, diagnostic accuracy, risk of stigmatization, and scientific validity.  |
| 164 | Ahmad Apandi     | "Modeling and Method Development for Indonesian Language Image Captioning Based on Vision Transformer, Indobert, and Bigbird"                                       | Medium Ethical Potential: Accuracy of description is very important. Incorrect or biased descriptions may lead to misinformation or be offensive.   |
| 165 | Ahmad Hidayat    | Development of a Multi-label Voice Phishing Classification Model Based on Large Language Models in Indonesian Telephone Conversations                               | High Ethical Potential: Applications for security. Issues of privacy (analyzing phone conversations), accuracy, and potential for damaging false positives.   |



## **Publications**

Following are publications which are related with Ethics of AI or related subjects

| <b>Name</b>       | <b>Title</b>  | <b>Publication</b>   | <b>Year</b> |
|-------------------|---|--|-------------|
| Detty Purnamasari | Sentiment Analysis Methods for Customer Review of Indonesia E-Commerce                    | International Journal of Innovative Computing, Information & Control | 2024        |
| Detty Purnamasari | Artificial Intelligence Model for Detecting Tax Evasion Involving Complex Network Schemes | APTISI Transactions on Technopreneurship (Q1, Scopus, SINTA-1)       | 2024        |
| Detty Purnamasari | Ontology for Corpus of Occupation and Competency Standards                                | Journal of Theoretical and Applied Information Technology (Q3)       | 2021        |
| Detty Purnamasari | Semantic Similarity for Search Engine Enhancement   | Journal of Engineering and Applied Sciences (Q4)                     | 2017        |
| Detty Purnamasari | HTML Table Wrapper Based on Table Components  | International Journal of Computer Applications in Technology (Q2)    | 2015        |

| Name                      | Title  | Publication  | Year |
|---------------------------|--|--|------|
| Detty Purnamasari         | Population Metadata Development for Data Interoperability (Government Agencies in Indonesia) | ARPN Journal of Engineering and Applied Sciences (Q3)                            | 2014 |
| Adang Suhendra            | MiMaLo: Advanced Normalization Method for Mobile Malware Detection                           | International Journal of Modern Education and Computer Science (Q2, Scopus)      | 2022 |
| Adang Suhendra            | A study using machine learning with N-gram model in harmonized system classification         | Journal of Advanced Research in Dynamical and Control Systems (unranked, Scopus) | 2020 |
| Adang Suhendra            | Artificial intelligence-based methods for harmonized system code translation: A review       | Journal of Advanced Research in Dynamical and Control Systems (unranked, Scopus) | 2020 |
| Lintang Yuniar Banowosari | Comparison of deep learning models: CNN and VGG-16 in identifying pornographic content       | IAES International Journal of Artificial Intelligence (IJAI)                     | 2025 |

| Name                         | Title   | Publication   | Year |
|------------------------------|---|---|------|
| Lintang Yuniar<br>Banowosari | Comparative Study of LSTM Algorithm Performance and CNN in Machine Learning Model for Google Inc. Share                             | International Research Journal of Advanced Engineering and Science (IRJAES), Vol 6 No 2   | 2021 |
| Lintang Yuniar<br>Banowosari | Interdependence analysis of critical information infrastructure using fuzzy cognitive maps  | ICIC Express Letters (Scopus Q4)  | 2024 |
| Sutresna Wati                | Implementation of Convolutional Neural Network (CNN) in Android-Based Acne Detection Applications                                   | 2022 International Conference on Information Technology Research and Development (ICITRD) | 2022 |
| Sutresna Wati                | Klasifikasi Kendaraan Militer (Pesawat F16, Kapal Fregat, Tank Leopard) di Indonesia menggunakan Convolutional Neural Network (CNN) | Jurnal Elektrosista, Vol 12 No 1  | 2024 |
| Sutresna Wati                | Implementasi Algoritma Regresi Logistik untuk Binary Classification dalam Spam SMS dan WhatsApp                                     | Seminar Nasional Inovasi Teknologi (INOTEK) Vol 7 No 1                                    | 2021 |



| Name                     | Title  | Publication   | Year |
|--------------------------|--|---|------|
| Antonius Angga Kurniawan | Multidisciplinary classification for Indonesian scientific articles abstract using pre-trained BERT model            | International Journal of Advances in Intelligent Informatics (Q3, Scopus-indexed) | 2023 |
| Antonius Angga Kurniawan | Evaluasi Kinerja MLib Apache Spark pada Klasifikasi Berita Palsu dalam Bahasa Indonesia                              | Jurnal Teknologi Informasi dan Ilmu Komputer (JTIIK)                              | 2022 |
| Antonius Angga Kurniawan | Implementasi Deep Learning Menggunakan Metode CNN dan LSTM untuk Menentukan Berita Palsu dalam Bahasa Indonesia      | Informatika: Jurnal Elektronika dan Instrumentasi                                 | 2021 |
| Antonius Angga Kurniawan | Design of chatbot with 3D avatar, voice interface, and facial expression   | International Conference on Science in IT (ICSITECH), IEEE indexed                | 2015 |
| Antonius Angga Kurniawan | Towards advanced development of cyborg intelligence  | International Journal of Information and Knowledge Management (IJKM)              | 2018 |
| Tubagus Maulana Kusuma   | Automated hierarchical classification of scanned documents using convolutional neural network and regular expression | International Journal of Electrical and Computer Engineering (IJECE)              | 2022 |

| <b>Name</b>            | <b>Title</b>   | <b>Publication</b>  | <b>Year</b> |
|------------------------|--|---|-------------|
| Tubagus Maulana Kusuma | Design of a traceability system for a coffee supply chain based on blockchain and machine learning                       | Journal of Industrial Engineering and Management 17(1)  | 2024        |
| Tubagus Maulana Kusuma | Functional Requirements and Traceability System Information Modeling on Java Preanger Coffee Supply Chain                | Proceedings – 4th International Conference on Informatics, Multimedia, Cyber & Info System (ICIMIC) | 2022        |
| Tubagus Maulana Kusuma | Fingerprint Authenticity Classification Algorithm based on Distance of Minutiae using Convolutional Neural Network (CNN) | Incomtech / Mercu Buana Proceedings   | 2021        |
| Tubagus Maulana Kusuma | Human gait feature extraction based on silhouette and center of mass   | International Journal of Advanced Computer Science and Applications Vol. 10, No. 3                  | 2019        |
| Tubagus Maulana Kusuma | Adaptive power link adaptation on DVB-T system based on picture quality feedback (menggunakan CNN)                       | IJECE   | 2019        |

| Name                   | Title  | Publication   | Year  |
|------------------------|--|---|-------|
| Tristyanti Yusnitasari | Deep Learning Model for Real-Time Multi-Class Detection on Food Ingredients Using YOLOv4             | 6th Batusangkar International Conf (BIC 2021) – Prosiding (EAI)             | 2022  |
| Tristyanti Yusnitasari | Implementation of Convolutional Neural Network Method for Classification of Baum Test                | 5th Intl Conf on Informatics and Computing (ICIC 2020) – Prosiding          | 2020  |
| Tristyanti Yusnitasari | Food Crop Farmer Index Price Prediction using LSTM during Covid-19 Pandemic                          | International Research Journal of Advanced Engineering and Science (IRJAES) | 2021  |
| Tristyanti Yusnitasari | Comparison of ARIMA and SARIMA for Forecasting Crude Oil Prices                                      | Jurnal RESTI (Rekayasa Sistem & TI) Vol 7 No 2                              | 2023  |
| Tristyanti Yusnitasari | Prediction analysis of food crop farmer index price during Covid-19 using ARIMA and LSTM             | Academy Publisher ABAC (COVID-19 agriculture forecasting)                   | 2021  |
| Tristyanti Yusnitasari | Market Segmentation for Local Product Marketing Strategy Using K-Means and Dempster-Shafer Algorithm | – (kemungkinan prosiding/unpublished)                                       | 2025? |

| Name         | Title  | Publication  | Year |
|--------------|--|--|------|
| Tri Handhika | Boruta Algorithm: An Alternative Feature Selection Method in Credit Scoring Model                    | AIP Conference Proceedings (Q4)  | 2023 |
| Tri Handhika | Reinforcement Learning on the Credit Risk-Based Pricing  | Proceedings – 2021 2nd International Conference on Computational Methods in Science and Technology | 2021 |
| Tri Handhika | Bayesian analysis in predicting the success rate of the scrum-based software development project     | ICIC Express Letters (Scopus Q3)   | 2021 |
| Tri Handhika | Hybrid expert-traveler preferences-based analytic hierarchy process for optimal customized itinerary | ICIC Express Letters (Scopus Q3)   | 2021 |
| Tri Handhika | Exhaustive Search for Weighted Ensemble Classifiers to Improve Performance on Imbalanced Dataset     | Lecture Notes on Data Engineering and Communications Technologies (Q3 book series)                 | 2022 |
| Tri Handhika | An automated credit intelligence learning system   | International Journal of Electronic Finance (Q4)   | 2022 |

| Name              | Title  | Publication   | Year |
|-------------------|--|---|------|
| Tri Handhika      | Integrated Implementation of Fuzzy Logic and Dijkstra's Algorithm in Travel Routes Planning                                | AIP Conference Proceedings (Q4)   | 2023 |
| Tri Handhika      | Optimizing Profitable Tour Problems with Priority Prizes (PTPPP) Using Mixed Integer Programming + PuLP                    | AIP Conference Proceedings (Q4)   | 2023 |
| Astie Darmayantie | Terrorism Domain Corpus Building Using Latent Dirichlet Allocation (LDA) and Its Ontology Relationship Building Using GSHL | 2017 11th Intl. Conf. on Information & Communication Technology & System (ICTS)       | 2017 |
| Astie Darmayantie | Implementation of Naïve Bayes Method for Product Purchasing Decision Using Neural Impulse Actuator in Neuromarketing       | 2015 Intl. Conf. on ICT & Systems (IEEE ICTS)   | 2015 |
| Astie Darmayantie | Requirement Engineering Strategy for Multinational OEM Partnership   | Conference article (2014) – non-AI focus but foundational for socio-technical systems | 2014 |

| Name                 | Title  | Publication   | Year |
|----------------------|--|---|------|
| Astie Darmayantie    | Socio-Technical Perspective for Better Design Thinking Process ... Using Light-Weight Why Because Analysis (LWBA)    | International Journal of Scientific & Research Publications (IJSRP) Vol 10 No 7 | 2020 |
| Astie Darmayantie    | Implementation and Comparative Analysis of Test Automation Framework ... using DIA Method                            | Widya Teknik Vol 22 No 1  | 2023 |
| Achmad Benny Mutiara | Artificial Intelligence Model for Detecting Tax Evasion Involving Complex Network Schemes                            | APTISI Transactions on Technopreneurship (ATT)                                  | 2024 |
| Achmad Benny Mutiara | Convolutional Neural Network (CNN) Deep Learning Model for Recognition of 3 Regional Dialect Accents                 | ICIC Express Letters (Scopus Q4)  | 2025 |
| Achmad Benny Mutiara | Generating Image Captions in Indonesian Using a Deep Learning Approach Based on forformer and IndoBERT Architectures | Journal of Applied Data Sciences (Scopus Q2)                                    | 2025 |

| Name                 | Title   | Publication   | Year |
|----------------------|---|---|------|
| Achmad Benny Mutiara | Enhancing Sharia Stock Price Forecasting using a Hybrid ARIMA-LSTM with Locally Weighted Regression Approach  | Journal of Applied Data Sciences (Scopus Q2)                                      | 2025 |
| Achmad Benny Mutiara | Musical Genre Classification Using SVM and Audio Features   | TELKOMNIKA – Telecommunicati on, Computing, Electronics and Control (Vol 14 No 3) | 2016 |
| Achmad Benny Mutiara | An Executive's Guide to Artificial Intelligence   | Conference "Sentik" (Jakarta, 2018)   | 2018 |
| Avinanta Tarigan     | UGLEO: A Web-Based Intelligence Chatbot for Student Admission Portal Using MegaHal Style                      | Jurnal Ilmiah Informatika Komputer Vol 23 No 3                                    | 2018 |
| Avinanta Tarigan     | Determination of SVM-RBF Kernel Space Parameter to Optimize Accuracy of Indonesian Batik Image Classification | Conference/journal paper on SVM-RBF parameter tuning                              | 2017 |
| Avinanta Tarigan     | Data Governance in Blockchain-Based Systems for Internship Grade Conversion                                   | APTISI Transactions on Technopreneursh ip Vol 6 No 3 (Scopus Q1)                  | 2024 |

| <b>Name</b>    | <b>Title</b>   | <b>Publication</b>   | <b>Year</b> |
|----------------|--|--|-------------|
| Sigit Widyanto | Monitoring the Growth of Tomatoes in Real Time with Deep Learning-based Image Segmentation               | International Journal of Advanced Computer Science and Applications (IJACSA)                                   | 2021        |
| Sigit Widyanto | Image-Based Tomato Maturity Classification and Detection Using Faster R-CNN                              | ISMSIT 2021 – 5th International Symposium on Multidisciplinary Studies & Innovative Technologies (Proceedings) | 2021        |
| Sigit Widyanto | Comparison of Deep Learning-Based Object Classification Methods for Detecting Tomato Ripeness            | International Journal of Fuzzy Logic and Intelligent Systems (IjFLIS, Scopus Q1)                               | 2022        |
| Sigit Widyanto | Implementation of Convolutional Neural Network Method for Classification of Diseases in Tomato Leaves    | 4th International Conference on Informatics and Computing (ICIC 2019) (Conference Proceedings)                 | 2019        |
| Rodiah         | Perbandingan Metode Recurrent Neural Network (RNN) dengan Linear Regression untuk Prediksi Saham Netflix | Artikel ilmiah (judul/metode ML)   | 2024        |



| Name   | Title  | Publication   | Year |
|--------|--|---|------|
| Rodiah | Identifikasi Fitur Suara Menggunakan Model Convolutional Neural Network (CNN) pada Speech-to-Text (STT)    | Artikel ilmiah (judul/metode CNN)                               | 2024 |
| Rodiah | Klasifikasi Penyakit Paru: Covid-19, Lung Opacity dan Viral Pneumonia Menggunakan EfficientNetV2 (CNN)     | Bab buku atau artikel full-text (judul/metode EfficientNetV2)   | 2024 |
| Rodiah | Biometric System for Person Authentication Using Retinal Vascular Branching Pattern                        | Artikel ilmiah (metode biometric imaging algorithm)             | 2023 |
| Rodiah | Pembentukan Model RNN & Connectionist Temporal Classification untuk Pengenalan Kata Tulisan Tangan Offline | Artikel ilmiah (metode RNN + CTC untuk handwriting recognition) | 2023 |
| Rodiah | Model Random Forest Regression untuk Peramalan Penyebaran Covid-19 di Indonesia                            | Artikel ilmiah (metode Random Forest Regression)                | 2022 |
| Rodiah | Implementation of the Prophet Model in COVID-19 Cases Forecast   | Artikel ilmiah (metode Prophet time-series forecasting)         | 2022 |

| Name               | Title  | Publication  | Year |
|--------------------|--|--|------|
| Sarifuddin Madenda | Build Auto Annotate Oil Palm Image Datasets Using Template Matching & BIRCH Clustering                 | Kudang Boro Seminar (koleksi prosiding UG)         | 2023 |
| Sarifuddin Madenda | Polynomial Regression Model Utilization to Determine Potential Refuse-Derived Fuel (RDF) Calories      | Artikel publik                                     | 2023 |
| Sarifuddin Madenda | Terrorism Domain Corpus Building Using LDA + Ontology via GSHL   | 2017 Intl. Conf. on ICTS (IEEE)                    | 2017 |
| Sarifuddin Madenda | Fish Freshness Identification Based on Gill Color Features Using Neural Network                        | Artikel ilmiah                                     | 2022 |
| Sarifuddin Madenda | Fingerprint Authenticity Classification Based on CNN   | Artikel ilmiah                                     | 2021 |
| Sarifuddin Madenda | Detection of Fingerprint Authenticity Based on Deep Learning Using Image Pixel Value                   | Conference Paper 2020                              | 2020 |
| Fitrianingsih      | The Implementation of Artificial Neural Network (ANN) on Offline Cursive Handwriting Image Recognition | ILKOM Jurnal Ilmiah, Vol 14 No 1 (Accreditation-2) | 2022 |

| <b>Name</b>   | <b>Title</b>   | <b>Publication</b>   | <b>Year</b> |
|---------------|--|--|-------------|
| Fitrianingsih | Web-Based Fuzzy Expert System for Lung Cancer Diagnosis  | Konferensi / Jurnal Internal (Fuzzy Expert System mention, AI domain)                                | 2017        |
| Ahmad Sabri   | Exhaustive Search for Weighted Ensemble Classifiers to Improve Performance on Imbalanced Dataset | Chapter in Artificial Intelligence in Data and Big Data Processing (Springer LNDECT Q3)              | 2022        |
| Ahmad Sabri   | Reinforcement Learning on the Credit Risk-Based Pricing  | International Conference on Artificial Intelligence & Big Data in Digital Economy, AIP Conf. Proc.   | 2021        |
| Ahmad Sabri   | An Optimization Model for Network-based Mobile Positioning                                       | 15th International Conference on Advanced Computing & Communications (ICACC) (Conference Proceeding) | 2021        |
| Ahmad Sabri   | Comparison of Dynamic Weighted Centroid and Optimization Model to Predict Mobile Device Location | 8th International Conference on Informatics and Computing (ICIC 2023)                                | 2023        |

| Name          | Title   | Publication  | Year |
|---------------|---|--|------|
| Rifki Kosasih | Classification of six banana ripeness levels based on statistical features and machine learning | International Journal of Advanced Applied Sciences (Measurement Confederation) | 2023 |
| Rifki Kosasih | Implementation of K-Nearest Neighbor in Detecting Heart Disease with Various Training Data      | Journal Article  | 2023 |
| Rifki Kosasih | Mobile Device Positioning by Using Dynamic Weighted Centroid Model                              | Conference Paper (ICIC 2022–2023)  | 2023 |
| Rifki Kosasih | Face Recognition Using Isomap, KNN and Naïve Bayes Classifier                                   | Journal Article  | 2023 |
| Rifki Kosasih | Fire detection system on surveillance videos using Faster R-CNN                                 | Conference Paper   | 2023 |
| Rifki Kosasih | Travel Time Estimation Using Support Vector Regression on Model with 8 Features                 | Journal Article  | 2022 |
| Rifki Kosasih | Implementation of Random Forest on Face Recognition Using Isomap Features                       | Journal Article  | 2022 |

| Name             | Title  | Publication  | Year |
|------------------|--|--|------|
| Rifki Kosasih    | Comparison of two deep learning methods for detecting fire hotspots  | Journal of Electrical & Computer Engineering (IJECE) | 2019 |
| Rifki Kosasih    | Convolutional Neural Network for Tomato Leaf Disease Classification  | ICIC 2019 Conference Proceedings                     | 2019 |
| Nurma Nugraha    | Aplikasi Virtual Reality Taman Wisata Bawah Laut Sea World Ancol Berbasis Android  | Artikel Ilmiah                                       | 2019 |
| Nurma Nugraha    | Analysis and Recognition of Curve Type as the Basis of Object Recognition in Image   | Artikel Ilmiah                                       | 2016 |
| Nurma Nugraha    | Pembuatan Aplikasi Website Berbasis Pelanggan pada Toko Online menggunakan CodeIgniter   | Jurnal Ilmiah Informatika Komputer, Vol 22 No 3      | 2017 |
| Aini Suri Talita | Naïve Bayes Classifier and Particle Swarm Optimization Feature Selection Method for Classifying Intrusion Detection System Dataset | Journal of Physics: Conference Series (ICPS)         | 2021 |

| Name             | Title  | Publication   | Year             |
|------------------|--|---|------------------|
| Aini Suri Talita | Fuzzy Kernel C-Means Algorithm for Intrusion Detection Systems   | Journal of Theoretical and Applied Information Technology & AIP Conference    | 2015, 2017, 2018 |
| Aini Suri Talita | Implementasi algoritma Long Short-Term Memory (LSTM) untuk mendeteksi ujaran kebencian (hate speech) pada pilpres 2019 | MATRIK: Jurnal Manajemen, Teknik Informatika & Rekayasa Komputer, Vol 19 No 1 | 2019             |
| Aini Suri Talita | An Improved Calibration Technique for Polarization Images  | IEEE Access (Q1 journal)  | 2019             |
| Aini Suri Talita | Intrusion Detection Systems Data Classification by Possibilistic C-Means Method  | ResearchGate article (2019)   | 2019             |
| Aini Suri Talita | Analisis Usability Aplikasi Sambara dengan metode System Usability Scale dan Use Questionnaire                         | JatISI Vol 10 No 2 (SINTA-2)  | 2023             |
| Ilmiyati Sari    | Predicting levels of legal case difficulties using machine learning (Random Forest & SVM)                              | IAES International Journal of Artificial Intelligence (IJAI), Vol 13 No 4     | 2024             |

| <b>Name</b>   | <b>Title</b>   | <b>Publication</b>  | <b>Year</b> |
|---------------|--|---|-------------|
| Ilmiyati Sari | Clustering and Topic Modeling of Verdicts of Narcotics Cases Using Machine Learning                      | Journal of Advanced Computational Intelligence and Intelligent Informatics, Vol 27 No 6 | 2023        |
| Ilmiyati Sari | Fire detection system on surveillance videos using Faster R-CNN for high buildings evacuation            | AIP Conference Proceedings  | 2023        |
| Ilmiyati Sari | Prediction types of legal cases in Indonesia using TF-IDF and K-Nearest Neighbors algorithm              | AIP Conference Proceedings  | 2023        |
| Ilmiyati Sari | Implementation of Machine Learning in Predicting Length of Punishment at Bandung Court                   | ICSINTE Conference Proceedings (2022)   | 2022        |
| Ilmiyati Sari | Indonesian Sign Language (BISINDO) Recognition Using Accurate & Fast Dynamic Time Warping (AF-DTW) model | International Journal of Machine Learning and Computing Vol 10 No 2 (IJMLC)             | 2020        |

| Name                | Title  | Publication  | Year |
|---------------------|--|--|------|
| Ernastuti Ernastuti | Analysis of Deauthentication Attack on IEEE 802.11 Connectivity Based on IoT Using External Penetration Test | COMMIT Journal, Vol 14 No 1  | 2020 |
| Ernastuti Ernastuti | Penerapan Teknologi AI untuk Mendeteksi Kantuk Menggunakan OpenCV  | Skripsi Universitas Gunadarma (deteksi kantuk real-time)                         | 2024 |
| Ernastuti Ernastuti | Ontology Guided Image Understanding: A Preliminary Study   | Conference paper awal terkait AI & Computer Vision, menyebut ontology & big data | 2017 |
| Dewi Putrie Lestari | Comparison of two deep learning methods for detecting fire hotspots  | International Journal of Electrical & Computer Engineering (IJECE) Vol 12 No 3   | 2022 |
| Dewi Putrie Lestari | Gesture recognition for Indonesian Sign Language (BISINDO) using Accurate & Fast Dynamic Time Warping        | International Journal of Machine Learning and Computing (IJMLC) Vol 10 No 2      | 2020 |



| Name                | Title   | Publication   | Year |
|---------------------|---|---|------|
| Dewi Putrie Lestari | Comparison of three segmentation methods for breast ultrasound images based on level set & morphological operations | International Journal of Electrical & Computer Engineering (IJECE) Vol 7 No 1               | 2017 |
| Ias Sri Wahyuni     | Fusion Multi-Focus Images with Neighbor Local Distance  | International Conference on Machine Learning Techniques and NLP (MLNLP 2020), CS & IT Proc. | 2020 |
| Ias Sri Wahyuni     | Local Distance and Dempster-Shafer for Multi-Focus Image Fusion   | Signal & Image Processing: An International Journal (SIPIJ) Vol 13 No 1                     | 2022 |
| Ias Sri Wahyuni     | Wavelet Decomposition and Alpha-Stable Fusion (statistical image fusion)  | Conference Proceedings CS & IT Vol 9 No 16  | 2017 |
| Ias Sri Wahyuni     | Network Anomaly Detection Based on Late Fusion of Several Machine Learning Algorithms                               | Conference Proceedings CS & IT Vol 11   | –    |
| Desti Riminarsih    | Effective Feature Selection Methods for Vaginal Birth After Cesarean Data   | Conference Paper (konferensi medis/data science)  | 2025 |

| Name              | Title  | Publication  | Year |
|-------------------|--|--|------|
| Desti Riminarsih  | Implementation of Support Vector Regression for Predicting Lawyer Charges Using Cloud Computing        | ICONESTH 2023 (International Conference on Education, Science, Technology) | 2023 |
| Desti Riminarsih  | Background Estimation Using Principal Component Analysis with Limited Memory Block Krylov Optimization | IJECE Vol 8 No 5 (2018)  | 2018 |
| Desti Riminarsih  | Wall Shear Stress Calculation Based on MRI Image in Abdominal Aortic Aneurysm Patients                 | Prosiding ICIC 2016  | 2016 |
| Iffatul Mardhiyah | Blighted Ovum Detection Using Deep Convolution Neural Network Method                                   | Symposium on Biomathematics (SYMOMATH 2018) – AIP Conference Proceedings   | 2019 |
| Iffatul Mardhiyah | Travel Time Estimation Using Support Vector Regression on Model with 8 Features                        | Scientific Journal of Informatics, Vol 9 No 2                              | 2022 |
| Mohammad Iqbal    | Applying Deep Learning and Convolutional Neural Network to Identify Historic Building “Little China”   | ISVS e-journal   | 2023 |

| <b>Name</b>           | <b>Title</b>   | <b>Publication</b>   | <b>Year</b> |
|-----------------------|--|--|-------------|
| Mohammad Iqbal        | Comparative Analysis of Deep Learning Models for Vehicle Detection (Faster R-CNN, SSD, YOLOv3) | Journal of Systems Engineering and Information Technology (JOSEIT) Vol 1 No 1          | 2022        |
| Mohammad Iqbal        | Driving Simulator Software for Evaluation of Safe Driving                                      | Proceedings – 5th Intl Conf on Informatics and Computing (ICIC)                        | 2020        |
| Mohammad Iqbal        | Developing PC-Based Driving Simulator System for Driver Behavior Analysis Research             | Journal of Physics: Conference Series (ICIC 2020 proceedings)                          | 2020        |
| Mohammad Iqbal        | Pixel-Based Algorithm in Brain Tumor Classification (Measuring Area)                           | Journal of Theoretical and Applied Information Technology (Q4)                         | 2024        |
| Nur Sultan Salahuddin | Development of a Robotic System for Agricultural Pest Detection: A Case Study on Chili Plants  | Advance Sustainable Science, Engineering and Technology (ASSET) Vol 7 No 1             | 2025        |
| Nur Sultan Salahuddin | Leaf Disease Detection Web Design using Django Framework for CNN Models                        | International Research Journal of Advanced Engineering and Science (IRJAES) Vol 8 No 3 | 2023        |

| <b>Name</b>           | <b>Title</b>  | <b>Publication</b>   | <b>Year</b> |
|-----------------------|---|--|-------------|
| Nur Sultan Salahuddin | Smart Aquaponic with Monitoring and Control System Based on IoT                                       | Proceedings – 2017 Second International Conference on Informatics and Computing (ICIC) | 2017        |
| Nur Sultan Salahuddin | Prototype of Baby Incubator Security System via Face Recognition using Raspberry Pi and OpenCV        | Techno.Com, Vol 21 No 3  | 2022        |
| Nur Sultan Salahuddin | Prototype of Automatic Micro-Climatic Greenhouse Monitoring & Control System using IoT Platform Blynk | Techno.Com, Vol 21 No 1  | 2022        |
| Dyah Anggraini        | Analysis and Classification of Customer Churn Using Machine Learning Models                           | Jurnal RESTI (Rekayasa Sistem & Teknologi Informasi)                                   | 2023        |
| Koko Bachrudin        | Classification of meat using the convolutional neural network   | IAES International Journal of Artificial Intelligence (IJAI) Vol 12 No 4               | 2023        |
| Koko Bachrudin et al. | A Survey of Interdependency Analysis for Critical Information Infrastructure                          | ICIC 2023 – International Conference on Informatics & Computing (prog. book)           | 2023        |

| Name              | Title   | Publication   | Year |
|-------------------|---|---|------|
| Ruddy J. Suhatril | Evaluation of Machine Learning Models for Predicting Cardiovascular Disease Based on Framingham Heart Study Data      | ILKOM Jurnal Ilmiah, Vol 16 No 1  | 2024 |
| Ruddy J. Suhatril | Hypertension Prediction Using Machine Learning Algorithm Among Indonesian Adults                                      | IAES International Journal of Artificial Intelligence (IJAI), Vol 12 No 2 | 2023 |
| Ruddy J. Suhatril | Multidisciplinary classification for Indonesian scientific articles abstract using pre-trained BERT model (co-author) | ResearchGate  | 2023 |
| Ruddy J. Suhatril | Enkripsi citra digital menggunakan ... Transposisi Cat Map & Substitusi Logistic Map (Cryptography) (co-author)       | Article in ResearchGate   | 2023 |
| Dina Anggraini    | Face Recognition untuk Akses Pegawai Bank Menggunakan Deep Learning dengan Metode CNN                                 | Artikel Ilmiah (ILKOM atau prosiding internal)                            | 2020 |

| Name           | Title   | Publication  | Year |
|----------------|---|--|------|
| Dina Anggraini | Indonesian Music Classification on Folk and Dangdut Genre Based on Rolloff Spectral Feature Using SVM | International Journal of Computer and System Sciences (?)            | 2021 |
| Dina Anggraini | Performance Analysis of Six Chaos Cryptographic Algorithms for Image Encryption                       | Artikel Ilmiah (crypto-algorithm benchmarking including ML insights) | 2023 |
| Dina Anggraini | Pembuatan Aplikasi Chatbot Kolektor dengan Metode Extreme Programming dan Forward Chaining Strategy   | Artikel Ilmiah (Chatbot AI, prosiding internal)                      | 2021 |
| Dina Anggraini | Identify Reviews of PeduliLindungi Application Using Topic Modeling with Latent Dirichlet Allocation  | Artikel Ilmiah (Topic modeling COVID-19 app)                         | 2023 |