

2022 5th International Conference on Information and Communications Technology (ICOIACT 2022)

**Yogyakarta, Indonesia
24-25 August 2022**



**IEEE Catalog Number: CFP22L86-POD
ISBN: 978-1-6654-5141-3**

**Copyright © 2022 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:	CFP22L86-POD
ISBN (Print-On-Demand):	978-1-6654-5141-3
ISBN (Online):	978-1-6654-5140-6
ISSN:	2770-467X

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

Wednesday, August 24

Wednesday, August 24 6:30 - 7:00 (Asia/Jakarta)

Preparing and Join to Zoom Meeting: Registration and Join to Zoom Meeting

Rooms: room a (offline), Room B (Offline), Zoom A (Online), Zoom B (Online), zoom c (online), Zoom D (Online), Zoom E (Online), zoom f (online)

Meet with The Committee Team.

Preparing for Conference Day.

Simulation and Check Connection for Zoom Meeting.

Contact Center : Open Q & A all about conference.

Etc

Wednesday, August 24 7:00 - 8:30 (Asia/Jakarta)

1A: Parallel Session 1-A

Room: Zoom A (Online)

- 1 **7:00 True-Time-Delay Line of Chipless RFID Tag for Security & IoT Sensing Applications**
Mohammad Ehsanul Alim (University of Delaware, USA); Ali Maswood (Nanyang Technological University, Singapore); Nazmus Sakib Bin (North South University, Bangladesh)
- 7 **7:15 Design and Analysis of Optical Fiber Network Deployment on Soekarno Hatta Airport Railroad**
Eria Tri Utamy, Ainamardiah Putri Fatikah, Irfaan Fadhlullah, Jeremia June Caesar Parsinabul, Malvin Samuel Martino, Rafif Fadhilah Ushaim and Catur Apriono (Universitas Indonesia, Indonesia)
- 13 **7:30 5G mobile wireless network threats and its mitigation methods**
Vinay M and Purushotham U (PES University, India)
- 19 **7:45 Efficient ECC Architecture for Data Storage Memory Applications**
Nithesh Gupta Chebrolu and Sumanth Sakkara (PES University, India); Cyril Raj (MS College of Engineering, India); Purushotham U (PES University, India)
- 24 **8:00 Accuracy Comparison of Different Machine Learning Models in Phishing Detection**
Anthony Chandra (BINUS University & None, Indonesia); Gregorius Gregorius and John I. M. Seumahu (BINUS University, Indonesia); Alexander Agung Santoso Gunawan (Bina Nusantara University & University of Indonesia, Indonesia); Anderies Anderies (BINUS University, Indonesia)
- 30 **8:15 Software-Defined Networking (SDN): A Review**
Quadri Waseem and Wan Isni Sofiah Wan Din (Universiti Malaysia Pahang, Malaysia); Afrig

Aminuddin (Universitas Amikom Yogyakarta, Indonesia); Muzammil Hussain Mohammed (Taif University, Saudi Arabia); Rifda Faticha Alfa Aziza (Universitas Amikom Yogyakarta, Indonesia)

1B: Parallel Session 1-B

Room: Zoom B (Online)

- 36 **7:00 Covid-19 Variants Survivability Simulation With Genetic Algorithm**
Cornelius M Sarungu (Bina Nusantara University, Indonesia)
- 42 **7:15 Trust-Chain-Based Certificate Revocation Control in Autonomous Vehicle Networks**
Gizem Erceylan and M. Ali Akcayol (Gazi University, Turkey)
- 48 **7:30 Performance Analysis of Optical-CDMA via FSO effect on Li-Fi system utilizing L'Band frequencies**
Baker Khalid Alfaris (Aliraqia University, Iraq); Satea Hikmat Alnajjar (Al-Iraqia University, Iraq)
- 54 **7:45 Systematic Literature Review and Qualitative Survey of Blockchain Impact on Social Media Security**
Shannya Michelia, Fendy Kurniawan, Victor Antonius, Jurike Moniaga and Bakti Amirul Jabar (Bina Nusantara University, Indonesia)
- 60 **8:00 Impact Of Rain On Performance Of Visible Light Communication System In Vehicle-to-Vehicle Communication**
Triswiza Ariatama, Arfianto Fahmi and Brian Pamukti (Telkom University, Indonesia)
- 66 **8:15 Design and Implementation Named Data Networking-Based Video Streaming System**
Ade Aditya Ramadha, Leanna Yovita and Tody Wibowo (Telkom University, Indonesia)

1C: Parallel Session 1-C

Room: zoom c (online)

- 71 **7:00 An Intrusion Detection System (IDS) using Dimensional Reduction Based on Statistical and SDAE to Enhance SVM in Classification Task**
Muh Hanafi (Universitas Amikom Yogyakarta, Indonesia & Time Excellindo, Malaysia)
- 77 **7:15 Development of A Smart Box Prototype for Mail and Parcel Posts Using IoT and Solar Energy**
Jaranin Kaewsrusuphawong, Vatcharakiat Waelun, Jiranuwat Parakawong Na Ayuthaya and Suwit Paengkanya (RMUTP, Thailand); Therdpong Daengsi (Rajamangala University of Technology Phra Nakhon, Thailand)
- 82 **7:30 Classifying the Students' Behavior on e-Learning System using Fine-Tuning K-NN Method**
Yuni Yamasari, Anita Qoiriah, Naim Rochmawati and I Made Suartana (Universitas Negeri Surabaya, Indonesia); Oddy Virgantara Putra (Universitas Darussalam Gontor, Indonesia); Tohari Ahmad (Institut Teknologi Sepuluh Nopember (ITS), Indonesia)

- 87 **7:45 Effect of Image Enhancement in CNN-Based Medical Image Classification: A Systematic Literature Review**
Vio A Ferdinand, Vinsen Nawir, Gregorius E Henry and Anderies Anderies (BINUS University, Indonesia); Alexander Agung Santoso Gunawan (Bina Nusantara University & University of Indonesia, Indonesia)
- 93 **8:00 Determination of Land Suitability for Herbal Plants Using FMADM With Weighted Product**
Novianti Puspitasari, Havaluddin Havaluddin, Hamdani Hamdani, Anindita Septiarini and Joan Angelina Widians (Universitas Mulawarman, Indonesia)
- 99 **8:15 Lumpy Skin Disease Prediction Based on Meteorological and Geospatial Features using Random Forest Algorithm with Hyperparameter Tuning**
Suparyati Suparyati (Universitas Amikom Yogyakarta, Indonesia & Kementerian Pertanian Republik Indonesia, Indonesia); Ema Utami and Alva Muhammad (Universitas Amikom Yogyakarta, Indonesia)

1D: Parallel Session 1-D

Room: Zoom D (Online)

- 105 **7:00 Complexity Weights Parameter Optimization of Use Case Points Estimation using Chaotic PSO**
Ardiansyah Ardiansyah (Universitas Ahmad Dahlan, Indonesia); Ridi Ferdiana and Adhistya Erna Permanasari (Universitas Gadjah Mada, Indonesia)
- 110 **7:15 Sentiment Analysis of Cooking Oil using Bidirectional Encoder Representations from Transformers**
Mochammad Haldi Widiyanto and Yaya Heryadi (Bina Nusantara University, Indonesia); Lukas Lukas (Universitas Katolik Indonesia Atma Jaya, Indonesia); Wayan Suparta (Institut Teknologi Nasional Yogyakarta, Indonesia & Bina Nusantara University, Indonesia); Antoni Wibowo (Bina Nusantara University & Jakarta, Indonesia)
- 116 **7:30 Predictive Models Using Supervised Neural Network for Pollutant Removal Efficiency in Petrochemical Wastewater Treatment**
Varun Geetha Mohan, Al-Fahim Mubarak-Ali, Mohamed Ariff Ameen and Bincy Lathakumary Vijayan (Universiti Malaysia Pahang, Malaysia); Afrig Aminuddin and Wiwi Widayani (Universitas Amikom Yogyakarta, Indonesia)
- 122 **7:45 Selection of Prospective Workers Using Profile Matching Algorithm on Crowdsourcing Platform**
Ahmad Cucus (Universitas Bandar Lampung, Indonesia); Luhur Bayuaji (FSKPP, Universiti Malaysia Pahang, Malaysia); Al-Fahim Mubarak-Ali (Universiti Malaysia Pahang, Malaysia); Afrig Aminuddin and Lilis Dwi Farida (Universitas Amikom Yogyakarta, Indonesia)
- 127 **8:00 Comparative Analysis of the Characteristics of the yoy Inflation Rate Cities in Indonesia before and during the Covid-19 Pandemic**
Adi Setiawan (Universitas Kristen Satya Wacana & Vrije Universiteit Amsterdam, Indonesia)
- 133 **8:15 The Comparison of Classification of Stress Level Related to Student's Menstrual Cycle Irregularities with Support Vector Machine and Decision Tree Algorithm**
Helena Nooraini and Umi Salamah (Sebelas Maret University, Indonesia); Heri Prasetyo (Universitas

Sebelas Maret, Indonesia)

1E: Parallel Session 1-E

Room: Zoom E (Online)

- 139 **7:00 Classification of Hepatitis Disease Using Learning Vector Quantization 3(LVQ3)**
Yufika Sari Bagi (Sekolah Tinggi Manajemen Informatika dan Komputer (STMIK) Multicom, Indonesia); Mihuandayani Mihuandayani (STMIK Multicom Bolaang Mongondow, Indonesia)
- 144 **7:15 Sentiment Analysis of Indonesian Government's Effort to Overcome the Unemployment Problem during COVID-19 Pandemic**
Pandu Maulana (University of Indonesia, Indonesia); Indra Budi (Faculty of Computer Science & Universitas Indonesia, Indonesia); Aris Budi Santoso (University of Indonesia, Indonesia)
- 150 **7:30 Cephalometric Landmark Detection on Cephalograms using Regression CNN**
Aziz Fajar (Institut Teknologi Sepuluh Nopember, Indonesia); Gusti Pangestu (Binus University, Indonesia); Riyanarto Sarno (Institut Teknologi Sepuluh Nopember, Indonesia); I Gusti Ardani (Airlangga University, Indonesia)
- 155 **7:45 Misogyny Speech Detection Using Long Short-Term Memory and BERT Embeddings**
Rizkyta Shainy Angeline, Dade Nurjanah and Hani Nurrahmi (Telkom University, Indonesia)
- 160 **8:00 Spatial Hotspot Data and Weather for Forest Fire Data Clustering**
Prasetyo Mimboro (AMIKOM Yogyakarta & PT Perkebunan Nusantara IV, Indonesia); Kusrini Kusrini (AMIKOM Yogyakarta University, Indonesia); Arif Dwi Laksito (Universitas Amikom Yogyakarta, Indonesia)
- 166 **8:15 Application of the Adaptive-Neuro Fuzzy Inference System (ANFIS) Method for Rapid Diagnosis COVID-19 Patient Cases**
Esti Suryani (University of Sebelas Maret, Indonesia); Handy Putra and Wiharto Wiharto (Universitas Sebelas Maret, Indonesia); Umi Salamah and Wisnu Widiarto (Sebelas Maret University, Indonesia)

Wednesday, August 24 8:30 - 12:00 (Asia/Jakarta)

Opening Ceremony + Plenary Speakers

Rooms: room a (offline), Room B (Offline), Zoom A (Online), Zoom B (Online), zoom c (online), Zoom D (Online), Zoom E (Online), zoom f (online)

Plenary

Wednesday, August 24 12:00 - 1:00 (Asia/Jakarta)

Break: Break Time

Rooms: room a (offline), Room B (Offline), Zoom A (Online), Zoom B (Online), zoom c (online), Zoom D (Online),

Wednesday, August 24 1:00 - 3:00 (Asia/Jakarta)

2A: Parallel Session 2-A

Room: room a (offline)

- 172 **1:00 Comparison of Accuracy and Time of Naïve Bayes Algorithm With Support Vector Machine Algorithm in Twitter Sentiment Analysis of Peduli Lindungi Application**
Maulana Rizky Hidayat (Universitas AMikom Yogyakarta, Indonesia); Mulia Sulistiyono (Universitas Amikom Yogyakarta, Indonesia)
- 177 **1:15 The Comparison Study of Matrix Factorization on Collaborative Filtering Recommender System**
Avis Priyati, Arif Dwi Laksito and Heri Sismoro (Universitas Amikom Yogyakarta, Indonesia)
- 183 **1:30 BI-CARU Feature Extraction for Semantic Analysis**
Ka-Hou Chan and Sio-Kei Im (Macao Polytechnic University, China)
- 188 **1:45 Sentiment Analysis of Review Sestyc Using Support Vector Machine, Naive Bayes, and Logistic Regression Algorithm**
Barka Satya, Muhammad Hasan S J, Majid Rahardi and Ferian Fauzi Abdulloh (Universitas Amikom Yogyakarta, Indonesia)
- 194 **2:00 An Automatic Egg Quality Grading Using Nature-Inspired Algorithm Based Classification**
Cahya Rahmad (State Polytechnic of Malang, Indonesia); Septian Enggar Sukmana (Politeknik Negeri Malang, Indonesia); Arie Rachmad Syulistyo (State Polytechnic of Malang, Indonesia)
- 199 **2:15 AIoT@Water- An Intelligent Water Resources Management System**
Jiann-Liang Chen and QingAn Wu (National Taiwan University of Science and Technology, Taiwan); Candra Ahmadi (ITB STIKOM BALI Jalan Raya Puputan No 86 Renon Denpasar Bali & ITB STIKOM Bali, Indonesia)

2B: Parallel Session 2-B

Room B (Offline)

- 205 **1:00 Data Communication Design Based on Internet of Things Architecture for Smart Greenhouse Monitoring and Controlling System**
Aghus Sofwan, Sumardi Sumardi. and Febrio Rizky Adhipratama (Diponegoro University, Indonesia)
- 210 **1:15 The Effect of the COVID-19 Pandemic on Nitrogen Dioxide (NO2) Gas Concentration in Yogyakarta Special Province**
Uni Khikmatul Khasanah (Amikom University Yogyakarta, Indonesia); Fitria Nucifera (AMIKOM University, Indonesia)

- 215 **1:30 Shoreline Change Forecasting on Eretan Beach using Long Short Term Memory**
Iryanto Iryanto (Politeknik Negeri Indramayu, Indonesia); Putu Harry Gunawan and Z. k. a. Baizal (Telkom University, Indonesia); Ahmad Lubis Ghozali and Eka Ismantohadi (Politeknik Negeri Indramayu, Indonesia)
- 220 **1:45 Kinematics Modeling and Motions Analysis of Non-holonomic Mobile Robot**
Nur Uddin and Hari Nugraha (Universitas Pembangunan Jaya, Indonesia); Auralius Manurung (Universitas Pertamina, Indonesia); Hendi Hermawan and Teddy Mohamad Darajat (Universitas Pembangunan Jaya, Indonesia)
- 226 **2:00 Spatio-temporal Distribution of Heat Index and Land Cover Change in Tropical Cities of Southeast Asia**
Fitria Nucifera (AMIKOM University, Indonesia); Widiyana Riasasi (Universitas AMIKOM Yogyakarta, Indonesia); Kazuhito Ichii (Center of Environmental Remote Sensing (CeRES), Chiba University, Japan)
- 232 **2:15 Nglanggeran 3D Modelling for Virtual Reality Asset with Oblique Close Range Photogrammetry**
Fitria Nuraini Sekarsih (University of Amikom Yogyakarta, Indonesia); Ali Mustopa and Kusnawi Kusnawi (Universitas Amikom Yogyakarta, Indonesia)
- 238 **2:30 Performance Analysis of the Neural Network Solution of Advection-Diffusion-Reaction Problem**
Aditya Firman Ihsan and Putu Harry Gunawan (Telkom University, Indonesia)
- 244 **2:45 Multi-Layer LSTM Implementation in Operational Condition Forecasting of a Natural Gas Transmission Pipeline Network**
Aditya Firman Ihsan (Telkom University, Indonesia); Darmadi Darmadi, Saladin Uttunggadewa, Silvyia Dewi Rahmawati, Irsyad Giovanni and Salamet Nur Himawan (Institut Teknologi Bandung, Indonesia)

2C: Parallel Session 2-C

Room: zoom c (online)

- 250 **1:00 Reclassify and Readjust Software Risk Taxonomy in Software Development Activities Context**
Renny Sari Dewi (Universitas Negeri Surabaya, Indonesia)
- 256 **1:15 Digital Wallet Service Quality Analysis using Multiclass Classification and Sentiment Analysis**
Sirin Zahra and Andry Alamsyah (Telkom University, Indonesia)
- 262 **1:30 Context-aware Embeddings for Stock Prediction with Visual Clues**
 Jinghua Tan, Tongyi Guo, Junxiao Chen and Tao Shu (Southwestern University of Finance and Economics, China)
- 268 **1:45 Hoax Detection on Indonesian Text using Long Short-Term Memory**
Rizaldi Yusuf and Suyanto Suyanto (Telkom University, Indonesia)
- 272 **2:00 FHIR, BigchainDB, and GraphQL approach for interoperability between heterogeneous Health Information System**
Danang Kastowo (Amikom University Yogyakarta & PT. Dua Empat Tujuh, Indonesia); Ema Utami and Alva Muhammad (Universitas Amikom Yogyakarta, Indonesia)

- 278 **2:15 Stock Price Prediction with Golden Cross and Death Cross on Technical Analysis Indicators Using Long Short Term Memory**
Arya Yudhi Wijaya (Institut Teknologi Sepuluh Nopember Surabaya, Indonesia); Chastine Fatichah and Ahmad Saikhu (Institut Teknologi Sepuluh Nopember, Indonesia)
- 284 **2:30 A Model of E-commerce Recommender System using Enhancement Document Context Based on Attention and User Information Based on Auto Encoder and Latent Factor**
Muh Hanafi (Universitas Amikom Yogyakarta, Indonesia & Time Excellindo, Malaysia)
- 290 **2:45 Decision Support System for Student Selection Recipients of COVID-19 Impacts using MOORA**
Noorlela Marcheta, Hata Maulana, Asep Muharram and Muhammad Rashid Mishbahuddin Action (Politeknik Negeri Jakarta, Indonesia); Muhammad Faiz Bahyfallah (Jakarta State of Polytechnic, Indonesia)

2D: Parallel Session 2-D

Room: Zoom D (Online)

- 295 **1:00 Integral State Feedback Controller with Coefficient Diagram Method for USV Heading Control**
 Anggun Winursito (Universitas Negeri Yogyakarta, Indonesia); Oktaf Agni Dhewa (Universitas Gadjah Mada, Indonesia); Aris Nasuha and Gilang Nugraha Putu Pratama (Universitas Negeri Yogyakarta, Indonesia)
- 301 **1:15 Designing Smart Restaurant for Reopening During the Relaxation of Lockdown in the Time of Corona Pandemic**
Ola A. Hasan, Zaineb Alhakeem, Marwan Armash, Mohammed Khazal, Ali Malik and Mujeeb Abdullah (Iraq University College, Iraq)
- 307 **1:30 Systematic Literature Review on The Usage of IoT in The Metaverse to Support The Education System**
Dyandra Maheswari, Frangklyn Ndruru, Dewi Rejeki, Jurike Moniaga and Bakti Amirul Jabar (Bina Nusantara University, Indonesia)
- 311 **1:45 Sentiment Analysis on Tripadvisor Hotel Review using Named Entity Recognition**
Rizki Elisa Nalawati, Dewi Yanti Liliana, Fitria Nugrahani, Faldan Abiyanka and Rhenald Karrel (State Polytechnic of Jakarta, Indonesia)
- 317 **2:00 Classification of Complaint Categories in E-Commerce: A Case Study of PT Bukalapak**
Muhammad Yusuf Imam Itsari (Universitas Indonesia, Indonesia); Indra Budi (Faculty of Computer Science & Universitas Indonesia, Indonesia)
- 325 **2:15 Extraction of Person Entities Affiliated with Telkom University using Long Short-Term Memory (LSTM) on Related News Articles**
Muhammad Naufal Rizky (Telkom University, Indonesia); Donni Richasdy (Telkom University & Bandung Techno Park, Indonesia); Aditya Firman Ihsan (Telkom University, Indonesia)

- 331 **2:30 *Android Application For Analysis Review On Google Playstore Using Support Vector Machine Method***
Andrean Setiawan (Universitas Tarumanagara, Indonesia); Viny Christanti Mawardi (Taman Semanan Indah A2' / 12A, Indonesia)
- 337 **2:45 *Random Forest Algorithm for Meat Classification and Microbial Population Prediction***
Salman Hanif, Dedy Rahman Wijaya and Pramuko Aji (Telkom University, Indonesia)

2E: Parallel Session 2-E

Room: Zoom E (Online)

- 343 **1:00 *Impact Analysis of RGB Channels to the Quality of Imperceptibility in Image Steganography***
De Rosal Ignatius Moses Setiadi (Dian Nuswantoro University, Indonesia); Supriadi Rustad (Universitas Dian Nuswantoro, Indonesia); Pulung Nurtantio Andono (Dian Nuswantoro, Indonesia); Guruh Fajar Shidik (Universitas Dian Nuswantoro, Indonesia); Moch Arief Soeleman (Sepuluh Nopember Institute of Technology & Dian Nuswantoro University, Indonesia); Pujiono Pujiono and Purwanto Purwanto (Universitas Dian Nuswantoro, Indonesia)
- 349 **1:15 *Indonesian Seismic Mitigation using Earthquake Predicted Artificial Intelligence Model***
Usman Wijaya (Universitas AMIKOM Yogyakarta, Indonesia); Kusrini Kusrini (AMIKOM Yogyakarta University, Indonesia); Alva Muhammad (Universitas Amikom Yogyakarta, Indonesia)
- 355 **1:30 *Automatic Indonesian Image Captioning using CNN and Transformer-Based Model Approach***
Rifqi Mulyawan, Andi Sunyoto and Alva Muhammad (Universitas Amikom Yogyakarta, Indonesia)
- 361 **1:45 *Automatic Stop Line Violations Detection using Histogram of Oriented Gradients and Support Vector Machine***
Dwira Kurnia Larasati, Iwan Setyawan and Andreas Febrianto (Satya Wacana Christian University, Indonesia)
- 367 **2:00 *Block-based Fragile Image Watermarking based on SVD-LSB and Chaos System***
Nova Rijati (Universitas Dian Nuswantoro, Indonesia); De Rosal Ignatius Moses Setiadi (Dian Nuswantoro University, Indonesia); Pulung Nurtantio Andono (Dian Nuswantoro, Indonesia)
- 373 **2:15 *Gray Level Co-Occurrence Matrix Algorithm and Backpropagation Neural Networks for Herbal Plants Identification***
Muhammad Fikri Ihsan, Jr. (University of Amikom Yogyakarta, Indonesia); Andi Sunyoto and M. Rudyanto Arief (Universitas Amikom Yogyakarta, Indonesia)
- 379 **2:30 *An Event-based intelligent vehicle rerouting for efficient traffic management for connected vehicles***
Emmanuel O. Eze (University of Greenwich, United Kingdom (Great Britain)); Simeon Keates (External Research Supervisor, United Kingdom (Great Britain)); Kamran Pedram and Alireza Esfahani (Research Supervisor, United Kingdom (Great Britain)); Uchenna Odih (University of Greenwich, United Kingdom (Great Britain))

- 385 **2:45 Simulation of an Automated Sorting System for Peruvian mangoes based on computer vision**
Jhon Rodrigo Ortiz Zacarias, Michael Cristhian Rivera Rojas, Maydelson Yanarico Estrella, Iraiz Quintanilla Mosquera, Yadhira Samhira Valenzuela Lino and Carlos Coaquira Rojo (Universidad Continental, Peru)

2F: Parallel Session 2-F

Room: zoom f (online)

- 391 **1:00 Brain-Computer Interface of Emotion and Motor Imagery Using 2D Convolutional Neural Network - Recurrent Neural Network**
Satrio Ananda Setiawan, Esmeralda Contessa Djamal, Fikri Nugraha and Fatan Kasyidi (Universitas Jenderal Achmad Yani, Indonesia)
- 397 **1:15 3D CNN for MicroExpression Detection**
Wahyu Suryo Putro Bayu (University of Amikom Yogyakarta, Indonesia); Arief Setyanto (Universitas AMIKOM Yogyakarta, Indonesia)
- 402 **1:30 Implementation of the C4.5 Decision Tree Algorithm Method for Selection of Facial Mask Skin Care Products**
Masna Wati (Universitas Mulawarman, Indonesia); Heliza Rahmania Hatta (Mulawarman University, Indonesia); Ayunda Saputri and Anindita Septiarini (Universitas Mulawarman, Indonesia); Muh Jamil (Universitas Mulawarman & Departemen Of Information Technology And Computer Science, Indonesia)
- 407 **1:45 Multi-Class Support Vector Machine for Arabica Coffee Bean Roasting Grade Classification**
Anindita Septiarini and Hamdani Hamdani (Universitas Mulawarman, Indonesia); Achmad Rifani and Zainal Arifin (Mulawarman University, Indonesia); Nurul Hidayat (Jenderal Soedirman University, Indonesia); Heru Ismanto (Universitas Musamus Merauke, Indonesia)
- 412 **2:00 \diamond -TRIMAX Method with Silhouette Coefficient on Microarray Gene Expression Data for Early Detection of Heart Failure**
Wilhelmina A. N. Daeng (University of Indonesia, Indonesia); Titin Siswantining, Alhadi Bustamam and Prasnurzaki Anki (Universitas Indonesia, Indonesia)
- 417 **2:15 An Optimized Rice Leaf Disease Classification using Transfer Learning and Balanced Class Weight Distribution based on Bandit Approach**
Oddy Virgantara Putra, Niken Trisnaningrum and Niken Sylvia Puspitasari (Universitas Darussalam Gontor, Indonesia); Agung Toto Wibowo (Telkom University - Indonesia, Indonesia); Ema Rachmawati (Telkom University, Indonesia)
- 423 **2:30 Framework for Analyzing Intruder Behavior of IoT Cyber Attacks Based on Network Forensics by Deploying Honeypot Technology**
Michael Felix and Cutifa Safitri (President University, Indonesia); Rila Mandala (Institut Teknologi Bandung, Indonesia)
- 429 **2:45 Lane Detection With Conditions of Rain and Night Illumination Using Hough Transform**
Astika Istiningrum (Universitas Sebelas Maret, Indonesia); Umi Salamah (Sebelas Maret University,

Wednesday, August 24 3:00 - 3:30 (Asia/Jakarta)

Break: Break Time

Rooms: room a (offline), Room B (Offline), Zoom A (Online), Zoom B (Online), zoom c (online), Zoom D (Online), Zoom E (Online), zoom f (online)

Break Time

Wednesday, August 24 3:30 - 4:30 (Asia/Jakarta)

3A: Parallel Session 3-A

Room: Zoom A (Online)

- 435 **3:30 Unsupervised Feature Learning in Activity Recognition using Convolutional Denoising Autoencoders with Squeeze and Excitation Networks**
Ayokunle Olalekan Ige and Halim Noor (Universiti Sains Malaysia, Malaysia)
- 441 **3:45 Evaluation of Machine Learning Performance Based on BERT Data Representation with LSTM Model to Conduct Sentiment Analysis in Indonesian for Predicting Voices of Social Media Users in the 2024 Indonesia Presidential Election**
Guna Mandhasiya (University of Indonesia, Indonesia); Hendri Murfi, Alhadi Bustamam and Prasnurzaki Anki (Universitas Indonesia, Indonesia)
- 447 **4:00 Genetic Algorithm and K-Nearest Neighbors for Oil Palm Leaf Disease Classification**
Enda Putri Atika (AMIKOM Yogyakarta University, Indonesia); Andi Sunyoto (Universitas Amikom Yogyakarta, Indonesia); Emha Taufiq Luthfi (Universitas AMIKOM Yogyakarta, Indonesia)
- 452 **4:15 ITE Law Enforcement Support through Detection Tools of Fake News, Hate Speech, and Insults in Digital Media**
Pratama Azmi Atmajaya (Telkom University, Indonesia); Fendi Irfan Amorokhman (& Telkom University, Indonesia); Made Diva Prasetya, Aditya Firman Ihsan and Danang Junaedi (Telkom University, Indonesia)

3B: Parallel Session 3-B

Room: Zoom B (Online)

- 457 **3:30 Online Book Recommendation System Based on Optimized Collaborative Filtering Using Ant Colony Optimization**
Quezvanya Chloe Milano Hadisantoso, Gilbert Nathaniel and Felix Indra Kurniadi (Bina Nusantara University, Indonesia)

- 462 **3:45 *Employing YOLOv4 in a Vehicle Counting System Using Random Dataset***
Eric Prasetya Sentosa, Randy Julian Gunawan, Anatapindhika Anatapindhika, [Nurhasanah Nurhasanah](#) and Edy Irwansyah (Bina Nusantara University, Indonesia)
- 468 **4:00 *Improving Virus Colony Search Performance on Travelling Salesman Problem Case***
[Zilfikri Yulfiandi Rachmat](#) and Rila Mandala (Institut Teknologi Bandung, Indonesia)

3C: Parallel Session 3-C

Room: zoom c (online)

- 473 **3:30 *A Non-Invasive Cholesterol Measuring Device Using a Photodiode Sensor With a BLYNK Interface***
[Nur Hasanah Ahniar](#) (Politeknik Kesehatan Kemenkes Jakarta II, Indonesia); [Gita Rindang Lestari](#) (Poltekkes Kemenkes Jakarta II, Indonesia); [Rinda Nur Hidayati](#) (Politeknik Kesehatan Kemenkes Jakarta II, Indonesia)
- 479 **3:45 *Systematic Literature Review: Implementation Of Artificial Intelligence in Precision Agriculture***
[Viola Patricia Harmani](#), [Bryant Marcellino Himawan](#) and [Muhammad Ali Alhadi](#) (Binus University, Indonesia); Alexander Agung Santoso Gunawan (Bina Nusantara University & University of Indonesia, Indonesia); Anderies Anderies (BINUS University, Indonesia)
- 485 **4:00 *Implementation of Object Detection and Recognition Based On Exploration Deep Neural Network Features for Quadcopter***
[Suryo Adhi Wibowo](#) and Syamsul Rizal (Telkom University, Indonesia)
- 491 **4:15 *Parameter Investigation in Low Computing Cost Model-Based EfficientDet for UAV Object Detection***
Iga Narendra Pramawijaya, [Suryo Adhi Wibowo](#) and Koredianto Usman (Telkom University, Indonesia)

3D: Parallel Session 3-D

Room: Zoom D (Online)

- 497 **3:30 *Texture-Based Covid-19 Images Detection System using Haar Wavelet Transformation Algorithm***
[Yessi Jusman](#), [Dimas wildan Mubarok](#) and Widyasmoro Widyasmoro (Universitas Muhammadiyah Yogyakarta, Indonesia); Siti Nurul Aqmariah Mohd Kanafiah (Universiti Malaysia Perlis, Malaysia)
- 503 **3:45 *Query by Humming Music Information Retrieval using DNN-LSTM based Melody Extraction and Noise Filtration***
[Andreas Novian Dwi Triastanto](#) and Rila Mandala (Institut Teknologi Bandung, Indonesia)
- 509 **4:00 *Classification of gram-positive and gram-negative bacterial images based on machine learning algorithm***
Son Ali Akbar (Universitas Ahmad Dahlan, Indonesia); Kamarul Hawari Ghazali (Universiti Malaysia Pahang & Vision and Intelligent System Research Group, Malaysia); [Doni Subekti](#) (Universitas Ahmad Dahlan, Indonesia); Anton Yudhana (Ahmad Dahlan University, Indonesia); Liya Yusrina Sabila

(Universitas Ahmad Dahlan, Indonesia); Wahyu Sapto Aji (Ahmad Dahlan University, Indonesia); Habsah Hasan (Universiti Sains Malaysia, Malaysia)

513 4:15 *Glucose content analysis using image processing and machine learning techniques*

Anton Yudhana (Ahmad Dahlan University, Indonesia); Son Ali Akbar and Andrio Farezi (Universitas Ahmad Dahlan, Indonesia); Kamarul Hawari Ghazali (Universiti Malaysia Pahang & Vision and Intelligent System Research Group, Malaysia); Phisca Aditya Rosyady (Universitas Ahmad Dahlan, Indonesia)

3E: Parallel Session 3-E

Room: Zoom E (Online)

Wednesday, August 24 4:30 - 5:00 (Asia/Jakarta)

Closing Ceremony: Awarding + Closing Ceremony, and Another Announcement

Rooms: room a (offline), Room B (Offline), Zoom A (Online), Zoom B (Online), zoom c (online), Zoom D (Online), Zoom E (Online), zoom f (online)

Closing Ceremony Awarding Best Paper