

TABLE OF CONTENTS

COVER BOOK	1
TABLE OF CONTENTS	2
CONFERENCE INFORMATION	3
COMMITTEES	4
GUIDELINE FOR ONLINE PRESENTERS	6
KEYNOTE	SPEAKER
BIOGRAPHY.....	
.....8	
TECHNICAL	
PROGRAM.....	
.....10	
PARALLEL	SESSION
ON-SITE.....	
.....12	
PARALLEL	SESSION
ONLINE.....	
.....15	

CONFERENCE INFORMATION

- Date** : Wednesday, 06th August 2025
- Organizer** : Undergraduate Program of Information Technology, Faculty of Engineering, Universitas Muhammadiyah Yogyakarta
- Theme** : “Advancing Digital Ecosystems for a Sustainable and Borderless Future”
- Venue** : Hybrid, on site and online
- On site: Siti Walidah Building, F4 2nd Floor, Universitas Muhammadiyah Yogyakarta**
- Jl. Brawijaya, Tamantirto, Kasihan, Bantul, Kota Yogyakarta, Daerah Istimewa Yogyakarta 55183
- <https://maps.app.goo.gl/usRwDPh42znJnMXz5>
- Online: Zoom Meeting**
- Plenary Session** : <https://bit.ly/ICOSI&ICCS2025>
- Pararel Session** : <https://bit.ly/Focal-icitcom2025>
- Official Language** : English
- Secretariat** : Gedung Siti Walidah, F4 Lt.2, Kampus Terpadu UMY Jl. Brawijaya, Kasihan, Bantul, Yogyakarta 55183
- Conference Website** : <https://icitcom.umy.ac.id/>

COMMITTEES

Advisory boards

- Prof. Hsing-Chung Chen (Asia University, Taiwan)
- Kamarul Hawari Ghazali (Universiti Malaysia Pahang, Malaysia)
- Jesús García Herrero (Universidad Carlos III de Madrid, Spanyol)
- Ir. Aris Widyo Nugroho, S.T., M.T., Ph.D. (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Dr. Yessi Jusman, S.T., M.Sc. (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Dr. Reza Giga Isnanda, S.T., M.Sc. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Conference Chair

- Ir. Slamet Riyadi, S.T., M.Sc., Ph.D. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Secretary:

- Dr. Nasy'an Taufiq Al Ghifari, S.T., M.T. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Finance:

- Nurwahyu Alamsyah, S.Kom., M.Kom., M.IM., Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Septivari Dina Putri Nurliva, S.E. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Secretariat:

- Andhy Kurniawan Laksono Putra, S.T. (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Berliana Sofia Haya, S.Ak. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Publication:

- Cahya Damarjati, S.T., M.Eng., Ph.D. (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Ir. Eko Prasetyo, M.Eng., Ph.D. (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Tri Andi, S.T., M.Kom. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Program Event:

- Chayadi Oktomy Noto Susanto, S.T., M.Eng, Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)

Public Relations and Promotion:

- Laila Ma'rifatul Azizah, S.kom., M.I.M. (Universitas Muhammadiyah Yogyakarta, Indonesia)

Equipment and Consumables:

- Haris Firnandita, S.I.Kom (Universitas Muhammadiyah Yogyakarta, Indonesia)
- Indra Kurniawan, S.IP. (Universitas Muhammadiyah Yogyakarta, Indonesia)

GUIDELINE FOR ONLINE PRESENTERS

On August 6, 2025, the ICITCOM 2025 conference will be hosted both on-site and online. This conference is divided into plenary and parallel sessions. We offer an online meeting room using Zoom Meeting.

Online: Zoom Meeting

Meeting ID:

Passcode:

Enabling The Audio

After you've joined the room, click the "Join with the Computer Audio" button to enable the audio. If you turn off the audio, you won't be able to hear the meeting's sound.

Plenary and Parallel Session

The Main room is intended for opening, plenary, and closing sessions. Parallel sessions are intended for invited speakers and presenters, which divided into 8 parallel rooms as follow:

Room	Code	NOTE
ICITCOM-1	ICITCOM-1	Online Room-1
ICITCOM-2	ICITCOM-2	Online Room-2
ICITCOM-3	ICITCOM-3	Online Room-3
ICITCOM-4	ICITCOM-4	Online Room-4
ICITCOM-5	ICITCOM-5	Online Room-5
ICITCOM-6	ICITCOM-6	Online Room-6
ICITCOM-7	ICITCOM-7	Online Room-7
ICITCOM-8	ICITCOM-8	Online Room-8
ICITCOM-9	ICITCOM-9	Online Room-9
ICITCOM-10	ICITCOM-10	Offline Room-1

How to Displace Rooms?

By default, after clicking the appropriate link to join ICITCOM 2025, all participants will be placed in the Main room. The ICITCOM 2025 conference employs a "breakout system" to move attendees from one session to the next. The participant is required to alter their username by adding a parallel room code from the commencement of the conference. If John Doe is in an ICITCOM-1 parallel room, for example, he should alter his username to ICITCOM-1_John Doe.

Username: **John Doe**

Changed to: **ICITCOM-1_John Doe**

The admin (host) will run the breakout. If no parallel sessions are scheduled, the breakout rooms will be deactivated, and all attendees will be seated in the Main room. The room code will be utilized to make it easier for the admin (host) to assign the participants to the pre-arranged breakout rooms. Because of that, the participant is advised to alter their username following the guideline.

Scenario for Parallel Sessions

No	Time	Agenda	Session Moderator	Presenter
1	10 minutes before session	Preparation	Join the Zoom Meeting	Be ready in the main room
2	5 minutes before session	Opening the breakout rooms	Join the breakout room	Join the breakout room
3	Beginning of the session	Session introduction	Camera & mic on Check the attendance of all the presenters. Introduce session structure. Read the presentation schedule	Can ask questions by typing during the video playback
4	1 minute	Presenter introduction	Introduce the title and presenter	Camera on
5	Up to 10 minutes	Presentation	Camera & mic off Observe the chat panel from audience	Camera & mic off if video is played. Camera & mic on if present live.
6	4 minutes	Live Q&A session	Camera & mic on Read up to two questions from chat panel	Camera & mic on Answer the question from the session moderator
7	<i>Repeat step 4 to 6 for all other presenters</i>			
8	2 minutes	Closing	Conclude the session Ask for photo session	Camera on Pose for photo session

9	1 minutes	End of the session	Leave the breakout room	Leave the breakout room
---	-----------	--------------------	-------------------------	-------------------------

KEYNOTE SPEAKERS

1. Dr. Ir. Dwijoko Purbohadi, S.T., M.T.



Dr. Ir. Dwijoko Purbohadi, S.T., M.T. is an Associate Professor at the Department of Information Technology, Universitas Muhammadiyah Yogyakarta (UMY), with a doctoral degree in engineering and information technology from Universitas Gadjah Mada. He is widely recognized for his contributions in digital education, particularly in e-learning systems, mobile learning, and intelligent tutoring. His research often integrates artificial intelligence into education, including the development of speech-recognition-based virtual teaching assistants to support medical students' learning experience.

Over the past two years, Dr. Purbohadi has published several innovative studies that apply cutting-edge machine learning and education technologies. One of his 2025 studies explored the clustering of Jabodetabek commuter behavior using HDBSCAN and UMAP algorithms based on AFC (Automated Fare Collection) data, aimed at enhancing urban transportation analytics and planning. Another work in early 2025 examined innovative strategies for teaching English pronunciation in low-resource Indonesian contexts, providing practical mobile-based solutions to overcome infrastructure limitations.

Furthermore, his December 2024 publication presented a large-scale survey on Indonesian students' reading habits, analyzing motivation, anxiety, and frequency in both first and second languages. In the realm of AI in education, Dr. Purbohadi also led an experimental study in 2025 utilizing MobileNetV2-based mobile apps to teach ornamental plant recognition to elementary school students in rural areas. The study demonstrated a 35% increase in student engagement and learning outcomes, emphasizing his commitment to educational equity through technology. These contributions underline his role as a key figure in combining AI, usability, and pedagogy in Southeast Asian digital education research.

2. Prof. Jesús García Herrero



Prof. Jesús García Herrero is a Full Professor of Computer Science and Artificial Intelligence at Universidad Carlos III de Madrid, within the Department of Computer Science and Engineering. He holds a PhD in Telecommunications Engineering from Universidad Politécnica de Madrid and currently serves as Director of the Graduate School of Engineering and Basic Sciences, as well as Director of the Master's programme in Applied Artificial Intelligence.

His research spans artificial intelligence, data and information fusion, computer vision, and autonomous vehicle systems. He has authored over 70 journal papers and presented more than 200 conference communications, and serves on the editorial boards of journals including Information Fusion and Perspectives on Information Fusion (ISIF). He also coordinates the Applied Artificial Intelligence Group at UC3M and has held leadership roles including Deputy Director of the Polytechnic School and Vice-Rector positions at the Colmenarejo campus .

His recent publications highlight advanced applications such as trajectory segmentation and anomaly detection in marine and aerial contexts—works like Context learning from a ship trajectory cluster for anomaly detection (Neurocomputing, 2024) and DMZoomNet for object detection in intralogistics environments (IEEE Transactions on Industrial Informatics, 2024). These demonstrate his expertise in combining AI techniques with real-world systems, particularly in autonomous navigation and sensor-data prediction.

3. Dr. I Ketut Agung Enriko



Dr. I Ketut Agung Enriko received his Ph.D. in Electrical Engineering from Universitas Indonesia, Indonesia, in 2018. He is currently a Senior Lecturer at the Department of Telecommunication Engineering, Institut Teknologi Telkom Purwokerto (ITTP), and also serves as a Senior Manager and Principal Expert in IoT Platform and Digital Services at PT Telkom Indonesia. He obtained his B.Eng. in Telecommunication Engineering from Institut Teknologi Telkom in 1999 and his M.Sc. from Nanyang Technological University (NTU), Singapore, in 2009. His research focuses on Internet of Things (IoT), Machine-to-Machine Communication (M2M), Artificial Intelligence, Smart

Healthcare Systems, Industrial Automation, and Smart City technologies. Dr. Enriko has published extensively in national and international journals and conferences, and he is the co-author of several academic books in the areas of IoT and intelligent systems. He actively contributes to research, innovation, and digital transformation initiatives in both academic and industrial sectors in Indonesia.

TECHNICAL PROGRAM

Wednesday, 06 th August 2025		
Time (UTC+7)	Agenda	Location
07.30 – 08.00	ICOSI 2025 Registration	On Site : Siti Walidah Building, Room F4.003, Ground Floor Zoom Meeting Room : https://bit.ly/ICOSI&ICCS2025 ID: Passcode:
08.00 – 10.30	Opening International Conference on Sustainable Innovation (ICOSI) 2025 “Optimizing Science and Technology for Future Sustainable Living”	On Site : Siti Walidah Building, Room F4.003, Ground Floor Zoom Meeting Room : https://bit.ly/ICOSI&ICCS2025 ID: Passcode:
10.30 – 13.30	Parallel Session ICITCOM 2025 (Breakout Room) ICITCOM Parallel Session	On Site : Siti Walidah Building, Room F4.003, Ground Floor Zoom Meeting Room : https://bit.ly/Focal-icitcom2025 ID: Passcode:
13.30-15.00	Keynote speech Keynote Speaker 1 : Dr. I Ketut Agung Enriko (PT. Telkom Indonesia) Keynote Speaker 2 : Prof. Jesús García Herrero (Universidad Carlos III de Madrid) Keynote Speaker3 : Dr. Ir. Dwijoko Purbohadi, S.T., M.T. (Universitas Muhammadiyah Yogyakarta) Moderator : Faaris Mujaahid, B.Eng., M.Sc.	On Site : Siti Walidah Building, Room F4.003, Ground Floor Zoom Meeting Room : https://bit.ly/Focal-icitcom2025 ID: Passcode:
15.00-15.30	Closing Focal Ceremony and Announcement	On Site : Siti Walidah Building, Room F4.003, Ground Floor

		Zoom Meeting Room : https://bit.ly/Focal-icitcom2025 ID: Passcode:
--	--	---

PARALLEL SESSION ON-SITE

Parallel Session Offline Room-1

Moderator : Nurwahyu Alamsyah, S.Kom., M.Kom., M.IM., Ph.D

Location :

Paper ID	Title	Authors	Time
1571121975	Optimization of Charging Estimation in Lithium-ion Batteries Based On BiLSTM-AM	<u>Dian Premana, Dp</u> ; Djati Handoko and I Bagus Ngurah Alit Putra Wiryawan ; Imam Fachruddin	10:30 - 10:45
1571128599	Integrating Social Responsibility in the Development of Sign Language Recognition Technology for Quranic Recitation	<u>Aris Rakhmadi</u> ; Anton Yudhana	10:45 - 11:00
1571155902	Machine Learning-Based Spectrum Sensing in Cognitive Radio Networks: A Systematic Review	<u>Refni Arianti</u> ; Dyonisius Dony Ariananda ; Sigit Basuki Wibowo	11:00 - 11:15
1571165554	Predicting Internet Penetration in Indonesia Using XGBoost Regressor Based on Socioeconomic and Infrastructure Factors	Nasy'an Taufiq Al Ghifari and <u>Muhammad Arif Fajri Rahmadi</u>	11:15 - 11:30
1571163825	Convolutional Neural Network Optimization Using Evolution Strategy for Hijaiyah Letter Voice Recognition with GFCC Feature Extraction	Tri Andi; <u>Candra Juni Cahyo Kusuma</u>	11:30 - 11:45
1571163841	Optimizing LSTM for Air Quality Prediction in Jakarta using Chaotic Particle Swarm Optimization	Tri Andi; <u>Candra Juni Cahyo Kusuma</u> ; Fendi Aji Purnomo; Hery Siswanto	11:45 - 12:00
1571172815	Comparative Analysis of Earthquake Clustering in West Java Using Unsupervised Learning:	Dewintha Tresna Reza, Sunarno Sunarno, Supriadi Supriadi and Siti Wahyuni ; <u>Hanifullah</u>	12:15 - 12:30

	K-Means, K-Medoids, and Fuzzy C-Means	<u>Hafidz Arrizal</u> ; Marzuki Sinambela	
1571163305	Deep Learning-Based Drought Prediction Using Conv1D-BiLSTM-GRU with Bayesian Optimization: A Case Study of Central Java, Indonesia	<u>Hanifullah Hafidz Arrizal</u> ; Laila Ma'rifatul Azizah; Nelly Florida; Marzuki Sinambela; Munawar Munawar; Dwijoko Purbohadi	12:30-12.45
1571160618	Environmental Sustainability Practices: A Big-Data Driven Semantic Network Analysis on Indonesia Online News	<u>Viqi Ardaniah</u> ; Cahya Damarjati and Reza Giga Isnanda); Irawan Rofi Hidayat Lastiko Endi Rahmantyo	12:45-13.00

PARALLEL SESSION ONLINE

Parallel Session Online Room-1

Moderator : Viqi Ardaniah S.S., M.A. Linguistics, Ph.D.

Location :

Paper ID	Title	Authors	Time
1571160400	Machine Learning for Emotional Tone Detection: Comparing Naive Bayes and Support Vector Machine in Mental Health Contexts	Ahmad Ihda Falah Annur, Devina Salsabila Irawan, Talitha Rahmadewati Witanto and <u>Sulthan Rafif</u>	10:30 - 10:45
1571163011	Comparative Analysis of LSTM and XGBoost Models for Cryptocurrency Price Forecasting Under High Volatility	<u>Darren Tangamus</u> , Nathanael Alvaro Thai, Jung Shan and Alexander Agung Santoso Gunawan	10:45 - 11:00
1571163897	Disclosure of Collaboration Patterns with the Hierarchical Clustering Method Combined with Jaccard Distance	<u>Ghina Briliana Fatin Octariana</u> and Heri Wijayanto; Wirarama Wedashwara; I Gede Darmawan Adi Pratama Putra; Cahya Damarjati	11:00 - 11:15

1571164206	Multi-label Classification of Scientific Articles Based on Sustainable Development Goals Using Pre-trained Large Language Model	<u>Adhistianita Safira Husna</u> , Ade Romadhony and Suryo Adhi Wibowo	11:15 - 11:30
1571164228	A Comparative Study of Attention Mechanism Integrations in EfficientNet and ResNet for Colon Cancer Classification	<u>Gregorius Guntur Sunardi Putra</u> , Chastine Fatichah and Shintami Chusnul Hidayati ; Rusdiyana Ekawati	11:30 - 11:45
1571164229	A Comparative Study of Oversampling Methods in Regression-Based Financial Fraud Detection	<u>Jordan Istiqlal Qalbi Adiba</u> and Riyanarto Sarno; Muhammad Suzuri Hitam; Agus Tri Haryono; Kelly Rossa Sungkono; A Min Tjoa; Sang-Seok Lee	11:45 - 12:00
1571122742	Comparative Study: Cloud Segmentation Using U-Net & DeepLabV3+ Architecture	Nicholas Rahim Lim, <u>Nicholas Abel Williem</u> , Nickholas Nickholas and Alexander Agung Santoso Gunawan	12:15 - 12:30
1571164237	Smart Crew Dispatch System in Distribution Networks: A Digital Simulation Approach	<u>Gagandeep Singh Dua</u> ; Balaji Ramachandran; Shiraj Shaikh, Omar Hukal, Abdulrahman Aljasmi and Ahmad; Tareg Ghaoud	12:30 - 12:45

Parallel Session Online Room-2
Moderator : Ir. Eko Prasetyo, M.Eng., Ph.D.
Location :

Paper ID	Title	Authors	Time
1571129943	Enhancing Encrypted Data Security in True Color Images Using PVD and XOR-VLSB StegoCrypto Scheme	<u>Nur Pujiastuti</u> and Ika Arfiani	10:30 - 10:45

1571155243	Encryption and Decryption Time Analysis of LUC and Vincent-Sathiyamoorthy RSA Algorithms on Document Files	<u>Hasyati Nadhilah and Mohammad Budiman ;</u> Mahyuddin K. M. Nasution, yudi	10:45 - 11:00
1571161166	Blackhole Attack Analysis On VANET Networks	<u>Asroni</u>	11:00 - 11:15
1571163303	Robustness Evaluation of CNN-Based PE Malware Classifiers under Gradient-Based Adversarial Attacks	<u>Andi Novianto</u>	11:15 - 11:30
1571165373	DevSecPrivacyAIOps: An Integrated Framework for Intelligent Security, Privacy, and Operations in Modern Software Development	<u>Milankumar Rana ;</u> Nandita Giri	11:30 - 11:45
1571170676	Performance Evaluation of an IoT Ambulance Tracking System with LoRaWAN	<u>Nur Hayati,</u> Dena Arifanto and Kunnu Purwanto	11:45 - 12:00
1571158391	Evaluating Functionality and Usability: Black-Box Testing Results of the AKU-Demen Mobile Application	<u>apt. Pinasti Utami, M. Sc</u>	12:15 - 12:30
1571165668	Suicide Detection Model Based on X using Hybrid CNN and GRU with Feature Expansion and Feature Enhancement	Erwin Budi Setiawan and <u>Rizal Hidayat Putra</u>	12:30 - 12:45
1571150394	Mitigating Brute Force Attacks Through Algorithm Randomization In Asymmetric Cryptographic System	<u>Muhammad Hasan Saleh;</u> Benny Benyamin Nasution; Mohammad Budiman	12:45 - 13:00

Parallel Session Online Room-3 (Internet of Things)
Moderator : Tri Andi, S.T., M.Kom
Location :

Paper ID	Title	Authors	Time
1571151299	Integrating Message Queuing Telemetry	<u>Muhammad Mustafa Kamal</u> and Maya Fitria;	10:30 - 10:45

	Transport and Proximity Sensors for Positional Control and Synchronization in Automated Fruit Sorting System	Teuku Muhammad Nauval Nazar; Sarwo Edhy Sofyan; Ichsan Rayhan, Hendrik Leo and Rahmad Dawood	
1571155656	Water depth remote monitoring in University of Sriwijaya Lake, Indonesia	Khairul Saleh ; Rendy Malikulmulki Wahid, <u>Grahadi Ganang Aditya</u> , Hadi Hadi, Yulinar Adnan, Octavianus Cakra Satya, Iskhaq Iskandar and Assaidah Assaidah	10:45 - 11:00
1571165280	Performance Evaluation of Store-and-Forward Method for LoRaWAN Satellite Communication	Tri Andi; <u>Puput Dani Prasetyo Adi</u> ; Abdinasir Hirs; Victor M.M. Siregar	11:00 - 11:15
1571156322	Improving Cooperative NOMA Network Performance Using RIS: An Outage Probability Analysis with Imperfect CSI	Andika Wisnujati; Agung Mulyo Widodo; <u>Karisma Trinanda Putra</u> ; Mosiur Rahaman	11:15 - 11:30
1571159992	Securing Industrial IoT Device through Trusted Remote Attestation (TRA) to align with Zero Trust Principle	<u>Alan Budiyanto ;</u> Muhammad Salman	11:30 - 11:45
1571164162	Smartphone-Based Tilapia Pond Water Quality Monitoring	<u>Adityo Arya Putra</u> , Aldi Septiyanto, Hari Wahyu Ramadhan, Haris Setyawan and Nasy'an Taufiq Al Ghifari	11:45 - 12:00
1571164240	Wi-Fi Fingerprint Location Based on Adaptive Weighted K Nearest Neighbor Algorithm	Suqing Yan and <u>Weihong Liao</u>	12:15 - 12:30
1571165660	Digital Public Service Innovation: Internet of Things-Based Flood Control for Climate Adaption and Urban Resilience in DKI Jakarta	<u>Dimas Prahmana, Muhammad Bintang Akbar</u> , Helen Dian Fridayani and Achmad Nurmandi	12:30 - 12:45
1571170760	Design and evaluation of an IoT-based LoRaWAN water flow monitoring system	Nur Hayati, <u>Muhamat Sholeh</u> and Muhamad Yusvin Mustar	12.45 – 13.00

1571165596	Enhanced Classification of Concrete Cracks Through HU Moment Features and Margin-Based SVM Approach	Yessi Jusman, Ahmad Zaki, Ahmad Firdaus and <u>Agil Priambada</u>	13.00 - 13:15
-------------------	---	--	---------------

Parallel Session Online Room-4

Moderator : Dr. Reza Giga Isnanda, S.T., M.Sc.

Location :

Paper ID	Title	Authors	Time
1571127206	Localized Additive Models for Interpretable High-Dimensional Predictions	Dhivya Guru; Praveen Prabhakaran; Senthil raj Subramaniam; Rishi Sanjaykumar Patel	10:30 - 10:45
1571148549	Priority-Based Electricity Consumption Scheduling Using Greedy Optimization in Residential Areas	Melvyn Rafelino Lahai; Nurwahyu Alamsyah; Agustinus Bimo Gumelar; Evan William, <u>Dustin Wangsawidjaja</u> and Daniel	10:45 - 11:00
1571157428	Performance Evaluation of Laravel Application Deployment on Docker	<u>Abiyoga Dhaniswara;</u> Tien Fabrianti Kusumasari; Ekky Novriza Alam	11:00 - 11:15
1571157814	Generation of Score Description Sentences For School Report Cards Using NLG	<u>Soni Yora;</u> Muhammad Maulana Ramadhan	11:15 - 11:30
1571168247	Benchmarking YOLOv8 Model Compression Techniques for Egg Detection on Edge Hardware	Karisma Trinanda Putra; <u>Hasan Zidni</u> and Moh Khairudin Khairudin; Adi Izhar Che Ani; Rizki Ahmad Setiadi	11:30 - 11:45
1571162670	Multi-Granular Sentiment Intensity Augmentation with Ordinal Contrastive Learning for Enhanced Sentiment Classification	<u>Vipin Kataria; Nitin Kumar</u>	11:45 - 12:00
1571163735	Exploring visual hierarchy, banner blindness, and selective attention in tokopedia search ads: a	<u>Cifran Hiu</u>	12:15 - 12:30

qualitative screencast
videography analysis

Parallel Session Online Room-5

Moderator : Annisa Divayu, S.Kom

Location :

Paper ID	Title	Authors	Time
1571119917	Harnessing Machine Learning Techniques for Forecasting El Niño and La Niña: Advancing Sustainable Agriculture	Alexander Agung Santoso Gunawan; <u>Stevia Anlena Putri</u> ; Jeffrey Junior Tedjasulaksana	10:30 - 10:45
1571128131	A Critical Review of Feature Extraction and Machine Learning for Plant Disease Detection	<u>Ni Wayan Parwati Septiani</u> ; Marimin Marimin, Karlisa Priandana and Dwi Guntoro	10:45 - 11:00
1571130493	Multimodal Knowledge Graph Creation Using Large Language Models	<u>Timothy Dillan</u> and Sani Muhammad Isa; Abba Suganda Girsang; Derwin Suhartono	11:00 - 11:15
1571131081	Analysis of Micro, Small and Medium Enterprises (MSMEs) using the K-Prototype Method	<u>Lisna Zahrotun, Lz,</u> Miftahurahma Rashida and Muhammad Faris Akbar	11:15 - 11:30
1571141573	Improved DBT Image Quality for Breast Cancer Detection Using Fuzzy Weighted Median Filtering	Slamet Riyadi; <u>Qodri Aziz</u> ; Sunardi Sunardi; Anggita Putri Kantilaras and Yessi Jusman; Muhammad Abdul Haq; Siti Noraini Sulaiman	11:30 - 11:45
1571142933	Financial Crimes on Social Media: Leveraging Large Language Models and Generative AI to Detect Ponzi Schemes in Indonesia	<u>Rizaldy Anggriawan</u>	11:45 - 12:00
1571146828	Commonsense Reasoning 2.0: Symbolic Approaches to Close the GPT-4 Gap	<u>Agustinus Bimo Gumelar</u> Nurwahyu Alamsyah; Derry Pramono Adi; Slamet Winardi; Adri Gabriel Sooi	12:00 - 12:15

1571150677	Comparative Evaluation of CNN, LSTM, and Hybrid CNN-LSTM for Spatial-Spectral Classification of Hyperspectral Images	<u>Annisa Divayu Andriyani</u> ; Kamarul Hawari Ghazali; Slamet Riyadi	12:45 - 13:00
-------------------	--	---	---------------

Parallel Session Online Room-6

Moderator : Laila Ma'rifatul Azizah, S.kom., M.I.M.

Location :

Paper ID	Title	Authors	Time
1571150707	CBAM and CoordAtt in YOLOv8n: Attention Location Effects on KITTI Occlusion Detection	<u>Muhammad Maulana Yusuf</u> ; Kurniawan Nur Ramadhani; Fauzan Firdaus	10:30 - 10:45
1571151808	Comparison of EfficientNetB1 and ConvNeXtTiny Models for Coronary Artery Disease Detection	<u>Desta Atikananda</u> ; Slamet Riyadi and Chayadi Oktomy Noto Susanto; Khairun Nisa; Qodri Aziz; Ika Tania Chaerani	10:45 - 11:00
1571152993	Improving LightGBM Performance in Diabetes Risk Prediction Using Fi-Guide SMOTE	Andrian Sah; Adam M Tanniewa; Desi Puspita; Yessi Jusman; Rohmat Indra Borman	11:00 - 11:15
1571155245	Brain Tumor Segmentation Using Ensemble Vanilla U-Net and Residual U-Net Models	Annisa Dwi Puspitarini; Raihan Adam Handoyo Winarso; <u>Yusril Falih Izzaddien</u> ; Chastine Fatichah; Hilya Tsaniya	11:15 - 11:30
1571155570	Implementation of The KNN Algorithm for Classification Population Density Levels Based on Satellite Imagery	<u>Fuzy Yustika Manik</u>	11:30 - 11:45
1571156506	Crop Yield Prediction on Worldwide Data Using Tabnet Regressor	<u>Dheovan Winata Alvian</u> ; <u>Jefferson Darren</u> , <u>Jonathan Hopi Pranata</u> , Muhamad Fajar and Puti Andam Suri	11:45 - 12:00
1571156743	Outdoor Image Dehazing Using Combination of Dark Channel Prior and U-Net Model	<u>Aziz Fikri Hudaya</u> ; I Gede Putra Kusuma Negara	12:15 - 12:30

1571156745	Analyzing Deep Learning in Quick, Draw!: A Case Study on Hand-drawn Sketch Recognition	<u>Bren Alden</u> and Natanael Timotius Thung; Ivan Sebastian Edbert and Alvina Aulia	12:30 - 12:45
1571166018	Hybrid LSTM-FCNN Framework for Multimodal Sentiment Classification on Mental Health-Related Social Media Posts on X	Erwin Budi Setiawan and <u>Defryan Aprisandani</u>	12.45 – 13.00

Parallel Session Online Room-7
Moderator : Dr Nasy'an Taufiq Al Ghifari, S.T., M.T
Location :

Paper ID	Title	Authors	Time
1571158159	Pose Analysis of Amateur Badminton Players Using Transformer-Based Models	<u>Muhammad Abdul Haq</u> ; Nurwahyu Alamsyah; Muhamad Amirul Haq; Slamet Riyadi	10:30 - 10:45
1571161104	A Comparative Study of Cosine Similarity and Manhattan Distance on Text Representations Using TF-IDF and Bag of Words	Vivi Indah Rahmawati, Luh Candra Ayu Julianty, Shabiha Rahma Fauziah and <u>Sulthan Rafif</u>	10:45 - 11:00
1571161221	Sentiment Analysis of Indonesian Hashtag #kaburajadulu Using CNN	<u>Arvyn Rezky Fahrezy</u> , Sabila Aralia Refina and Jessica Giovanna Chandra ; Soni Yora	11:00 - 11:15
1571162406	Comparative Analysis of Deep Learning Models for Edible Mushroom Image Classification	<u>Andoko Wijaya</u> , Benedictus Jason, Jonathan Justin Haryanto, Shania Priccilia and Diana Diana	11:15 - 11:30
1571162742	Machine Learning-Based Customer Lifetime Value Prediction Framework: An Integrated Approach Using Behavioral Intention Analytics in Digital Service Ecosystems	<u>Sabar Aritonang Rajagukguk</u>	11:30 - 11:45

1571163019	Enhanced Skin Disease Classification Using a Modified VGG19 Architecture and Curated Multisource Image Dataset	<u>Zul Indra</u> and Tisha Melia; Yessi Jusman; Evfi Mahdiah and Feri Candra	11:45 - 12:00
1571163094	Edge-AI Mobile Application for Real-Time Public Bus Arrival Information in Developing Countries	<u>Yahdina Ahsya</u> and Maya Fitria; Dalila Husna Yunardi; Diky Wahyudi, Muhammad Ichsan, Shaquille Rizki Ramadhan Na, Ade Maulana, Muhammad Aqshal Adzkia, Razief Perucha Fauzie Afidh, Khamdan Masduki and Rahmad Dawood	12:15 - 12:30
1571163141	Optimizing BERT for Fake Job Posting Detection: A Comparative Study for Data Augmentation Integrity and Model Performance	<u>Jonathan;</u> <u>Steven Valentino Taslim,</u> Kenzie Farrel, Almuzhidul Mujhid and Hidayaturrahman Hidayaturrahman	12:30 - 12:45
1571163200	Sentiment Analysis of Reviews Using Variants of BERT Models with Data Imbalance Handling Through Augmentation Techniques	<u>Arridho</u> <u>Ramadhan Firdaus;</u> Arif Nurwidyantoro	12:45 – 13:00

Parallel Session Online Room-8
Moderator : Muhammad Abdul Haq, S.Tr.T., M.Eng.
Location :

Paper ID	Title	Authors	Time
1571156750	Multi-Classification of Mental Illnesses through Social Media Posts Using RoBERTa	<u>Dimas Bramantyo Putra Santoso,</u> Melvern Michio Chie, Ivan Sebastian Edbert and Alvina Aulia	10:30 - 10:45
1571163768	Gold Price Forecasting Using CRISP-DM and Deep Sequential Networks: A	<u>Peniarsih Peniarsih; Atik Budi Paryanti; Iswandir Z.A</u>	10:45 - 11:00

	Performance-Driven Analysis			
1571163770	Real-Time Counting in Crowds Using YOLO11	Individual Using	<u>Muhammad Baari Adli</u> and Gamma Kosala	11:00 - 11:15
1571163778	Effectiveness of Artificial Intelligence in Automation Testing in Software Development Cycle		Dyah Wahyu Sukmaningsih; <u>Wilbur Haratua, Kevin Valentino and Felix Christian Handoko</u>	11:15 - 11:30
1571163820	Hybrid CNN-CatBoost Algorithm for Soil Carbon Stock Classification using GGE and Field Data		Erwin Budi Setiawan and <u>Ferdi Syahputra</u>	11:30 - 11:45
1571163830	Convolutional Neural Network Optimization Using Particle Swarm Optimization for Hijaiyah Letter Voice Recognition with MFCC Feature Extraction		Tri Andi and Syahrul; Syahrul; Ariesty Fujiastuti; <u>Alamshach</u>	11:45 - 12:00
1571163420	Deep Learning Approaches for Livestock Monitoring: Comparing YOLOv11 and Faster R-CNN for Chicken Detection		<u>Ahmad Masyhur;</u> <u>Musthafa Kamarul</u> Hawari Ghazali	12:00 - 12:15
1571163292	Typology of Offensive Play Styles in UEFA Champions League: A Machine Learning-Based Clustering Study		Nasy'an Taufiq Al Ghifari and <u>Adam Adam Hanafi</u>	12.30 - 12:45

Parallel Session Online Room-9
Moderator : Agung Mulyo Widodo, ST., M.Sc., Ph.D
Location :

Paper ID	Title	Authors	Time
1571163918	Modification Of YOLOv11n Algorithm Architecture to	<u>Randy Ardiansyah;</u> Wirarama Wedashwara;	10:30 - 10:45

	Improve Efficiency in Facial Acne Detection	Ario Yudo Husodo and Heri Wijayanto; Cahya Damarjati	
1571163937	Rubric-based Automated Essay Scoring and Providing Insightful Feedback by Utilizing LLM for Indonesian Language Academic Text	<u>Romasi Gohanna Sibarani,</u> Indriana Hidayah and Adhistya Erna Permanasari	10:45 - 11:00
1571163938	Automatic Distractor Generation with Syntagmatic Relation for Vocabulary Multiple Choice Questions using LLM	<u>Maria Eryestin Nahak,</u> Indriana Hidayah and Teguh Bharata Adji	11:00 - 11:15
1571164198	Enhancing Line Sharpness in Blind Image Super-Resolution using Diffusion Models Color Swapping	<u>Eric Saputra Lays</u> and Shintami Chusnul Hidayati; Wijayanti Nurul Khotimah	11:15 - 11:30
1571164215	IndoGroundingDINO: Monolingual Open-Vocabulary Visual Grounding with Swin-T and IndoBERT	<u>Diva Aninditha,</u> Suryo Adhi Wibowo and Koredianto Usman	11:30 - 11:45
1571165044	Movie Recommender System Using Weighted Hybrid Filtering with Restricted Boltzmann Machine and Recurrent Neural Network	Erwin Budi Setiawan and <u>Rachmat Fajrian Noer</u>	11:45 - 12:00
1571165291	Comparative Analysis of Machine Learning and Deep Learning for Air Quality Prediction Using Meteorological and Climate Data	<u>Andersen Chandra,</u> Laurentius Nicholas Nicholas, Alexander Agung Santoso Gunawan and Rilo Chandra Pradana	12:15 - 12:30
1571164202	Investigating the Limitation of Technical-Based Multivariate Time Series Modeling in Predicting Bitcoin Prices: A Case for Incorporating Exogenous Features	<u>Yafi Daffa Andriansyah</u> and Nasy'an Taufiq Al Ghifari	12:30 - 12:45

As a committee of **The 2nd International Conference on Information Technology and Computing 2024**, we take this opportunity to express our sincere appreciation to all the distinguished participants, speakers, and contributors who have made this event a remarkable success. This conference has brought together a diverse array of professionals, researchers, and academics, each contributing unique insights and fostering an environment of collaboration and innovation.

Yogyakarta, Indonesia, August 6th 2025

COMMITTEE ICITCOM 2025