

2023 International Conference on Computer, Control, Informatics and its Applications (IC3INA 2023)

**Bandung, Indonesia
4-5 October 2023**



**IEEE Catalog Number: CFP23YAD-POD
ISBN: 979-8-3503-9488-7**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP23YAD-POD
ISBN (Print-On-Demand):	979-8-3503-9488-7
ISBN (Online):	979-8-3503-9487-0

Additional Copies of This Publication Are Available From:

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

CURRAN ASSOCIATES INC.
proceedings
.com

2023 International Conference on Computer, Control, Informatics and its Applications (IC3INA)

Day I - Session I - (Computer, Networking, and Control)

<i>Fairness-Aware Unmanned Aerial Vehicle-Mounted Base Station Placement with Quality of Service Provisioning</i> Yen Khai Lim (Universiti Tunku Abdul Rahman, Malaysia), Shengqi Jiang (Universiti Tunku Abdul Rahman, Malaysia), Kok Chin Khor (Universiti Tunku Abdul Rahman, Malaysia), Ying Loong Lee (Universiti Tunku Abdul Rahman, Malaysia), Feng Ke (South China University of Technology, China)	1
<i>Comparative Analysis of SMC and FSMC on Autonomous Underwater Vehicle (AUV) with Active Ballast</i> Mardlijah Mardlijah (Institut Teknologi Sepuluh Nopember, Indonesia), Yusron Fattahillah Akbar (Institut Teknologi Sepuluh Nopember, Indonesia), Belgis Ainatul Iza (Institut Teknologi Sepuluh Nopember, Indonesia)	7
<i>Oceanic Dynamic Positioning through Hierarchical LQR Algorithm-Driven Advancements for Underactuated Remotely Operated Underwater Vehicles</i> Maristya Rahmadiansyah (National Research and Innovation Agency, Indonesia), Muhammad Putra Rasuanta (National Research and Innovation Agency, Indonesia), Michael Andreas Purwoadi (National Research and Innovation Agency, Indonesia), Osen Nami (National Research and Innovation Agency (BRIN), Indonesia), Afif Widaryanto (National Research and Innovation Agency, Indonesia), Teddy Alhady Lubis (National Research and Innovation Agency BRIN, Indonesia), Tinova Pramudya (National Research and Innovation Agency, Indonesia), Muhammad Yusha Firdaus (The National Agency for Research and Innovation, Indonesia), Sasono Rahardjo (National Research and Innovation Agency, Indonesia), Peni Laksmi Widati (The National Research and Innovation Agency (BRIN), Indonesia), Sakinah Puspa Anggraeni (The National Research and Innovation Agency, Indonesia), Hanifah Dwiyantri (National Research and Innovation Agency, Indonesia)	13
<i>Improvement of DART Algorithm Teletsunami Detection Response through Lengthening the Prediction Time</i> Tri Sampurno (BRIN, Indonesia), Fara Ayuningtyas (Badan Riset dan Inovasi Nasional, Indonesia), Miranti Jatnika Riski (Badan Riset dan Inovasi Nasional, Indonesia), Siti Shaleha (BRIN, Indonesia), Agung Santosa (Institut Teknologi Sepuluh Nopember (ITS) & National Research and Innovation Agency (BRIN), Indonesia), Vitria Pragesvara (Badan Riset dan Inovasi Nasional, Indonesia), Made Gunawan (National Research and Innovation Agency, Indonesia)	19

Day I - Session II - (Data Science)

<i>Revealing Indonesian Netizens' Sentiments Towards Halal Food: A Machine Learning Approach</i> Ekasari Nugraheni (National Research and Innovation Agency, Indonesia), Andria Arisal (National Research and Innovation Agency (BRIN), Indonesia), Dianadewi Riswanti (National Research and Innovation Agency, Indonesia), Andre Sihombing (National Research and Innovation Agency, Indonesia), Anne Parlina (National Research and Innovation Agency, Indonesia), Irfan Asfy Fakhry Anto (National Research and Innovation Agency, Indonesia)	25
<i>A Proven Sentiment Annotation Guideline for Indonesian Twitter Data</i> Andi Djalal Latief (National Research and Innovation Agency, Indonesia), Asril Jarin (National Research and Innovation Agency (BRIN), Indonesia), Mohammad Teduh Uliniansyah (National Research and Innovation Agency, Indonesia), Elvira Nuradhilah (National Research and Innovation Agency, Indonesia), Dian Isnaeni Nurul Afra (National Research and Innovation Agency (BRIN), Indonesia)	31
<i>Sentiment Analysis with Supervised Topic Modelling on Twitter Data Related to Indonesian Election 2024</i> Siti Shaleha (BRIN, Indonesia), Haniif Mulya Wicaksana (PT. Artajasa Pembayaran Elektronik, Indonesia), Ariyanti Saputri (National Research and Innovation Agency, Indonesia)	37
<i>Utilizing Knowledge Bases in Filtering IoT Data to Predict Algal Blooms</i> Lindung Parningotan Manik (National Research and Innovation Agency, Indonesia), Reny Puspasari (National Research and Innovation Agency, Indonesia), Slamet Riyanto (National Research and Innovation Agency, Indonesia), Hatim Albasri (National Research and Innovation Agency, Indonesia), Setiya Triharyuni (National Research and Innovation Agency, Indonesia), Aris Yaman (National Research and Innovation Agency, Indonesia), Sandi Wibowo (Ministry of Marine Affairs and Fisheries of the Republic of Indonesia, Indonesia)	43

Day I - Session III - (Informatics and Data Processing)

<i>Improving the Quality of 3D Orthomosaic Images by Increasing Close Range Photogrammetry (CRP) and Data Processing</i> Muhammad Yudhi Rezaldi (National Research and Innovation Agency of Republic Indonesia (BRIN), Indonesia), Ambar Yoganingrum (LIPI, Indonesia), Abdurrakhman Prasetyadi (National Research and Innovation Agency, Indonesia), Nuraini Rahma Hanifa (National Research and Innovation Agency, Indonesia), Ridwan Suhud (National Research and Innovation Agency, Indonesia), Eko Yulianto (National Research and Innovation Agency, Indonesia), Wiwin Windupranata (Institut Teknologi Bandung, Indonesia), Achmad Fakhru Shomim (National Research and Innovation Agency, Indonesia)	49
<i>Delivering High-Resolution Historical Remote Sensing Image using Integration of SRGAN</i> Arie Vatesia (University of Bengkulu, Indonesia), Rido Dwi Ismanto (BRIN, Indonesia), Rendra Rais (Kementerian Kehutanan dan Lingkungan Hidup, Indonesia)	54
<i>Comparison of the Convolutional Neural Network Architectures for Traffic Object Classification</i> Apriandy Angdresy (De La Salle Catholic University, Indonesia), Lanny Sitanayah (Universitas Katolik De La Salle Manado, Indonesia), Efraim Pantas (Universitas Katolik De La Salle Manado, Indonesia)	60

<i>Multi-Agent Reinforcement Learning with Information Sharing for Optimal Drone Mapping</i> Stevanus Darwin (Parahyangan Catholic University, Indonesia), Tua Agustinus Tamba (Parahyangan Catholic University, Indonesia)	66
--	----

Day I - Session IV - (ICTs Applications)

<i>Proposing a Microservices Architecture for AMEL Information System Designed Using TOGAF-ADM</i> Gita Citra Puspita (National Research and Innovation Agency (BRIN), Indonesia), Hayuning Titi Karsanti (Research Center for Data and Information Sciences National, Research and Innovation Agency - Indonesia, Indonesia), Arief Sartono (National Research and Innovation Agency & Bandung Institute of Technology, Indonesia), Adam Firman (National Research and Innovation, Indonesia), Denna Arfiani (National Research and Innovation, Indonesia)	72
<i>An Importance-Performance Analysis Concerning the Quality of Indonesia's e-Procurement System Based on ISO/EIC 25010:2011</i> Hayuning Titi Karsanti (Research Center for Data and Information Sciences, National Research and Innovation Agency - Indonesia, Indonesia), Arti Dian Nastiti (Data and Information Center, National Research and Innovation Agency - Indonesia, Indonesia), Gita Citra Puspita (National Research and Innovation Agency (BRIN), Indonesia)	78
<i>Knowledge-based System for Scholarly Publication Cycle to Support Smart Learning</i> Deden Sumirat Hidayat (National Research and Innovation Agency (BRIN) & Faculty of Computer Science, Universitas Indonesia, Indonesia), Dana Indra Sensuse (University of Indonesia, Indonesia), Setyawan Widyarto (Universiti Selangor, Malaysia)	84
<i>TOGAF-based Enterprise Architecture Framework for Utilizing Artificial Intelligence</i> Leni Fitriani (Institut Teknologi Bandung, Indonesia), Masayu Leylia Khodra (Institut Teknologi Bandung, Indonesia), Kridanto Surendro (Institut Teknologi Bandung, Indonesia)	90

Day I - Session V - (Computer, Networking, and Control)

<i>Effect of IMU Sensor Positioning on 1-DOF Angle Measurement Accuracy for Robotic Charging Station (RoCharg-v1) Manipulator</i> Hendri Maja Saputra (National Research and Innovation Agency, Indonesia), Tesya Permadi (Universitas Pendidikan Indonesia, Indonesia), Catur Hilman A.H.B. Baskoro (National Research and Innovation Agency, Indonesia), Nur Safwati Mohd Nor (Universiti Teknologi Malaysia (UTM), Malaysia), Bany Abdussalam (Universitas Pendidikan Indonesia, Indonesia), Muhammad Yudhi Rezaldi (National Research and Innovation Agency of Republic Indonesia (BRIN), Indonesia)	96
<i>Counterweight Mechanism of Prismatic Joint at 4-DOF PRRR Manipulator for Robotic Charging Station (RoCharg-v1)</i> Hendri Maja Saputra (National Research and Innovation Agency, Indonesia), Bany Abdussalam (Universitas Pendidikan Indonesia, Indonesia), Catur Hilman A.H.B. Baskoro (National Research and Innovation Agency, Indonesia), Nur Safwati Mohd Nor (Universiti Teknologi Malaysia (UTM), Malaysia), Tesya Permadi (Universitas Pendidikan Indonesia, Indonesia), Muhammad Yudhi Rezaldi (National Research and Innovation Agency of Republic Indonesia (BRIN), Indonesia)	102
<i>CFPChain: An Optimization of Research Funding Selection System Employing A Consortium Blockchain Based Approach</i> Taufik Iqbal Ramdhani (National Research and Innovation Agency, Indonesia), Akbari Indra Basuki (National Research and Innovation Agency (BRIN), Indonesia), Heru Susanto (National Research and Innovation Agency, Indonesia), Raditya Panji Umbara (National Research and Innovation Agency, Indonesia), Samsul Arifin (Bina Nusantara University, Indonesia), Ninon Nurul Faiza (National Research and Innovation Agency, Indonesia)	108
<i>Network Slicing Modeling and Simulation on 5G Networks Using Virne</i> Dedy Irawan (National Research and Innovation Agency, Indonesia), A. A. N. Ananda Kusuma (National Research and Innovation Agency, Indonesia), Mohammad Hamdani (National Research and Innovation Agency, Indonesia), Rifqi Fajar Giyana (National Research and Innovation Agency, Indonesia), Arfan Hartawan (National Research and Innovation Agency, Indonesia), Toto Bachtiar Palokoto (National Research and Innovation Agency, Indonesia), Tahar Agastani (National Research and Innovation Agency, Indonesia), Widrianto Sih Pinastiko (BRIN, Indonesia), Sakinah Puspa Anggraeni (The National Research and Innovation Agency, Indonesia)	114

Day I - Session VI - (Data Science)

<i>Web-Based Decision Support System of Employee Admission Using Multi Attribute Utility Theory</i> Arafat Febriandirza (National Research and Innovation Agency, Indonesia), Muhammad Rizky Kurniawan (UHAMKA, Indonesia), Arti Dian Nastiti (National Research and Innovation Agency, Indonesia)	120
<i>Recognizing Public Satisfaction Toward Kampus Mengajar Program with Naive Bayes</i> Ridwan Suhud (National Research and Innovation Agency, Indonesia), Arafat Febriandirza (National Research and Innovation Agency, Indonesia), Intan Permatasari (BRIN, Indonesia), Farhan Ramadan (UHAMKA, Indonesia)	125
<i>Assisting Crowdsourced Data Collection by using Data Mining Algorithms</i> Andre Sihombing (National Research and Innovation Agency, Indonesia), Ariani Indrawati (National Research and Innovation Agency, Indonesia), Zaenal Akbar (National Research and Innovation Agency, Indonesia), Lindung Parningotan Manik (National Research and Innovation Agency, Indonesia), Aris Yaman (National Research and Innovation Agency, Indonesia), Hatim Albasri (National Research and Innovation Agency, Indonesia), Reny Puspasari (National Research and Innovation Agency, Indonesia), I Nyoman Radiarta (Ministry of Marine Affairs and Fisheries, Indonesia)	131
<i>Enhancing Sentiment Analysis Models through Multi-Technique Data Augmentation: A Study with IndoBERT</i> Lyla Ruslana Aini (BPPT, Indonesia), Elvira Nurfadhilah (National Research and Innovation Agency, Indonesia), Asril Jarin (National Research and Innovation Agency (BRIN), Indonesia), Agung Santosa (Institut Teknologi Sepuluh Nopember (ITS) & National Research and Innovation Agency (BRIN), Indonesia), Mohammad Teduh Uliniansyah (National Research and Innovation Agency, Indonesia)	137

Revealing the Development of Fish Species Identification Process through An Ontology Mapping Approach

Yulia Aris Kartika (National Research and Innovation Agency, Indonesia), Zaenal Akbar (National Research and Innovation Agency, Indonesia), Ariani Indrawati (National Research and Innovation Agency, Indonesia), Dadan Ridwan Saleh (National Research and Innovation Agency, Indonesia), Haryono Haryono (National Research and Innovation Agency, Indonesia), Aris Yaman (National Research and Innovation Agency, Indonesia) 143

Day I - Session VII - (Informatics and Data Processing)

Top Layer Selection in Pretrained Models for Sentiment Analysis on Biodiversity Tweets in Bahasa Indonesia

Agung Santosa (National Agency for Research and Innovation (BRIN), Indonesia, Indonesia), Asril Jarin (National Research and Innovation Agency (BRIN), Indonesia), Tri Sampurno (BRIN, Indonesia), Siska Pebiana (National Agency for Research and Innovation (BRIN), Indonesia, Indonesia) 149

Web-based Software Development of Movie Comparison using Laravel Framework

Ardelia Beatrice (Bina Nusantara University, Indonesia), Baladiffa Aurora Herkanyaka (Bina Nusantara University, Indonesia), Chyntia Chyntia (Bina Nusantara University, Indonesia), Filbert Fernandes Lienardy (Bina Nusantara University, Indonesia), Vieri Ferdian Putra Basuki (Bina Nusantara University, Indonesia), Kartika Purwandari (Bina Nusantara University, Indonesia) 155

Goal-Oriented Functional Suitability Measurement on Loan Origination System Based on ISO/IEC 25010

Nella Rosa Sudianjaya (Sepuluh Nopember Institute of Technology, Indonesia), Siti Rochimah (Institut Teknologi Sepuluh Nopember, Indonesia) 161

Diagnosis of Schizophrenia Patients in EEG Signals Using Multiple Optimizer-Convolutional Neural Network (CNN)

M Faizal Amri (National Research and Innovation Agency - BRIN, Indonesia), Swastika Nadine (Indonesia International Institute for Life Sciences (i3L), Indonesia), Muammar Sadrawi (Syiah Kuala University, Indonesia) 166

EfficientNetV2 based for MRI brain tumor image classification

Arya Adhyaksa Waskita (BRIN, Indonesia), Julfa Muhammad Amda (Research Center for Computing National Research and Innovation Agency, Indonesia), Dwi Seno Kuncoro Sihono (Universitas Indonesia, Indonesia), Heru Prasetyo (National Research and Innovation Agency, Indonesia) 171

Day I - Session VIII - (ICTs Applications)

Exploring Land Use Susceptibility to Geological Hazards in the Lembang Fault Zone, West Java, Indonesia: A Geospatial Perspective

Aang Gunawan Sutyawan (National Research and Innovation Agency, Indonesia), Muhammad Azmi (ESRI Indonesia, Indonesia), Wawan Hendriawan Nur (National Research and Innovation Agency, Indonesia) 177

Landslide Susceptibility Zoning Using Fuzzy Logic Algorithm & GIS: Study Case In Majene, West Sulawesi

Zulkifli Jawas (Universitas Hasanuddin, Indonesia), Zahir Zainuddin (Hasanuddin University, Indonesia), Muhammad Niswar (Universitas Hasanuddin, Indonesia), Hafsa Nirwana (Politeknik Negeri Ujung Pandang, Indonesia) 183

The Effectiveness of Integrated Dynamic Archival Information System (SRIKANDI) Using DeLone and McLean Model on Local Government Organisation of Surakarta City

Ida Setya Dwi Jayanti (Universitas Sebelas Maret, Indonesia), Irsyadul Ibad (Universitas Sebelas Maret, Indonesia), Chairul Huda Atma Dirgatama (Universitas Sebelas Maret, Indonesia), Arinta Kusumawardhani (Universitas Sebelas Maret, Indonesia), Mutiara Auliya Khadija (Universitas Sebelas Maret, Indonesia) 189

Towards Sustainable Village Development: Optimizing the Preparation of Village Medium-Term Development Plans Using AHP and Linear Regression

Muhamad Irfan Yudistira (Gadjah Mada University, Indonesia), Selo Sulisty (Universitas Gadjah Mada, Indonesia), Silmi Fauziati (Universitas Gadjah Mada, Indonesia) 194

Integrating Digital Repository System for Nuclear Power Plant (NPP) Site Studies in Indonesia

Niken Fitria Apriani (National Research and Innovation Agency, Indonesia), Al Hafiz Akbar Maulana Siagian (National Research and Innovation Agency, Indonesia), Shidiq Al Hakim (National Research and Innovation Agency (BRIN), Indonesia), Theo Alvin Ryanto (The National Research and Innovation Agency of Indonesia, Indonesia) 200

Day I - Session IX - (Informatics and Data Processing)

Automated License Plate Detection and Recognition using YOLOv8 and OCR With Tello Drone Camera

Hanif Fakhrrurroja (National Research and Innovation Agency & Telkom University, Indonesia), Dita Pramesti (Telkom University, Indonesia), Abdul Rofi Hidayatullah (UIN Sunan Gunung Djati, Indonesia), Ahda Arif Fashihullisan (UIN Sunan Gunung Djati, Indonesia), Harry Bangkit (National Research and Innovation Agency, Indonesia), Nanang Ismail (UIN Bandung, Indonesia) 206

Automatic Water Meter Reading Development based on CNN and LoRaWAN

Harry Bangkit (National Research and Innovation Agency, Indonesia), Hanif Fakhrrurroja (National Research and Innovation Agency & Telkom University, Indonesia), Ipin Aripin (National Research and Innovation Agency, Indonesia), Slamet Supriadi (National Research and Innovation Agency of Republic Indonesia, Indonesia), Muhamad Sani Aji Rahman (PT. Manvis Teknologi Enjineri, Indonesia), Nizam Ahmad (LAPAN, Indonesia) 212

Flooded Area Segmentation on Remote Sensing Image from Unmanned Aerial Vehicles (UAV) using DeepLabV3 and EfficientNet-B4 Model

Riskyana Dewi Intan Puspitasari (Universitas Negeri Surabaya, Indonesia), Fadhillah Qalbi Annisa (Universitas Negeri Surabaya, Indonesia), Danang Ariyanto (Universitas Negeri Surabaya, Indonesia) 216

Day I - Session X - (Data Science)

Digital Avatar Sub-Metaverse Modeling Using Terrestrial Photogrammetry Techniques

Abdurrakhman Prasetyadi (National Research and Innovation Agency, Indonesia), Muhammad Yudhi Rezaldi (National Research and Innovation Agency of Republic Indonesia (BRIN), Indonesia), Cahyo Trianggoro (National Research and Innovation Agency, Indonesia), Arafat Febriandirza (National Research and Innovation Agency, Indonesia), Ridwan Suhud (National Research and Innovation Agency, Indonesia), Aang Gunawan Sutyawan (National Research and Innovation Agency, Indonesia), Haidaruddin Muhammad Ramdhan (Telkom University, Indonesia) 221

Individual Innovative Behavior Through Human-Computer Interaction in eSport Mechanisms: An Evidence-Based Approach

Muhammad Fajar Wahyudi Rahman (Universitas Negeri Surabaya, Indonesia), Achmad Kautsar (Universitas Negeri Surabaya, Indonesia), Azmil Chusnaini (Universitas Nahdlatul Ulama Surabaya, Indonesia), Sabzar Ahmad Peerzadah (School of Business Studies University of Kashmir, India), Emeraldita Eka Putri Setyawati (Chung Yuan Christian University, Taiwan), Thidarat Somsuriyawong (Suratthani Rajabhat University, Thailand) 226

Unlocking the Power of Linked Data for Metadata Enrichment

Ariani Indrawati (National Research and Innovation Agency, Indonesia), Zaenal Akbar (National Research and Innovation Agency, Indonesia), Yulia Aris Kartika (National Research and Innovation Agency, Indonesia), Dadan Ridwan Saleh (National Research and Innovation Agency, Indonesia), Anis Kamillah Hayati (National Research and Innovation Agency, Indonesia), Aris Yaman (National Research and Innovation Agency, Indonesia) 232

Day I - Session XI - (Informatics and Data Processing)

Radionuclide Identification in Open Environment Based on CsI(Na) Scintillation Detector Using Machine Learning Methods

Gina Kusuma (National Research and Innovation Agency of Republic Indonesia (BRIN), Indonesia), Sastra Kusuma Wijaya (Departemen Fisika, FMIPA UI & University of Indonesia, Indonesia), I Putu Susila (National Research and Innovation Agency, Indonesia) 238

Enhancing Machine Learning Models through Hyperparameter Optimization with Particle Swarm Optimization

Ariani Indrawati (National Research and Innovation Agency, Indonesia), Intan Nuni Wahyuni (National Research and Innovation Agency, Indonesia) 244

Study of Graph Database Implementation on Dynamic Table of BPS Website

Andi Muhammad Rosyidin Hidayat (Politeknik Statistika STIS, Indonesia), Farid Ridho (Politeknik Statistika STIS, Indonesia) 250

Day I - Session XII - (ICTs Applications)

Digital Technology-Enhanced ZISWAF Management: A Case Study of UPZ Masjid Jami Ash Shiyaa

Budi Nugroho (National Research and Innovation Agency, Indonesia), Aries Hermawan (Sekolah Tinggi Ekonomi Islam SEBI, Indonesia), Cecep Indra Surawijaya (International University Liaison Indonesia, Indonesia) 256

A Review of Ontology Development in the e-Learning Domain: Methods, Roles, Evaluation

Muhammad Khoiruddin (Universitas Gadjah Mada, Indonesia), Sri Suning Kusumawardani (Universitas Gadjah Mada, Indonesia), Indriana Hidayah (Universitas Gadjah Mada, Indonesia), Silmi Fauziati (Universitas Gadjah Mada, Indonesia) 262

The Effect of Using Chatbots at e-Commerce Services of Customer Satisfaction, Trust, and Loyalty

Surjandy Surjandy (Bina Nusantara University, Indonesia), Cadelina Cassandra (Bina Nusantara University, Indonesia) 268

Day II - Session I - (Data Science)

Next Sentence Prediction: The Impact of Preprocessing Techniques in Deep Learning

Yuyun Wabula (National Research and Innovation Agency (BRIN), Indonesia), Andi Djalal Latief (National Research and Innovation Agency, Indonesia), Tri Sampurno (BRIN, Indonesia), Hazriani Hazriani (Handayani University, Indonesia), Andriansyah Oktafiandi Arisha (Handayani University, Indonesia), Mushaf Dipa (Dipa Makassar University, Indonesia) 274

Leveraging BERTopic for the Analysis of Scientific Papers on Seaweed

Anne Parlina (National Research and Innovation Agency, Indonesia), Ira Maryati (Universitas Indonesia, Indonesia) 279

Handling Data Imbalance Using Text Augmentation For Classifying Public Complaints

Muhammad Rizqi Indrahimawan (Universitas Gadjah Mada, Indonesia), Paulus Insap Santosa (Universitas Gadjah Mada, Indonesia), Teguh Bharata Adji (Universitas Gadjah Mada, Indonesia) 284

Traffic Incident Detection in Jakarta on Twitter Texts Using a Multi-Label Classification Approach

Muhammad Apriesya Wastu Nirbhaya (Politeknik Statistika STIS, Indonesia), Lya Hulliyatus Suadaa (STIS Polytechnic of Statistics, Indonesia & Tokyo Institute of Technology, Japan) 290

Day II - Session II - (Data Science)

<i>Understanding The Factors and Perspectives Influencing Safety Stock Prediction: A Systematic Literature Review on Inventory Management</i> Rianindya Chandra Hardika (University of Gadjah Mada, Indonesia), Noor Akhmad Setiawan (Universitas Gadjah Mada, Indonesia), Indriana Hidayah (Universitas Gadjah Mada, Indonesia)	296
<i>Analyzing Multimodal Sensory Signals Using Unsupervised Machine Learning</i> Apriandy Angdresey (De La Salle Catholic University, Indonesia), Jing-Quan Ooi (Universiti Tunku Abdul Rahman, Malaysia)	301
<i>Segmentation Combination Method for Corrective Action Recommendation</i> Wiwin Suwarningsih (National Research and Innovation Agency (BRIN), Indonesia), Christina Juliane, MT (STMIK LIKMI, Indonesia)	307
<i>Utilization of Machine Learning Approaches for Rainfall Data Imputation: A Systematic Literature Review</i> Wahyu Abdillah (Gadjah Mada University, Indonesia), Silmi Fauziati (Universitas Gadjah Mada, Indonesia), Azkario Rizky Pratama (UGM, Indonesia)	313

Day II - Session III - (Informatics and Data Processing)

<i>The Impact of Eyebrows Region on Deep Face Recognition</i> Nova Hadi Lestriandoko (National Research and Innovation Agency (BRIN), Indonesia & University of Twente, The Netherlands), Luuk Spreeuwers (University of Twente, The Netherlands), Raymond Veldhuis (University of Twente, The Netherlands)	319
<i>Identification of Mood in Early Childhood with Face Recognition</i> Fettyana Fettyana (Hasanuddin University, Indonesia), Zahir Zainuddin (Hasanuddin University, Indonesia), Amil Ahmad Ilham (Universitas Hasanuddin, Indonesia)	324
<i>Identification of banana ripeness using convolutional neural network approaches</i> Nur Nafi'iyah (Institut Teknologi Sepuluh Nopember, Indonesia), Retno Wardhani (Universitas Islam Lamongan, Indonesia), Esa Prakasa (National Research and Innovation Agency (BRIN), Indonesia)	330
<i>Chili Quality Classification using Convolution Neural Network</i> William Adam (Hasanuddin University, Indonesia), Muhammad Niswar (Universitas Hasanuddin, Indonesia), Zainal Zainal (Universitas Hasanuddin, Indonesia)	336

Day II - Session IV - (ICTs Applications & Informatics and Data Processing)

<i>Mapping Tourist Cognitive Perceptions and Movements in Bali's Top-Rated Destinations</i> Dian Puteri Ramadhani (Telkom University, Indonesia), Lusiana Zulfa Amelia Damayanti (Telkom University, Indonesia), Andry Alamsyah (Telkom University, Indonesia)	341
<i>The Adoption of Information Thread at Social Media during Covid using Modified Information Adoption Model</i> Surjandy Surjandy (Bina Nusantara University, Indonesia), Irene Virtonia (Bina Nusantara University, Indonesia)	347
<i>Design of Indonesian Culture Game Assets to Assist the Promotion of Culture Tourism</i> Esa Prakasa (National Research and Innovation Agency (BRIN), Indonesia), Nathania Felicia Gunadi (Universitas Multimedia Nusantara, Indonesia), Lalitya Talitha Pinasthika (Universitas Multimedia Nusantara, Indonesia)	353
<i>Business Process Improvement in the Program Development Division of PT. XYZ Based on Service-Oriented Architecture</i> Hanif Fajri (Telkom University, Indonesia), Hanif Fakhruroja (National Research and Innovation Agency & Telkom University, Indonesia), Muharman Lubis (Telkom University, Indonesia)	359

Day II - Session V - (Data Science)

<i>Procedural 2D Dungeon Generation Using Binary Space Partition Algorithm And L-Systems</i> Jos Timanta Tarigan (Universitas Sumatera Utara, Indonesia), Elviawaty Muisa Zamzami (Universitas Sumatera Utara, Indonesia), Pratama Aditya Putra (Universitas Sumatera Utara, Indonesia)	365
<i>Harmful Algal Blooms Prediction Model: Dealing With Limited Datasets</i> Aris Yaman (National Research and Innovation Agency, Indonesia), Reny Puspasari (National Research and Innovation Agency, Indonesia), Zaenal Akbar (National Research and Innovation Agency, Indonesia), Ariani Indrawati (National Research and Innovation Agency, Indonesia), Yulia Aris Kartika (National Research and Innovation Agency, Indonesia), Lindung Parningotan Manik (National Research and Innovation Agency, Indonesia), Setiya Triharyuni (National Research and Innovation Agency, Indonesia), Hatim Albasri (National Research and Innovation Agency, Indonesia), Sandi Wibowo (Ministry of Marine Affairs and Fisheries of the Republic of Indonesia, Indonesia), Hilman F Pardede (National Research and Innovation Agency of Indonesia, Indonesia)	370
<i>Fast Maximum Likelihood Estimation Of Big Data Spatial Autoregressive Model: Matrix Exponential Spatial Specification Approach</i> Marsono Marsono (Institut Teknologi Sepuluh Nopember, Indonesia), Setiawan Setiawan (Institut Teknologi Sepuluh Nopember, Indonesia), Heri Kuswanto (Institut Teknologi Sepuluh Nopember, Indonesia)	376

<i>Parameter Estimation and the Goodness-of-fit test for the Multivariate Generalized Gamma Distribution</i>	
Hasbi Yasin (Institut Teknologi Sepuluh Nopember & Diponegoro University, Indonesia), Purnomo Husnul Khotimah (National Research and Innovation Agency (BRIN), Indonesia), Achmad Choiruddin (Institut Teknologi Sepuluh Nopember Surabaya, Indonesia)	382
<i>Using Linguistic and Stylometric Features for Satirical News Detection in Bahasa Indonesia</i>	
Yunita Sari (Universitas Gadjah Mada, Indonesia), Rochana Prih Hastuti (Universitas Gadjah Mada, Indonesia), Guntur Herwanto (Universitas Gadjah Mada & Faculty of Mathematics and Natural Science, Indonesia)	388

Day II - Session VI - (Data Science)

<i>Automating Information Retrieval from Faculty Guidelines: Designing a PDF-Driven Chatbot powered by OpenAI ChatGPT</i>	
Mutiara Auliya Khadija (Universitas Sebelas Maret, Indonesia), Abdul Aziz (Universitas Sebelas Maret, Indonesia), Wahyu Nurharjadmo (Universitas Sebelas Maret, Indonesia)	394
<i>Classification Model for Assessing Micro and Small Enterprises' Awareness Level towards Halal Certification Adoption</i>	
Dianadewi Riswantini (National Research and Innovation Agency, Indonesia), Ekasari Nugraheni (National Research and Innovation Agency, Indonesia), Andria Arisal (National Research and Innovation Agency (BRIN), Indonesia), Purnomo Husnul Khotimah (National Research and Innovation Agency (BRIN), Indonesia), Wiwin Suwarningsih (National Research and Innovation Agency (BRIN), Indonesia), Andri Fachrur Rozie (Indonesian Institute of Sciences, Indonesia)	400
<i>Enhancing Glioma Grading Performance: A Comparative Study on Feature Selection Techniques and Ensemble Machine Learning</i>	
Teuku Rizky Noviandy (Universitas Syiah Kuala, Indonesia), M. Haekal Alfanshury (Universitas Syiah Kuala, Indonesia), Taufik F. Abidin (Universitas Syiah Kuala, Indonesia), Hammam Riza (National Research and Innovation Agency (BRIN) & University of Syiah Kuala (USK), Indonesia)	406
<i>The Impact of Downsampling Methods on Face Recognition in Electronic Identity Card</i>	
Muhammad Nurkhoiri Hindratno (National Research and Innovation Agency, Indonesia), Auliati Nisa (BRIN, Indonesia), Muhammad Imaduddin Abdur Rohim (Badan Riset dan Inovasi Nasional (BRIN), Indonesia), Radhiyatul Fajri (BRIN, Indonesia), Mohammad Hamdani (National Research and Innovation Agency, Indonesia), Gembong S Wibowanto (Badan Riset dan Inovasi Nasional (BRIN), Indonesia), Nova Hadi Lestriandoko (National Research and Innovation Agency (BRIN), Indonesia & University of Twente, The Netherlands), Pesigrihastamadya Normakristagaluh (National Research and Innovation Agency (BRIN), Indonesia)	412
<i>Synthetic Data Generation Using Time-Generative Adversarial Network (Time-GAN) to Predict Cash ATM</i>	
Feri Ranja (Universitas Sumatera Utara, Indonesia), Erna Budhiarti Nababan, MIT (Universitas Sumatera Utara, Indonesia), Ade Candra (Universitas Sumatera Utara, Indonesia)	418

Day II - Session VII - (Informatics and Data Processing)

<i>Deep Learning Approach for Heavy Rainfall Prediction Using Himawari-8 And RDCA Data</i>	
Muhammad Fadhlan Putranto (Institut Teknologi Bandung, Indonesia), Rinaldi Munir (Institut Teknologi Bandung, Indonesia)	424
<i>Utilizing YOLO for Efficient Indonesian Sign Language Recognition</i>	
Dicky Luthfy (Telkom University, Indonesia), Casi Setianingsih (Telkom University, Indonesia), Marisa Paryasto (Telkom University, Indonesia), Nurul Amelia (Telkom University, Indonesia)	430
<i>Parallel Computing Implementation of Marine Heat Waves Detection</i>	
Ade Rachmat J. Pangestu (Brawijaya University, Indonesia), Riski Kurniawan (National Research and Innovation Agency, Indonesia), I Wayan Aditya Swardiana (National Research and Innovation Agency, Indonesia), Abdurrouf Abdurrouf (Brawijaya University, Indonesia), Arnida L Latifah (National Research and Innovation Agency & Telkom University, Indonesia)	436
<i>Sleep Apnea Detection Based on Respiratory Movement Using Harris Corner and Recurrent Neural Networks</i>	
Esmeralda Contessa Djamal (Universitas Jenderal Achmad Yani, Indonesia), Hizkia Syaukani (Universitas Jenderal Achmad Yani, Indonesia), Fatan Kasyidi (Universitas Jenderal Achmad Yani, Indonesia)	440