

2024 International Electronics Symposium (IES 2024)

**Denpasar, Indonesia
6-8 August 2024**



IEEE Catalog Number: CFP24D37-POD
ISBN: 979-8-3503-9200-5

**Copyright © 2024 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:	CFP24D37-POD
ISBN (Print-On-Demand):	979-8-3503-9200-5
ISBN (Online):	979-8-3503-9199-2
ISSN:	2994-3698

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

A Thermal Investigation of Heat Sink with Dimple in Battery Cooling for Electric Motorbike Application	1
<i>Muhammad Aghist Fitrony, Teguh Hady Ariwibowo, Muhammad Rizani Rusli, Eko Henfri Binugroho, Dadet Pramadihanto</i>	
Dynamic Voltage Restorer with Direct AC-AC Controller Using H-Bridge Bidirectional Switch Topology to Mitigate Voltage Sag and Swell	7
<i>Pangestu Nugroho, Dimas Okky Anggriawan, Mochamad Ari Bagus Nugroho, Eka Prasetyono, Epyk Sunarno</i>	
Interleaved Buck Converter as Current Regulator for Lithium Ion Battery Charging with Fuzzy Logic Control	13
<i>Epyk Sunarno, Suhariningsih, Eka Prasetyono, Mochamad Ari Bagus Nugroho, Rachma Prilian Eviningsih, Royan Falaqun Nizar</i>	
Maximum Power Point Tracking on Photovoltaic System Based on Fusion Firefly Algorithm and Fuzzy Logic Controller for Charging Lead Acid Battery	19
<i>Rizki Amrullah Navi, Eka Prasetyono, Dimas Okky Anggriawan, Suhariningsih, Epyk Sunarno</i>	
Modified Grasshopper Optimization Improved Maximum Power Point Tracking in Partially Shaded Photovoltaic Conditions	25
<i>Muhammad Alfin Nurhidayat, Moh. Zaenal Efendi, Rachma Prilian Eviningsih</i>	
Thermal Analysis of Vapor-Phase R1234yf Flow Inside Horizontal Helical Discrete Double Inclined Ribs Tubes	31
<i>Teguh Hady Ariwibowo, Arrad Ghani Safitra, Fachry Yusuf Zakafi, Salsabila Adinda Imaniar, Dwi Berninda Pratiwi</i>	
Series Double Flyback Converter for Power Factor Correction to Multi-Output Battery Charger Using Fuzzy Logic Controller	37
<i>Salsabila Nadia Putri, Moh. Zaenal Efendi, Rachma Prilian Eviningsih</i>	
Design and Implementation Mountaineering Team-Based Optimization Algorithm for MPPT on Partial Shading Conditions	43
<i>Rifqi Noviantono Prakoso, Moh. Zaenal Efendi, Muhammad Nizar Habibi</i>	
Detection of Series AC Arc Fault Based on Continuous Wavelet Transform and Artificial Neural Network Under Voltage Variation Disturbances	49
<i>Dimas Okky Anggriawan, Ardyono Priyadi, Margo Pujiantara, Mauridhi Hery Purnomo</i>	
An Improvement GWO-P&O Algorithm Based MPPT for PV System Under Partial Shading Condition	54
<i>Nur Fadliah Baso, Heri Suryoatmojo, Dianiar Fahmi, Novie Ayub Windarko</i>	
Voltage Regulation Optimization of a Modified Seven-Level Packed U-Cell Inverter with Mamdani Fuzzy Logic	60
<i>Tendy Bryant Jaya Gemilang, Moh. Zaenal Efendi, Novie Ayub Windarko, Faizulddin Ebrahimi, Moch Rafi Damas Abdilla</i>	

Thermodynamic Analysis of Battery Thermal Management System in Electric Van for Tropical Climate: A Preliminary Study.....	66
<i>Arya Rafi Abrari, Teguh Hady Ariwibowo, Dadet Pramadihanto, Nu Rhahida Arini, Raden Sanggar Dewanto</i>	
Evaluating the Effects of Constant Current C Rates on Li-Ion Battery State of Health and Charging Efficiency	72
<i>Gigih Prabowo, Arjun Saseno, Era Purwanto, Endro Wahjono, Syechu Dwitya Nugraha, Ony Asrarul Qudsi, Muhammad Rizani Rusli, Arman Jaya, Fifi Hesty Sholihah</i>	
The Effect of Co-Rotating Twin Turbines on Mooring Line Tension in Quad-Spar Tidal Current Power Plant.....	77
<i>Sony Junianto, Suci Rindya Kaswarie, Wisnu Wardhana, Wahyu Nur Fadilah, Nu Rhahida Arini, Joke Prastilastiarso</i>	
Grey Wolf Optimizer-Based Optimal Inner Loop Control and SRF-PLL for Grid Tie Inverter Under Low Frequency Oscillation	83
<i>Endro Wahjono, Gigih Prabowo, Ony Asrarul Qudsi, Syechu Dwitya Nugraha, Muhammad Rizani Rusli, Era Purwanto, Arman Jaya, Fifi Hesty Solihah, Fadli Atma</i>	
DC-Link Capacitor Design in Neutral Point Clamped Multilevel Inverter Utilizing Ripple Current Analysis and DC-DC Converter Control.....	89
<i>Fifi Hesty Sholihah, Victor Becerra, Shanker Radhakrishna Prabhu</i>	
IoT-Based Real-Time Energy Monitoring System for ELVIRO EV	95
<i>Muhammad Rizani Rusli, Gigih Prabowo, Luki Septya Mahendra, Ony Asrarul Qudsi, Fadli Atma, Moh. Budiono, Era Purwanto, Arman Jaya, Indra Ferdiansyah, Syechu Dwitya Nugraha</i>	
Airfoil Profile Modifications Based on Bezier Curve and Optimization Using PSO.....	100
<i>Moch. Arif Fatchulloh, Nu Rhahida Arini</i>	
Procedure of Structural Analysis on Steam Turbines in Various Loads for Early Fatigue Failure Detection	107
<i>Nu Rhahida Arini, Muhammad Zaki Nugroho, Arrad Ghani Safitra, Fahrunnas</i>	
Dynamic Priority Approach for Unit Commitment Scheduling Solution.....	114
<i>Fiqqih Faizah, Rifdian Indrianto Sudjoko, Mat Syai'In, Adi Soeprijanto</i>	
Smart Aquaponics with Automatic Sensors Cleaning for Zero Waste Integrated Farming System Using Internet of Things.....	120
<i>Zainul Abidin, Atha Darari Putra, Akhmad Zainuri, Eka Maulana</i>	
IoT and Electronic System Solution for Failed Parcel Delivery Attempts	126
<i>Christian Romar I. Teodosio, Febus Reidj G. Cruz</i>	
Experimental Approach for the Performance of a CanSat Module Based on Environmental Testing.....	134
<i>I Made Nugi Edwika Ariwigangga, Nofria Hanafi, Didik Setyo Purnomo, Hendhi Hermawan</i>	
Radiation-Hardened Programmable Two-phase Clock Generator.....	140
<i>Minoru Watanabe</i>	
Accident Posture Reconstruction and Analysis of a Purposed Vehicle Event Data Recorder	145
<i>I Made Aditya Rama Putra, Endra Pitowarno, Zaqiatus Dariojah</i>	
6-Lead ECG Monitoring System for Recording Cardiac Activity Using Pan-Tompkins Algorithm.....	151
<i>Raden Septiaji Dwilakso Utomo, Mochammad Rochmad, Rika Rokhana</i>	

Design of Underwater Vehicle Balance System Using Inertial Measurement Unit (IMU) Sensor.....	158
<i>Mohamad Alwi Abdillah, Arrad Ghani Safitra, Adytia Darmawan</i>	
Ninety Days of Observation on the Metal Electrodes of a Salinity Sensor for Vannamei Shrimp Farming Purposes	165
<i>Muhamad Aldino Habibulloh, Agus Indra Gunawan, Taufiqurrahman, Muhammad Wafiq Kamaluddin</i>	
Implementation of Chicken Eggs Fertility Detection Device Using SSD MobileNet-V2 FPNLite	171
<i>Habibi Ahmadi Muslim, Hary Oktavianto, Rusminto Tjatur Widodo, Elly Purwantini, Wahjoe Tjatur Sesulihati</i>	
A Study of Mechanical Characteristics of Lubricant Oil Based on the Vehicle Mileage Using Ultrasonic Waves.....	178
<i>Wahyu Rifki Prayoga, Agus Indra Gunawan, Ardiwijayanto</i>	
Nutritional Status Monitoring System Based on Antropometric to Support Society 5.0.....	183
<i>Alfenia Nikmah, Okkie Puspitorini, Nur Adi Siswandari, Ari Wijayanti, Arifin Arifin</i>	
Design and Implementation of Passive Autofocus Control System for Contrast Detection in Tuberculosis Microscopy Images	189
<i>Heny Yuniarti, Chastine Faticah, Riyanto Sigit, Ahmad Fadel Aminata</i>	
Time-Frequency Analysis and Setting Motion Activity Detection of Volleyball Motion Signals for Set-Play Classification.....	195
<i>Gregory Lou Parcon, Ronald Pascual</i>	
Comparative Performance Evaluation of Line Coding Schemes for Uplink Transmission in Single and WDM Channels FSO-HAP Systems Across Varied Altitude and Weather Scenarios.....	201
<i>Valerie Olive Suryono, Yus Natali, Catur Apriono</i>	
An Efficient Authentication System to Access Electric Vehicle Data in the Cloud Based on Identity Role-Based Access Control	207
<i>Amang Sudarsono, Rahardhita Widyatratna Sudibyo, Idris Winarno, Mike Yuliana</i>	
Performance Analysis of Terrestrial Radio Signal Receiver Using RTL-SDR GNU Radio Based on Raspberry Pi	215
<i>Citra Ati Finalis, I Gede Puja Astawa, Budi Aswoyo, Anang Budikarso, Ida Anisah, Faridatun Nadziroh</i>	
A Crop Recommendation System for Smart Agriculture Using Random Forest Method	222
<i>Bagas Aji Tifanto, Mochammad Zen Samsono Hadi, Nihayatus Sa'Adah</i>	
Combining Clipping and Channel Coding for Effective PAPR Reduction in OFDM System with GNU Radio-USRP	228
<i>Aliefia Ningtyas Tuti, I Gede Puja Astawa, Faridatun Nadziroh, Anang Budikarso, Budi Aswoyo, Melki Mario Gulo</i>	
Deep Learning Based Channel Reciprocity Technique for Secret Key Generation.....	234
<i>Dewi Cahyo Wulandari, Mike Yuliana, Amang Sudarsono</i>	
Reliability Study of TDoA-Based Emission Localization in Using Simple RTL-SDRs	241
<i>Audra Nur Irsyad, Nur Achmad Junaedi, Tri Budi Santoso, Rini Satiti, Paramita Eka Wahyu Lestari, Titon Dutono</i>	

Performance Analysis of ADSB Signal Receiver SDR for Low Cost ADSB Mini Radar.....	245
<i>Hadid Malik, I Gede Puja Astawa, Budi Aswoyo, Anang Budikarso, Ida Anisah, Faridatun Nadziroh</i>	
Performance Analysis of Physical Layer Key Generation (PLKG) Scheme in Static Environment-Based LoRa	251
<i>Mike Yuliana, Aodry Ardhana, Amang Sudarsono, Bambang Sumantri</i>	
Fast Foothold Planning for Quadruped Robot Locomotion Using Topological Perception	257
<i>Azhar Aulia Saputra, Masaya Shoji, Fernando Ardilla, Naoyuki Kubota</i>	
Compact and Lightweight Foldable Umbrella Heatshield for CanSat-Scale Planetary Probes Lander Mission	264
<i>Zulfikar Davbi Mahendra Fasya, Hendhi Hermawan, Nofria Hanafi, Muhammad Reza, Artaka Sunu Adhi Prasetya, Muhammad Fahrizal</i>	
Precise Long Passing Skill on Middle Size League Robot Soccer ERSOW Using Teammate Detection and Pivot Motion.....	272
<i>Rohman Aditiya, Mochamad Mobed Bachtiar, Iwan Kurnianto Wibowo, Dana Yoga Setya Ikhwandi, Febrian Tиро Wicaksono, Septian Bagus Jumantoro</i>	
Fuzzy Logic Implementation to Improve the Accuracy of Ball Shoots on ERSOW's Soccer Robot.....	279
<i>Iwan Kurnianto Wibowo, Muhamad Tri Wahyudi, Adytia Darmawan, Indra Adji Sulistijono, Rahmat Sholikhin Firdaus, Febrian Tиро Wicaksono</i>	
Integrating LiDAR-Based Collision Avoidance on AMR-T for Advancing Operational Safety	286
<i>Riska Amalia Nurjanah, Dedit Cahya Happyanto, Ardiq Wijayanto</i>	
Integrated Footstep Planning and CoM Control for Enhanced Stability and Maneuverability in EROS Humanoid Robot	291
<i>Teuku Zikri Fatahillah, Bianca Surya Nobelia, Anhar Risnumawan, Ali Husein Alasiry, Erlangga Yudi Pradana, Candra Kusuma Wijaya</i>	
Design and Implementation of an Automatic Docking System on PENSHIP Roboboat.....	297
<i>Muhammad Fauzi, Adytia Darmawan, Eko Henfri Binugroho</i>	
Optimizing YOLOv8 for Real-Time Performance in Humanoid Soccer Robots with OpenVINO.....	304
<i>Erlangga Yudi Pradana, Shalahuddin Aditya Aji, Muhammad Amir Abdurrozaq, Ali Husein Alasiry, Anhar Risnumawan, Endra Pitowarno</i>	
Rapid Goalpost Detection Through Candidate Generation and Hough Transform in Humanoid Soccer Robots.....	310
<i>Shalahuddin Aditya Aji, Erlangga Yudi Pradana, Muhammad Amir Abdurrozaq, Anhar Risnumawan, Endra Pitowarno, Aris Sudaryo</i>	
Smart Cat Litter Box with Ammonia Gas Level Controller Using IoT-Based Fuzzy Logic	317
<i>Ali Suhud, Nofria Hanafi, Didik Setyo Purnomo</i>	
Dynamic Analysis of Forklift AGV Based on Center of Gravity	322
<i>Mohammad Reza Imani, Mohamad Nasyir Tamara, Bambang Pramujati, Latifah Nurahmi, Himmawan Sabda Maulana, Mohammad Aldinola Faranka, M. Salman Azzuri, Chrisna Hadi Wijaya</i>	
Implementing Crowdsourcing in Smart Government: An it Perspective Review	329
<i>Tri Bintang Dewantoro, Lukito Edi Nugroho, Adhistya Erna Permanasari</i>	

Creating Feedback to Maintain Motivation When Doing Home Based Exercise Using Pose Estimation: Single Subject Design	335
<i>Muhammad Firdaus Maulana, Yugo Okamoto, Eri Sato-Shimokawara</i>	
Securing the Privacy of Transactions Using Blockchain: Swap Battery Framework for Massive Subsidy Electric Motorcycle in Jakarta	341
<i>Tanzi Mubaroq Santoso, Shelvie Nidya Neyman, Didi Rosiyadi, Karina Mayasita Handoyo, Topan Try Harmania, Muhammad Rafi Juliansyah, Fajaryan Wijananto, Yosi Sahreza, Aan Khunaifi</i>	
The Combination of K-Means and A* Methods for Determining the Best Route for Vegetable Sellers	347
<i>Vincentius Riandaru Prasetyo, Astri Agustina Arius, Daniel Hary Prasetyo, Ripto Mukti Wibowo, Selvia Ferdiana Kusuma</i>	
Enterprise Architecture in E-Government Application: A Systematic Literature Review	353
<i>Dewa Ketut Wira Wahyu Mahendra, Selo Sulistyo, Guntur Dharma Putra</i>	
Geographical Mapping and Knowledgebase Indicative Cost Estimation for Direct Air Capture CO2 Utilization	359
<i>Tomoyuki Tateno, Naoki Ishibashi, Yasushi Kiyoki</i>	
The Influence of Self-Service Kiosks on Customer Experience in Retail Stores	365
<i>Albertus Lian Wisastraa, Amaganza Engwy Ardianyah, Berren Arisandy Hermanto, Devyano Luhukay</i>	
Mycobacterium Tuberculosis Detection on Sputum Smear Microscopic Images Using Attention-Based Multi-Scale Convolutional Neural Network	371
<i>Tita Karlita, Fidisa Anindya Pastika, Nana Ramadijanti, Ratna Kusumawati, Heny Yuniarti, Riyanto Sigit</i>	
Predictive Modelling of Gas Turbine Emissions Based on Generalized Regression Neural Network Method Approach	379
<i>Rudy Winarto, Mauridhi Hery Purnomo, Wiwik Anggraeni</i>	
Developing Web-Based Application for QR Code Digital Signatures Using OpenSSL.....	386
<i>Fariz Bagaskoro Muzakkir, Haryadi Amran Darwito, Mike Yuliana</i>	
The Queue System of Kemlagi Community Health Center Using Decision Tree Method Based on a Website	393
<i>Agus Thoriqul Mukarrom, Budi Aswoyo, Anang Budikarso, I Gede Puja Astawa, Faridatun Nadziroh, Ida Anisah</i>	
Setting and Monitoring System for Motors on Rear Axle Using Android Automotive Operating System	400
<i>Elsy Sabrina Ramadini, Febby Ronaldo, Dewi Mutiara Sari, Dadet Pramadihanto</i>	
Application of AlexNet, EfficientNetV2B0, and VGG19 with Explainable AI for Cataract and Glaucoma Image Classification.....	406
<i>Muhammad Fauzi Fayyad, Mustakim</i>	
Plant Health and Severity Recognition System for Pechay (<i>Brassica Rapa</i> Ssp. <i>Chinensis</i>) Using Convolutional Neural Network	413
<i>Carlos Dwain L. Sorallo, Eric John M. Jabal, Jessie Jaye R. Balbin</i>	
Herbal Medicine Plant Leaf Identification Device Using ResNet50	419
<i>Andrew Al C. Aquiro, Shannen L. Arreola, Ramon G. Garcia</i>	

YOLOv8-Based Segmentation and 3D Reconstruction of Alveolar Bone and Mandibular Canal in CBCT Images	425
<i>Mohammad Farid Naufal, Chastine Faticah, Eha Renwi Astuti, Ramadhan Hardani Putra</i>	
Building Early Warning Scores with Statistical-Based Structured Methods on Patient Clinical Data	431
<i>Setyo Aryo Pangestu, Tessy Badriyah, Rosiyah Faradisa</i>	
Stroke Disease Classification Using CT Scan Image with Vision Transformer Method	436
<i>Alfian Prisma Yopiangga, Tessy Badriyah, Iwan Syarif, Nur Sakinah</i>	
Developing Early Warning Score with Structured Methodology Using Decision Trees Based on Patients' Clinical Data	442
<i>Putri Ayu Nisa Az Zahra, Tessy Badriyah, Selvia Ferdiana Kusuma</i>	
Multi-Stage Vision Transformer for Batik Classification	449
<i>Novendra Setyawan, Mas Nurul Achmadiah, Chi-Chia Sun, Wen-Kai Kuo</i>	
Classification of Intracranial Hemorrhage Based on CT-Scan Image with Vision Transformer (ViT) Method	454
<i>Muhammad Nur Faiz, Tessy Badriyah, Selvia Ferdiana Kusuma</i>	
Prediction of Length of Stay in Hospital Using Hyperparameter Optimization in the Convolutional Neural Networks Method	460
<i>Muh. Arga Swara Iskandar, Tessy Badriyah, Iwan Syarif</i>	
Path Planning for 4-Wheeled Omnidirectional Cellular Conveyor Using Q-Learning Algorithm	466
<i>Syamsiar Kautsar, Aulia Siti Aisjah, Mat Syai 'In, Katherin Indriawati, Totok Ruki Biyanto</i>	
A Comparative Study of GRU and LSTM Time-Series Forecasting for Precise River Dam Hydrodynamic Prediction.....	473
<i>Muhammad Arya Izzulhaq, Rusminto Tjatur Widodo, Hary Oktavianto</i>	
The Application of Monte Carlo Simulation to Assess the Value at Risk in Cryptocurrency.....	479
<i>Nila Astiti, Dicky Hida Syahchari</i>	
Design and Implementation of a Radar-Camera Fusion System for Human Detection and Its Distance Measurement	486
<i>Indra Putra Mahayuda, Alfan Rizaldy Pratama, Bima Sena Bayu Dewantara, Dadet Pramadihanto</i>	
Seat Occupancy Detection in Electric Vehicles: Unveiling Passenger Presence Through Overlap Area Analysis	491
<i>Alivia Haris, Alfan Rizaldy Pratama, Bima Sena Bayu Dewantara, Dadet Pramadihanto</i>	
Implementation of YOLOv8 Algorithm on Raspberry Pi for Automated PCB Quality Inspection.....	498
<i>Imaduddin Abdul Ghany, Zaqiatud Darojah, Nunik Hariadi Putri, Adytia Darmawan, Novian Fajar Satria</i>	
Fast Person Detection Using YOLOX with AI Accelerator for Train Station Safety	504
<i>Mas Nurul Achmadiah, Novendra Setyawan, Achmad Arif Bryantono, Chi-Chia Sun, Wen-Kai Kuo</i>	
Hybrid LSTM and SVM Method Rice Yield Prediction in Densely Populated Areas	510
<i>Ahmad Miqdad, Prima Kristalina, Aries Pratiarso</i>	

Automatic Classification of Lung Disease Based on Chest X-Ray Images Using CNN with Comparing Batch Normalization.....	515
<i>Mega Putri Rahmawati Darta, Arna Fariza, Tita Karlita</i>	
Convolutional Neural Network Implementation with MobileNetV2 Architecture for Indonesian Herbal Plants Classification in Mobile App	521
<i>Entin Martiana Kusumaningtyas, Nana Ramadjanti, Irfan Hanif Khoiru Rijal</i>	
Classifying Personality Traits from Text Data: A Machine Learning Approach Using Stochastic Gradient Descent for Simplified Jungian Typology-Based Assessment Tool.....	528
<i>Tri Hadiah Muliawati, Tirta Rumy Swandaru, Entin Martiana Kusumaningtyas, Iqbal Bimantoko</i>	
Resampling Effects on Imbalanced Data in Network Intrusion Classification.....	534
<i>Fayruz Rahma, Mahesa Cadi Rajasa, Reza Fuad Rachmadi, Baskoro Adi Pratomo, Mauridhi Hery Purnomo</i>	
Performance Evaluation of YOLO-Based Deep Learning Models for Real-Time Armour Unit Detection with Image Pre-processing Method.....	541
<i>Firmansyah Putra Pratama, Alfan Rizaldy Pratama, Dewi Mutiara Sari, Bayu Sandi Marta, R. Haryo Dwito Armono</i>	
Comparison of LSTM, RNN, and GRU Methods in Predicting Water Quality in the Totality Integrated Smart Aquaculture System	547
<i>Santi, Arna Fariza, Agus Indra Gunawan, Fitrah Maharani Humaira</i>	
Cloud-Based Weather Prediction for Agricultural Land Using NeuralProphet	555
<i>Mefita Ayu Kusumaningtyas, Moch. Zen Samsono Hadi, Nihayatus Sa'Adah</i>	
Estimation of Rice Field Area Using YOLO Method to Support Smart Agriculture System	562
<i>Zenino Ega Maretanio, Mochammad Zen Samsono Hadi, Prima Kristalina, Aries Pratiarso</i>	
The Impact of Accountants' Perceptions of Technology Readiness and Competitive Intensity on Technology Adoption	569
<i>Shindy Sulastri Br Ginting, Anderes Gui, Kevin Deniswara</i>	
CNN Modified Approach for Classifying Cardiomegaly Disease Based on CXR Image	575
<i>Sri Heranurweni, Ronny Mardiyanto, Eko Mulyanto Yuniarno, Andi Kurniawan Nugroho, Mauridhi Hery Purnomo</i>	
A Comparative Study of Machine Learning Algorithms for Classifying Personality Type Based on Carl Jung's Cognitive Function	581
<i>Entin Martiana Kusumaningtyas, Tirta Rumy Swandaru, Tri Hadiah Muliawati, Iqbal Bimantoko</i>	
Comparative Analysis and Optimization of Deep Learning Models for Object Detection Using Grid Search Hyperparameter Tuning	587
<i>Arasy Dafa Sulistya Kurniawan, Yoga Imanda Purnama, Ardian Bagus Wicaksono, Haniah Mahmudah</i>	
Prototype of Monitoring and Automation Systems of the Furnace in the Fire Laboratory.....	593
<i>Unan Yusmaniar Oktiawati, Muhammad Nur Fajri Alfata, Dani Yudha Kusuma</i>	
Implementation of Dynamic Art Curation Engine in Global Art Collection Archive.....	600
<i>Yosuke Tsuchiya, Naoki Ishibashi</i>	

Sentiment Analysis of Nuclear Power Plant and Nuclear Science in Indonesia Based on Platform X Using BERT, VADER, and TextBlob Methods	607
<i>Halim Hamadi, Risqi Berliana Rahmantari, Aditia Pawaid, Naufal Avicena Taufiq, Muhammad Rizky Farhan, Aleksey G. Goryunov</i>	
Web Chat-Based Application with Large Language Model and Transformers from Hugging Face for Self-Learning on Storytelling Skills	614
<i>Victoria Agatha, Iwan Setyawan</i>	
Utilizing Long Short-Term Memory for Precipitable Water Vapor Prediction Over the Southern Philippine Region	619
<i>Christian David C. Aquino, Joseph Bryan G. Ibarra, Ernest P. Macalalad</i>	
Evaluating the Google English Speaking and Pronunciation Practice Tool	624
<i>Aliv Faizal M, Agus Eko Cahyono, Sektalonir Oscarini Wati Bhakti, Rahmawati Fitriana, Lady Silk Moonlight, Teguh Arifianto</i>	
Dengue Fever Vulnerability Prediction Using Integrated Moving Average - Hierarchical Clustering	630
<i>Silfiana Nur Hamida, Arna Fariza, Tessy Badriyah, Arif Basofi</i>	
Heart Disease Detection from PSAX Echocardiography View Using Ultrasound Portable Based on Machine Learning Method	637
<i>Jovan Josafat Jaenputra, Riyanto Sigit, Tri Harsono, Abraham Ahmad Ali Firdaus</i>	
Portable Device for Supporting Fertilizer Recommendation System in Smart Agriculture	644
<i>Rara Widya Paramartha Hapsari, Mochammad Zen Samsono Hadi, Prima Kristalina</i>	
East Java Rivers Characterization Using Analytical Hierarchical Clustering on Supporting Disaster Management System	650
<i>Annisa Rassy Azzahra, Prima Kristalina, Nihayatus Sa'Adah</i>	
Drowning Victims Detection and River Classification Using Deep Learning Methods.....	656
<i>Nur Laila Novianti, Prima Kristalina, Mochammad Zen Samsono Hadi</i>	
Bidirectional Long Short-Term Memory Method for Weather Prediction in Terms of Evacuation of River Drifting Victims.....	663
<i>Arin Kusuma Wardani, Prima Kristalina, Mochammad Zen Samsono Hadi, Aries Pratiarso</i>	
Early Detection and Classification of Cataracts Using Smartphone Imagery Based on Support Vector Machine (SVM) and Certainly Factor Methods.....	669
<i>Tegar Dzul Fikri, Riyanto Sigit, Dewi Mutiara Sari, Dyah Purwita Trianggadewi</i>	
Implementation of Face Recognition Using Deep Metric Learning for Automatic Door Openers	675
<i>Muhammad Zaid Abdillah, M. Udin Harun Al Rasyid, Riyanto Sigit</i>	
Drug-Target Interactions Prediction Using Stacking Ensemble Learning Approach.....	681
<i>Viko Pradana Prasetyo, Wiwik Anggraeni</i>	
Exploring Crowdsourced Data Validation Methods for Flood Mitigation: A Comprehensive Review	687
<i>Widi Sarinastiti, Rengga Asmara, Ashafidz Fauzan D., Asy Syaffa Khoirunnisa, Suryan Mustafa E. P. W</i>	
Distributed Aerial 3D Object Mapping Reconstruction Using Message Passing Interface	693
<i>Cahyo Arissabarno, Idris Winarno, Sritrusta Sukaridhoto</i>	

Implementation of Automatic Proctoring in Online Exam System	698
<i>Akhmad Alimudin, Aliv Faizal M, Widi Sarinastiti, Wiratmoko Yuwono, Idris Winarno, Rachmat Santoso, Citra Devi Murdaningtyas, Muhajirin Ida Ilyas, Muhamad Reza Muktasib</i>	
Cutlery Detection System with Camera and Yolov5	703
<i>Gita Agraini Manullang, Setiawardhana, Bima Sena Bayu Dewantara</i>	
A Cloud-Centric Application for Elderly Heart Disease Detection with Machine Learning and Confusion Matrix	709
<i>Rafly Arief Kanza, M. Udin Harun Al Rasyid, Sritrusta Sukaridhoto, Budi Utomo, Shifa Fauziah, Grezio Arifiany Primajaya</i>	
Self-Checking Corner of Upper Acute Respiratory Infection Disease Using Certainty Factor Method	715
<i>Zulqhi Fahri Muda, Arna Fariza, Entin Martiana Kusumaningtyas</i>	
E-Commerce Website with 3D Catalog and Product Customization.....	723
<i>Andhik Ampuh Yunanto, Farhan Izzudin Az Zufar, Anhar Risnumawan, Martianda Erste Anggraeni, Wanyv Arifsha Saputra, Siska Arifiani</i>	
Motion Sickness Comparison of 2 XR Approaches: Camera+screen Or Hologram on Transparent Lens (Meta Quest 3 Or Microsoft HoloLens 2).....	728
<i>Volodymyr Bondarenko, Mahdi Attawna, Giang T. Nguyen, Frank H. P. Fitzek</i>	
Analyzing Bloom's Taxonomy to Interactions in Virtual Reality Application for Education.....	734
<i>Hestiasari Rante, Muhammad Agus Zainuddin, Zacky Maulana Achmad, Khairunnisa' Sekar Ramadhanti, Cahyo Arissabarno</i>	
Interactive Augmented Reality Simulation to Stimulate Children in Learning Robotics Arm Behaviour	740
<i>Hestiasari Rante, Moh. Zikky, Muhammad Fauzan Arief, Iwan Syarif, Dwi Susanto, Zakha Maisat Eka Darmawan, Youcef Mezouar, David Hill</i>	

Author Index