



2025 12th International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2025)

Program

Ciputra Hotel Semarang, 25-26 September 2025

Hybrid Conference:

Offline: Ciputra Hotel Ballroom

Online: Zoom ID: Meeting ID: 876 9361 5010 Passcode: eecsi2025

07:30 - 08:00 Registration

08:00 - 08:40 Opening Ceremony

08:40 – 12:00 Keynote Speech

Moderator: Prof. Dr. Sri Arttini Dwi Prasetyowati

Department of Electrical Engineering, Universitas Islam Sultan Agung, Semarang, Indonesia

Keynote Speaker 1: Assoc. Prof. Dr. Uthayakumar Sowmmiya

Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, India

Keynote Speaker 2: Assoc. Prof. Dr. Noorminshah A. Iahad

Department of Applied Computing & Artificial Intelligence, Universiti teknologi Malaysia, Johor, Malaysia

Keynote Speaker 3: Prof. Dr. Muhamad Haddin

Department of Electrical Engineering, Universitas Islam Sultan Agung, Semarang, Indonesia

12.00-13.00 BREAK

13.00-15.00 Parallel Session I

15.00-15.15 BREAK

15.15-17.15 Parallel Session II

17.15-17.30 Closing Ceremony

R01: Parallel session R1

Moderator: Dr. Arief Marwanto

13:00 ForenSeeker: An Automated Digital Forensic Examination Platform with Open-source Tools Utilization

Stefanus Santori Zen, Jackson Sidabutar, Setiyo Cahyono and Tiya Yulita (Politeknik Siber dan Sandi Negara, Indonesia); Rheva Anindya Wijayanti (Politeknik Siber dan Sandi Negara, Indonesia & National Cyber and Crypto Polytechnic, Indonesia)

13:20 Text-to-Speech Digital Payment Notification System Using HTTP and MQTT

Tania Mahani Handojo, Ridwan Sanjaya and Andre Kurniawan Pamudji (Soegijapranata Catholic University, Indonesia)

13:40 The Impact of Low-Code/No-Code Platforms on the IT Industry: A Post-Adoption Study of Citizen Developers

Alvin Valentino (Binus University, Indonesia); Hari Husni (Bina Nusantara University, Indonesia)

14:00 Comparative Analysis of CNN and Sequence Models for Medical Image Captioning on Diabetic Foot Ulcer Images

Sri Mulyono (Diponegoro University, Indonesia & Universitas Islam Sultan Agung, Indonesia); Kusworo Adi and Aris Sugiharto (Diponegoro University, Indonesia)

14:20 A Hybrid Blockchain-Based Accounting System for Religious Educational Institutions

Lynetta Cindy Hermawan, Ridwan Sanjaya and Freddy Koeswoyo (Soegijapranata Catholic University, Indonesia)

14:40 Enhancing Stroke Detection Accuracy on Imbalanced Datasets Using SMOTE and Optimized SVM

Arief Marwanto, Imam Much Ibnu Subroto and Ghufron Ghufron (Universitas Islam Sultan Agung, Indonesia); Sam Farisa Chaerul Haviana (Universitas Diponegoro, Indonesia & Universitas Islam Sultan Agung, Indonesia); Andi Riansyah (Universitas Islam Sultan Agung, Indonesia & Universitas Diponegoro, Indonesia)

15:00 Coffee Break

15:20 Field-Weighted Citation Impact Measurement for Indonesian Scientific Publications Using GROBID and Zero-Shot Text Classification

Muhammad Azka Adhisetama, Indah Soesanti and Sunu Wibirama (Universitas Gadjah Mada, Indonesia); Imam Much Ibnu Subroto (Universitas Islam Sultan Agung, Indonesia)

15:40 Integrating SHAP-based Explainable AI and Linear Regression for Transparent Fuel Volume Prediction in Fleet Management

Perpetua Lacorunha Purba (Soegijapranata Catholic University, Indonesia); Albertus Dwiwoga Widianoro (Soegijapranata Catholic University & Jl. Pawiyatan Luhur 4/1, Indonesia); Stephani Ingrid Swastini Dewi (Soegijapranata Catholic University, Indonesia)

16:00 *Recent Advances in the Rice Leaf Diseases Prediction Using Convolutional Neural Networks with Transfer Learning Methods: Concepts, Architectures, Challenges, and Future Directions*

Abdul Azis, Aa (Amikom Purwokerto, Indonesia); Tole Sutikno (Universitas Ahmad Dahlan & Universiti Teknologi Malaysia, Indonesia); Abdul Fadlil (Universitas Ahmad Dahlan, Indonesia)

R02: Parallel session R2

Moderator: Dr. Suryani Alifah

13:00 Hierarchical Forecasting of Load Consumption from Residential Dwellings with AutoARIMA and LightGBM Approach

Michel Angelo R Sucaldito and Conrado Ostia, Jr (Mapua University, Philippines)

13:20 Contingency Severity Classification Using Machine Learning: a Comparative Study on Tasikmalaya Power Subsystem

Muhammad Reynaldi (Gadjah Mada, Indonesia); Sasongko Hadi (Universitas Gadjah Mada, Indonesia); Husni Rois Ali (UGM, Indonesia)

13:40 Semaui Island Generation Expansion Planning Considering Economic Value of Carbon

Duwi Hasan Prakoso (Universitas Gadjah Mada & PT PLN (Persero), Indonesia); Fransisco Danang Wijaya and Roni Irnawan (Universitas Gadjah Mada, Indonesia)

14:00 Designing Secondary Frequency Control of Grid-Forming Inverter for Isolated Microgrid with Photovoltaic System

Akhrim Oktaviano, Adi Soeprijanto and Djoko Purwanto (Institut Teknologi Sepuluh Nopember, Indonesia)

14:20 Photovoltaic System Assesment for Water Pumping Station Case Study: Pasir Kraton Kramat Pump Station at Pekalongan City

Mochammad Facta, Alfia Putri Wulandari and Aghus Sofwan (Diponegoro University, Indonesia); Muhammad Rofiq Maududi (Universitas Diponegoro, Indonesia); Iwan Setiawan and Karnoto Karnoto (Diponegoro University, Indonesia)

14:40 Electromagnetic Comparison of Various Rotor Configuration of Permanent Magnet Generator for Renewable Energy Application

Raja Nor Firdaus Kashfi Raja Othman (Universiti Teknikal Malaysia Melaka & Universiti of Putra Malaysia, Malaysia); Ngatono Ngatono and Md Nazri Othman (Universiti Teknikal Malaysia Melaka, Malaysia); Hanif Hanif Sallehuddin (Universiti Teknikal Malaysia Malaysia Melaka, Malaysia); Mohd Zulkifli Ab Rahman (Universiti Teknikal Malaysia Melaka & Politeknik Sultan Mizan Zainal Abidin, Malaysia)

15:00 Coffee Break

15:20 Optimization of Distribution Network Reconfiguration Using Archimedes Algorithm to Enhance FLISR Readiness at Sentul Substation

Tribagja Manoptika and Mokhammad Setyonegoro (Universitas Gadjah Mada, Indonesia)

15:40 Color Identification and Detection Based on Artificial Neural Network to Help Color Blind People

Eka Nuryanto Budisusila and Munaf Ismail (Universitas Islam Sultan Agung, Indonesia); Jenny Putri Hapsari (Faculty of Industrial Engineering, Universitas Islam Sultan Agung, Indonesia)

16:00 *Detection of Food Adulteration Using Fuzzy Logic Based Gas Sensors*

Munaf Ismail, Eka Nuryanto Budisusila and Sri Arttini Dwi Prasetyowati (Universitas Islam Sultan Agung, Indonesia)

16:20 *Development of an Automated Shelling System for Morocho Corn Utilizing Machine Learning and Sensor Technologies*

Tim Miguel Meza Valencia, Katherine Lucero Cardeal-Aliaga, Alexis Cristian Verastegui-Orosco, Manuel Michael Beraún-Espíritu and Albert Justiniano-Medina (Universidad Continental, Peru); Joko Hariyono (Universitas Sebelas Maret, Indonesia)

16:40 *Carbon Monoxide Concentration Prediction System Using Fuzzy Time Series-Markov Chain in Semarang*

Ali Bardadi and Budi Warsito (Universitas Diponegoro, Indonesia); Bayu Surarso (Faculty of Science and Mathematics, Diponegoro University, Indonesia)

R03: Parallel session R3

Moderator: Dr. Agus Adhi Nugroho

13:00 *Dynamic Measurement Matrix for Frame-wise Compressed Sensing of GPR Signals: Performance Evaluation Across Multiple Compression Ratios*

Muhammad Chaerullah (Politeknik Astra, Indonesia & Telkom University, Indonesia); Aloysius Adya Pramudita, Koredianto Usman and Fiky Suratman (Telkom University, Indonesia)

13:20 *EfficientNetB0-Based Recognition of Arabic Sign Language for Quranic Recitation Support*

Aris Rakhmadi (Universitas Muhammadiyah Surakarta, Indonesia & Universitas Muhammadiyah Yogyakarta, Indonesia); Siska Khairunnisa and Muhammad Syahriandi Adhantoro (Universitas Muhammadiyah Surakarta, Indonesia); Slamet Riyadi (Universitas Muhammadiyah Yogyakarta, Indonesia); Anton Yudhana (Universitas Ahmad Dahlan, Indonesia); Sunardi Sunardi (UAD, Indonesia)

13:40 *Vehicle Detection and Classification using YOLOv8*

Joko Hariyono, Talib Sahdha Wibowo, Sutrisno Ibrahim, Faisal Rahutomo, Subuh Pramono, Muhammad Hamka Ibrahim and Meiyanto Eko Sulisty (Universitas Sebelas Maret, Indonesia)

14:00 *Forensic Analysis of Deterioration in Archival Newspapers Using Multiband Imaging Techniques*

Imam Yuadi (Airlangga University, Indonesia); Nisak Nazikhah (Hasyim Asy'ari University, Indonesia); Khoirun Nisa' (Airlangga University, Indonesia)

14:20 *A Novel Approach to Responding to Key Data Anomalies Using Unsupervised Learning: Work In Progress*

Feri Hari Utami, Jr (Universitas Sriwijaya Palembang, Indonesia & Universitas Dehasen Bengkulu, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); Dian Palupi Rini (Universitas Sriwijaya, Indonesia); Anto Satriyo Nugroho (BPPT, Indonesia); Lukman Lukman (Indonesian Institute of Science, Indonesia)

14:40 *Analysis of Factors Affecting Environmental Quality with Machine Learning*

Andi Riansyah (Universitas Islam Sultan Agung, Indonesia & Universitas Diponegoro, Indonesia); Purwanto P (Universitas Diponegoro, Indonesia); Rahmat Gernowo (Information System School of Postgraduate Diponegoro University, Indonesia)

15:00 Coffee Break

15:20 *A Systematic Review of Artificial Intelligence in Mobile Fitness Apps: Pathways to Goal Attainment*

Yanyan Zhang and Noorminshah A. Iahad (Universiti Teknologi Malaysia, Malaysia)

15:40 *Leveraging the XGboost Model for Property Stock Recommendations Based on Technical Analysis*

Muhammad Iko Wardhana and Imam Much Ibnu Subroto (Universitas Islam Sultan Agung, Indonesia); Ashraf Osman Ibrahim (UTM, Malaysia); Noor Suhana Sulaiman (University College TATI, Malaysia)

16:00 *Navigating Vision-based Autonomous Excavator Robot Using Deep Reinforcement Learning*

Andhika Indra Laksana (Gadjah Mada University, Indonesia); Ahmad Ataka, Igi Ardiyanto, Prapto Nugroho and Naufal Mu'afi (Universitas Gadjah Mada, Indonesia); Muhammad Rizqi Subeno (Gadjah Mada University, Indonesia)

16:20 *Performance Analysis of PSRAM, LittleFS, and SPIFFS in Real-Time Speech Processing on ESP32-Based IoT Devices*

Matthew Amadeus Sugihartono, Ridwan Sanjaya and Stephani Inggrit Swastini Dewi (Soegijapranata Catholic University, Indonesia)

16:40 *Transmissive Dual-band Polarization Converter Based on Metal-Only Metasurface at V-Band*

Mudrik Alaydrus, Dian Widi Astuti and Umaisaroh Umaisaroh (Universitas Mercu Buana, Indonesia); Noor Asniza Murad (University Technology Malaysia, Malaysia); Defi Lestari (Indonesia)

Z04: Parallel Session Z4

Moderator: Bagus Satrio Waluyo Poetro, M.CS

13:00 Enhancing Depression Detection Accuracy with Time and Frequency Domain Features Extracted from EEG Signals

Mera Kartika Delimayanti (Politeknik Negeri Jakarta, Indonesia & Academic Support Unit for Information and Communication Technology, Indonesia); Dewi Yanti Liliana (State Polytechnic of Jakarta, Indonesia); Wiwi Prastiwinarti (Politeknik Negeri Jakarta, Indonesia); Mohammad Reza Faisal (Lambung Mangkurat University, Indonesia); Rizky Adi and Dea Luthfina Azzahra (Politeknik Negeri Jakarta, Indonesia)

13:15 Multi-Lead Heart Arrhythmia Classification using Optical Neural Network Based on Mach-Zehnder Interferometer

Ahmed Toman Thahab and Samir Jasim Mohammed (University of Babylon, Iraq); Ibraheem Abdulla (Babylon University, Iraq)

13:30 Capacitive Loading Techniques for Miniaturization of Implantable Self-resonant Tags

Baraa F Al-Azzawi (University of Information Technology and Communications, Iraq); Jonathan Rigelsford (Sensata Technologies, United Kingdom (Great Britain))

13:45 High-Fidelity Artificial Medical Image Generation designed for Rare Tissues Using Diffusion Models Enhancing Diagnostic Accuracy and AI Training

Wassan Saad Abduljabbar Hayale, Rasha S. Ali and Raghda Abd Ul Rab Abd Ul Hasan (Aliraqia University, Iraq); Israa Majeed Ali (Al-Iraqia University, Iraq)

14:00 Enhancing Early Detection of Diabetes Mellitus Type 2 using Machine Learning and Class Balancing

Gathan Al Dhafa Raihan Putra Pratama, Aryaputra Ekalaya Gumay, Jacky Jufonda and Risma Yulistiani (Bina Nusantara University, Indonesia)

14:15 Grid-Based Human Mobility Prediction Using Deep Sequential Models and H3 Indexing

Aetandrian Widya Raharjo and Widy Widyawan (Gadjah Mada University, Indonesia); Indriana Hidayah (Universitas Gadjah Mada, Indonesia)

14:30 AI model for early language learning and supporting children with speech delays

Denis Mušić (University Dzemal Bijedic, Bosnia and Herzegovina)

14:45 Target User Recognition Based on Gesture Detection Using 360-Degree Camera

Rocel Ann B Belesario and Florence D. Dela Cruz (Polytechnic University of the Philippines - Sta. Rosa Campus, Philippines); Mark Cristofer P Mañibo (Polytechnic University of the Philippines - Sta. Rosa Campus, Philippines); Krysztin Aeiyn Francis Licup, Kaithe Aubrey L Santos and Roselito E. Tolentino (Polytechnic University of the Philippines - Sta. Rosa Campus, Philippines)

15:00 Coffee Break

15:15 *Leveraging AI for enhancing emotional and cognitive well-being in elderly populations*

Denis Mušić (University Dzemal Bijedic, Bosnia and Herzegovina)

15:30 *Ethically-Constrained Mental Health Chatbot for University Students: A Context-Aware NLP System using LLMs*

Rizma Adlia Syakurah (Universitas Sriwijaya, Indonesia); Latius Hermawan (Universitas Sriwijaya & Universitas Katolik Musi Charitas, Indonesia); Meilinda Meilinda (Universitas Sriwijaya, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); Muhammad Qurhanul Rizqie (Universitas Sriwijaya, Indonesia); Noer Triyanto Rusli (Universitas Indo Global Mandiri, Indonesia)

15:45 *Optimizing Emotion Classification in Text Using TF-IDF, SMOTE, and GridSearchCV with Multiple Machine Learning Models*

Mahazam Afrad, M. Yoka Fathoni and Arif Riyandi (Telkom University, Indonesia)

16:00 *Implementation of Single Shot Detector Method: Smoking Detection in No Smoking Area*

Andi Riansyah (Universitas Islam Sultan Agung, Indonesia & Universitas Diponegoro, Indonesia); Muhammad Qomaruddin (Universitas Islam Sultan Agung (UNISSULA), Indonesia); Ahmad Tri Yulianto and Moch Taufik (Universitas Islam Sultan Agung, Indonesia); Noorminshah A. Iahad (Universiti Teknologi Malaysia, Malaysia); Laksita Kusuma Wardhani Sita, Laksita (Islam Sultan Agung University, Indonesia & Universitas Islam Sultan Agung, Indonesia)

16:15 *Quantifying Health System Collapse: Visual Forensics of Indonesian Hospital in Gaza Using Photo Severity Index*

Rizma Adlia Syakurah (Universitas Sriwijaya, Indonesia); Rian Rahmanda Putra (State Polytechnic of Sriwijaya, Indonesia)

16:30 *Local-Based Artificial Intelligence Implementation in a Mobile Application for Early Detection of Mental Health Disorders among Indonesian Adolescents: Case Study and Effectiveness Evaluation*

Muhammad Yunus Rangkuti, M.Kom (Dosen, Indonesia & Universitas pamulang, Indonesia)

16:45 *Evaluating Computational Sustainability In Instance Segmentation For Biological Contamination*

Fatih Seida (Institut Teknologi Bandung, Indonesia); Kridanto Surendro (Bandung Institute of Technology, Indonesia)

Z05: Parallel Session Z5

Moderator: Sam Farisa CH, M.Kom

13:00 Cost-Optimal Scheduling in Electric Vehicle-Enabled Microgrids

Duy C Huynh (HUTECH University); Hieu M Pham (HUTECH University, Vietnam); Ho Dac Loc (HUTECH, Vietnam); Matthew Dunnigan (Heriot-Watt University, United Kingdom (Great Britain)); Corina Barbalata (Louisiana State University, USA)

13:15 A Compact and High-Efficiency Bidirectional DC-DC Converter for Electric Vehicles

Tole Sutikno (Universitas Ahmad Dahlan & Universiti Teknologi Malaysia, Indonesia); Hendril Satrian P (Embedded System and Power Electronics Research Group (ESPERG), Indonesia & Institute of Advance Engineering and Science (IAES), Indonesia); Ahmad Raditya Cahya Baswara (Universitas Ahmad Dahlan, Indonesia & Universitas Gadjah Mada, Indonesia)

13:30 Forecasting Performance Degradation in Dye-Sensitized Solar Cells Using Statistical Time-Series Modeling

Rahmawati Rahmawati and Zainuddin Nawawi (Universitas Sriwijaya, Indonesia); Bhakti Suprpto (University of Sriwijaya, Indonesia); Tresna Dewi (Politeknik Negeri Sriwijaya, Indonesia)

13:45 Impact of Distributed Energy Resources on Transient Stability in a Medium Voltage Microgrid

Syafii Syafii and Andromeda Ahbar Musabbih (Universitas Andalas, Indonesia)

14:00 Design, Optimization, and Economic Assessment of Floating Solar Photovoltaic Systems: A Literature Review with Application to Nangbéto Dam

Débola Mikemina (Université Abomey Calavi (UAC), Benin); Patrice Chetangny (Polytechnic School of Abomey-Calavi, Benin); Mawuena Medewou (University of Abomey-Calavi Abomey-Calavi, Benin); Victor Zogbochi (University of Abomey-Calavi, Benin); Macaire Agbomahena (University of Abomey-calavi, Benin); Didier Chamagne (FEMTO-ST - UMR CNRS 6174, Benin)

14:15 Integrated Optimization of Demand-Side Management and Battery Storage in a Microgrid for Cost-Effective and Reliable Operation

Duy C Huynh and Hieu M Pham (HUTECH University, Vietnam); Khai H. Nguyen (Committee of People of NinhThuan, Vietnam); Ho Dac Loc (HUTECH, Vietnam); Matthew Dunnigan (Heriot-Watt University, United Kingdom (Great Britain)); Corina Barbalata (Louisiana State University, USA)

14:30 Design and Construction of a Solar-Powered Electrolytic Hydrogen Production System

Dezetty Monika, Juliansyah Prasetya Nurwafii, Muchlishah Muchlishah, Nuha Nadhiroh, Fatahula Fatahula and Fiqi Mutiah (Politeknik Negeri Jakarta, Indonesia)

14:45 Monitoring the Charging of a Lithium-Ion Battery from a Photovoltaic Source Using a PZEM-017 Sensor via the ESP32-Based Internet of Things

Tole Sutikno (Universitas Ahmad Dahlan & Universiti Teknologi Malaysia, Indonesia); Tri Wahono (Ahmad Dahlan University, Indonesia); Mohd Hatta Jopri (Universiti Teknikal Malaysia Melaka, Malaysia)

15:00 Coffee Break

15:15 *Impact of Network Reinforcement on Transient Stability in the North Sulawesi-Gorontalo Interconnection*

Dimas Angga Putra (Universitas Gadjah Mada, Indonesia & PT PLN (Persero), Indonesia); Avrin Nur Widiastuti (UGM, Indonesia); Sasongko Hadi (Universitas Gadjah Mada, Indonesia)

15:30 *Optimal Capacitor Placement for Voltage Profile Improvement Using PSO: A Case Study in PLN UP3 Tanah Bumbu*

Abdul Azis (UGM, Indonesia & PLN, Indonesia); Yohan Fajar Sidik (Universitas Gadjah Mada, Indonesia); Avrin Nur Widiastuti (UGM, Indonesia)

15:45 *Performance Comparison of P&O, InC, and PSO for PV Optimization*

Dimas Saifur Rizal and Mochammad Facta (Diponegoro University, Indonesia); Andhika Prastawa (National Agency for Research and Innovation Indonesia, Indonesia)

16:00 *Performance Evaluation and Impact Analysis of AVR and Exciter Parameters on the Dynamic Behavior of a Synchronous Generator Through Parameter Estimation*

Theekshana Nikaweratiya and Hansi Perera (General Sir John Kotelawala Defence University, Sri Lanka)

16:15 *Optimizing the Output Voltage of PSFB Converter Using PI-PSO Algorithm Under Load Variation*

A Rajif Ma'arif (Universitas Diponegoro, Indonesia); Iwan Setiawan and Mochammad Facta (Diponegoro University, Indonesia)

16:30 *Techno-Economic Analysis of Grid-Connected Rooftop Solar Power Plants for Residential and Commercial Sectors in Banyumas, Indonesia*

Itmi Hidayat Kurniawan (Universitas Muhammadiyah Purwokerto, Indonesia & Universitas Muhammadiyah Yogyakarta, Indonesia); Sadham Arbian (Universitas Muhammadiyah Purwokerto, Indonesia); Anna Nur Nazilah Chamim (Universitas Muhammadiyah Yogyakarta, Indonesia & Universiti Malaysia Perlis, Malaysia); Sheik Mohammed Sulthan (Universiti Teknologi Brunei, Brunei Darussalam); Latiful Hayat and W Winarso (Universitas Muhammadiyah Purwokerto, Indonesia)

16:45 *The Impact of Agrivoltaic Integration to the Grounding Performance of a 5 MWp Ground-Mounted Photovoltaic System in Kupang, Indonesia*

Sulaiman A, Julius Tanesab, Avelino Daduk and Duma Pabiban (Politeknik Negeri Kupang, Indonesia)

17:00 *Grid integration of photovoltaic solar power plants in Benin: a multi-criteria approach*

Métolé Franck Kpassassi (LETIA Laboratoire d'Electrotechnique de Télécommunications et d' Informatique Appliquée, Benin); Patrice Chetangny (Polytechnic School of Abomey-Calavi, Benin); Victor Zogbochi (University of Abomey-Calavi, Benin); Macaire Agbomahena (University of Abomey-calavi, Benin); Didier Chamagne (FEMTO-ST - UMR CNRS 6174, Benin); Gerald Barbier (Université de Haute Alsace, France)

16:15 *Evaluation of Chunking Strategies in RAG Application for Explicit Retrieval on Indonesian Language Scientific Papers*

Sam Farisa Chaerul Haviana (Universitas Diponegoro, Indonesia & Universitas Islam Sultan Agung, Indonesia);
Munawar Riyadi (Diponegoro University, Indonesia); Retno Kusumaningrum (Universitas Diponegoro,
Indonesia)

Z06: Parallel Session P6

Moderator: Moch Taufik, MIT

13:00 CMOS Clock Recovery Circuit for FSK Demodulator in WPD T Applications

Mohd Khairi Khairi Bin Bin Zulkalnain and Naqeeb Ullah (Kyushu University, Japan); Adel Barakat (eSync SSB, Inc., Japan); Haruichi Kanaya (Kyushu University, Japan)

13:15 Performance Analysis of Homogeneous and Heterogeneous Network-on-Chip Architectures

Md Amirul Islam (Dept. of Information Engineering, University of Pisa, Italy); Giovanni Stea (University of Pisa, Italy)

13:30 Integration of Cross-Vendor PLCs Using Modbus TCP/IP Protocol in Industrial Automation Systems

Murie Dwiyaniti, Md, Hatib Setiana, Respati Prajna Vashti, Nuha Nadhiroh, Danang Widjajanto, Adam Risky Muharam, Rizqi Elok Fatimah Lutfi and Nanda Afrian Nurzaha (Politeknik Negeri Jakarta, Indonesia)

13:45 Robust Consensus Control for Uncertain Nonlinear Fractional-Order Multi-Agent Systems Using Adaptive Reinforcement Learning

Mohammad Fiuzy (LIT Secure and Correct Systems Laboratory Johannes Kepler University, Austria); Stefan Rass (Johannes Kepler University & Universitaet Klagenfurt, Austria)

14:00 Design and Implementation of FOFA: A Smart Floating Feeder System for Sustainable Shrimp Farming

Yuning Widiarti (Politeknik Perkapalan Negeri Surabaya, Indonesia); Budianto Budianto (Shipbuilding Engineering, Indonesia); Agus Khumaidi and Sumardiono Sumardiono (Politeknik Perkapalan Negeri Surabaya, Indonesia); Irma Rustini (PPNS, Indonesia)

14:15 A Preliminary Study on an IoT-Based Landslide Early Warning System Using LoRa Communication

Ruliyanta Ruliyanta (Universitas Nasional, Indonesia & Universiti Teknikal Malaysia Melacca, Malaysia); Viktor Vekky Ronald Repi and Muhamad Arrivo Al Izhar (Universitas Nasional, Indonesia)

14:30 Development of IoT-based Early Warning System for Weather Disaster using LoRA

Munawar Riyadi, Ferdian D Darmawan, Akhlis S R Prastika, Galang Priyohutomo, Aghus Sofwan and Teguh Prakoso (Diponegoro University, Indonesia)

14:45 Internet of Things-based Air Quality Monitoring System using Carbon Monoxide and Particulate Matter Parameters

Tole Sutikno (Universitas Ahmad Dahlan & Universiti Teknologi Malaysia, Indonesia); Watra Arsadiando (Embedded Systems and Power Electronics Research Group (ESPERG), Indonesia); Hendril Satrian P (Embedded System and Power Electronics Research Group (ESPERG), Indonesia & Institute of Advance Engineering and Science (IAES), Indonesia)

15:00 Coffee Break

15:15 Improved AMR Localization Using Dual RGB-D Cameras and 3D Monte Carlo Localization

Muhammad Azhar Ismail, Alfian Noor Faizal, Muhammad Zakiyullah Romdlony and Azam Zamhuri Fuadi (Telkom University, Indonesia); Anggera Bayuwindra (Bandung Institute of Technology, Indonesia)

15:30 Implementation of PSO Algorithm for Multi-AGV Task Scheduling with Collision Avoidance in Warehouse Environment

Ryan Pribadi, Muhammad Zakiyullah Romdlony and Angga Rusdinar (Telkom University, Indonesia); Norhaliza Abdul Wahab (Research Supervisor, Malaysia); Muhammad Azhar Ismail (Telkom University, Indonesia)

15:45 Design and Control Strategy for Standalone PV Applications with a Hybrid Energy Storage System

Heba Mohammed Saeed Haji (University of Mosul, Iraq); Mohammad Mostafa (UOM, Iraq)

16:00 Estimation of PV Power Generation from Predicted GHI Using Satellite Imagery and Deep Learning (CNN and LSTM)

Amirul Asyraf Mohd Rafi (Universiti Teknologi MARA (UiTM), Malaysia); Norliza Mohamad Zaini and Mohd. Fuad Abdul Latip (Universiti Teknologi MARA, Malaysia)

16:15 Fast Charging of Lithium-Ion Batteries for Electric Vehicles: Concepts, Challenges, and Future Directions

Tole Sutikno (Universitas Ahmad Dahlan & Universiti Teknologi Malaysia, Indonesia); Tri Wahono (Ahmad Dahlan University, Indonesia); Mohd Hatta Jopri (Universiti Teknikal Malaysia Melaka, Malaysia)

16:30 Classification of Induction Motor Rotor Bar Damage Using Discrete Wavelet Transform and Artificial Neural Network

Hilmaniyya Hilmaniyya, Aghus Sofwan and Mochammad Facta (Diponegoro University, Indonesia); Trias Andromeda (Universitas Diponegoro, Indonesia); Karnoto Karnoto (Diponegoro University, Indonesia); Shahrin Md Ayob (University Teknologi Malaysia, Malaysia)

16:45 Electrical Generator Fault Detection Using Artificial Intelligence Approaches

Arvina Rizqi Nurul'aini, Mohammad Mahruf Alam and Rizky Ajie Aprilianto (Universitas Negeri Semarang, Indonesia); Tole Sutikno (Universitas Ahmad Dahlan & Universiti Teknologi Malaysia, Indonesia); Tri Wahono (Ahmad Dahlan University, Indonesia); Mochammad Facta (Diponegoro University, Indonesia)

17:00 New Energy Management Strategy in Microgrid by Optimizing Battery Control

Adhi Kusmantoro (Universitas PGRI Semarang & UPGRIS, Indonesia)

Z07: Parallel session Z7

Moderator: Rieska Ernawati, MT

13:00 *Beyond Black-Box Explanations: Monte Carlo Dropout for Uncertainty-Aware Explainable AI in Marketing Analytics*

Nitin Kumar (Marriott International, USA); Vipin Kataria (Picarro, USA)

13:15 *Effectiveness of Chatbots in Improving Customer Service Response in E-Commerce Applications*

Prabdeep (BINUS, Indonesia); Sudiana Sudiana (Bina Nusantara University, Indonesia)

13:30 *Evaluating CNN-BiLSTM for Sentiment Classification in Indonesian App Reviews: The Role of Label Granularity and Lexicon Features*

Winda Kurnia Sari, Ricy Firnando and Zaqqi Yamani (Universitas Sriwijaya, Indonesia); Yurni Oktarina (Polytechnic Sriwijaya Palembang-Indonesia, Indonesia)

13:45 *Faithful by Design: Improving Large Language Model Rationales through Counterfactual Consistency Verification*

Nitin Kumar (Marriott International, USA); Vipin Kataria (Picarro, USA)

14:00 *Aspect-Based Sentiment Analysis with IndoBERT for Mapping Public Perception of Nusantara's Capital in Smart City Domains*

Kesi Restian Dwi Pujawati and Herry Irawan (Telkom University, Indonesia)

14:15 *BERT-Based Classification of CVSS Metrics from Vulnerability Descriptions*

Belgis Anggita and Badieah Badieah (Universitas Islam Sultan Agung, Indonesia)

14:30 *CombiBERT: Choosing the Best Layers Combination in Sentence-BERT Model Variant to Reduce Losses in Knowledge Distillation*

Willy Lau and Sani M. Isa (Bina Nusantara University, Indonesia)

14:45 *Integrating Technology Acceptance Model, Digital Twin, and Fuzzy Analytic Hierarchy Process in Public Sector Digital Transformation: A Systematic Literature Review*

Sudarmawan Sudarmawan (AMIKOM Yogyakarta University, Indonesia); Ema Utami and Kusrini Kusrini (Universitas AMIKOM Yogyakarta, Indonesia); Alva H Muhammad (Universitas Amikom Yogyakarta, Indonesia)

15:00 Coffee Break

15:15 *Forecasting Indonesia's Marine Commodity Export Sales Using Clustering and Deep Learning*

Michael Simaela Tarima (Bina Nusantara University, Indonesia); Aidan Rafif Djalins (BINUS University, Indonesia); Raysteven Lietianto (Bina Nusantara University, Indonesia); Lili Ayu Wulandhari (Universitas Bina Nusantara, Indonesia)

15:30 Database Design of Context-Input-Process-Product Evaluation Application Based on Weighted Product

Dewa Gede Hendra Divayana, Wayan Sugandini, Made Susi Lissia Andayani, Luh Putu Eka Damayanthi, Ni Ketut Erawati and I Komang Gede Sukawijana (Universitas Pendidikan Ganesha, Indonesia)

15:45 Enhancing Degree Prediction with a Hybrid Learning Model: Combining Academic Performance and Affective Sentiment Analysis Using Decision Tree and SVM

Bell S. Campanilla (Cebu Technological University-Main Campus, Philippines)

16:00 Analysis of the TOPSIS Method for Ranking Flood Risk Areas in Denpasar City Using Python

Adie Wahyudi Oktavia Gama, Faiqotul Himma and I Gusti Ngurah Putu Dharmayasa (Universitas Pendidikan Nasional, Indonesia); I Putu Sugiana (Universitas Udayana, Indonesia)

16:15 A Program Study Plan Recommender System based on the Greedy Algorithm

Ryndel Amorado and Jerome M Fabregar (Batangas State University, Philippines)

16:30 SIGNIFY: A Bidirectional Sign Language Communication System to Real-Time Text and Voice Translation

Richelle M Sulit, Laud Zion Cascalla, Max Daniel De Silva and Kyla Andes (Batangas State University, Philippines)

16:45 Analyzing Indonesian X Platform Users Sentiment Towards Video Assistant Referee Usage Using Natural Language Processing

Daniel Rhivaldo (Binus University, Indonesia); Christopher Walandi (Bina Nusantara University, Indonesia); Evaristus Didik Madyatmadja (Bina Nusantara University & School of Information Systems, Indonesia)

17:00 Integration of BERT Model and Temporal Clustering for Real-Time Detection of Events on Social Media

Muhammad Syahriandi Adhantoro, Aris Rakhmadi and Helmi Imaduddin (Universitas Muhammadiyah Surakarta, Indonesia); Rifqi Fauzi Rahmadzani (Universitas Islam Batik, Indonesia); Ganno Tribuana Kurniaji (Universitas Gadjah Mada, Indonesia); Naufal Ishartono (Universitas Muhammadiyah Surakarta, Indonesia)

Z08: parallel session Z8

Moderator: Sri Mulyono, MT

13:00 *Assessing the Awareness and Preparedness of Indonesian College Students Against Cyber Threats*

Audry Fadlan Shang Ardhiyasa and Dedy Syamsuar (Bina Nusantara University, Indonesia)

13:15 *Active Learning and Uncertainty-Driven Labeling for Improving Financial Risk Models in B2B Corporate Client*

Carolus Borromeus Widiyatmoko (Diponegoro University, Indonesia & Telkom Indonesia, Indonesia); Rahmat Gernowo (Information System School of Postgraduate Diponegoro University, Indonesia); Budi Warsito (Universitas Diponegoro, Indonesia)

13:30 *Performance Analysis of BB-HIBE Scheme for Key Exchange in Early Warning System*

Nita Nur Qarinah, Favian Dewanta and Farah Afianti (Telkom University, Indonesia)

13:45 *Automated Attendance System for Face-to-Face, Online Synchronous, and Online Asynchronous Using VGG-FACE and Facebook DeepFace Ensemble Learning Technique for Facial Recognition*

Kerby T. Olmillo and Juliam Homer A. Piedad (Mapua University, Philippines); Ramon Garcia (Mapua Institute of Technology, Philippines)

14:00 *Comparative Performance Analysis of GAN Architectures for Grayscale Image Generation: Stability, Efficiency, and Image Quality*

Joseph Clio Limantara (Sepuluh Nopember Institute of Technology, Indonesia & Bank Maspion Indonesia, Indonesia); Darlis Herumurti (Institut Teknologi Sepuluh Nopember, Indonesia & ITS, Indonesia)

14:15 *Digital transformation in modern football: A systematic literature review and technological framework for VAR technology and player monitoring systems*

Raga Ahmad Ghifari (Binus University, Indonesia); Sudiana Sudiana (Bina Nusantara University, Indonesia)

14:30 *A Comparative Analysis of Custom CNN, Inception-V3, MobileNet, ResNet-50, and VGG-19 in Detecting AI-Generated Images*

Verindra Hernanda Putra, Zahra Amiera Putri Sailendra, Marcelia Chintya Hartakaadi, Rafi Andhika Putra Pratama and Felix Corputty (Telkom University, Indonesia)

14:45 *UDP Flood Attack Detection in IoT Networks Using Decision Tree Algorithm*

Nurul Afifah (Universitas Sriwijaya, Indonesia); Riki Andika (PT. Petrosea, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); Elisa Dwi Nanda and Septiani Kusuma Ningrum (Universitas Sriwijaya, Indonesia); Anto Satriyo Nugroho (National Research and Innovation Agency, Indonesia)

15:00 Coffee Break

15:15 *Malware Detection in Executable Files Using Dynamic Analysis and Gaussian NB*

Septiani Kusuma Ningrum (Universitas Sriwijaya, Indonesia); Fahron (PT MSBU Konsultan Indonesia, Indonesia); Nurul Afifah, Nensi Fitriyanti and Muhammad Qurhanul Rizqie (Universitas Sriwijaya, Indonesia); Indrajani Sutedja (Binus University, Indonesia & BCA, Indonesia)

15:30 *Developing Multi-GRU Architectures for DDoS Attack Detection in IoT Environments: Work in Progress*

Abdul Rahim (Universitas Dinamika Bangsa, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); Hadipurnawan Satria (Universitas of Sriwijaya, Indonesia); Kurniabudi Kurniabudi (Universitas Dinamika Bangsa, Indonesia); Didi Rosiyadi (National Research and Innovation Agency, Republic of Indonesia, Indonesia); Rahmat Budiarto (Al Baha University, Saudi Arabia)

15:45 *Design and Development of Serial Hub as a Monitoring System at Networking Practice Course using Raspberry Pi*

Adnan Fauzi, Elang Prasakti Ghani, Muhammad Amri Hakim, Darul Fahri, Dania Eridani and Adian Fatchur Rochim (Diponegoro University, Indonesia)

16:00 *Latency Compensation and State Synchronization Using Unity Netcode*

Jos Timanta Tarigan, Alexander Yuanata and Handrizal Handrizal (Universitas Sumatera Utara, Indonesia)

16:15 *Real-Time Energy Monitoring Using Message Identifiers In IoT Mesh*

Bintang Hadi Dharma (University Ahmad Dahlan, Indonesia); Imam Riadi (Ahmad Dahlan University & Yogyakarta, Indonesia); Riky Dwi Puriyanto (Universitas Ahmad Dahlan, Indonesia); Tri Wahono (Ahmad Dahlan University, Indonesia)

16:30 *Cultivating Agile Software Development Teams through IT Servant Leadership: Strategies for Success*

Dhivya Guru (Anna University, India); Vinaya Kumar Jyothi (Acharya Nagarjuna University, India); Ashok Morsu (ThermoFisher, USA); Karthik Kudithipudi (Central Michigan University, USA); Renjith Kathalikkattil Ravindran (Castlight Health, USA); Sanjay Kumar Polampally (Pharma, USA); Sharat Kumar Ragunayakula (Delaware First Health, USA); Karthik Meduri (University of the Cumberlands, USA)

16:45 *Grad.Guide: A Hybrid Machine Learning-Based Application for Recommending Undergraduate Programs to Senior High Graduates*

Joaquin S Patiño (State University of Northern Negros, Philippines); Felicisimo V Wenceslao, Jr (Northern Iloilo State University, Philippines); Patrick D Cerna (State University of Northern Negros, Philippines)

16:45-17:00 *Comparative Analysis of CNN and Sequence Models for Medical Image Captioning on Diabetic Foot Ulcer Images*

Sri Mulyono (Diponegoro University, Indonesia & Universitas Islam Sultan Agung, Indonesia); Kusworo Adi and Aris Sugiharto (Diponegoro University, Indonesia)

Z09: parallel session Z9

Moderator: Ali Bardadi, M.Kom

13:00 Enhancing Game Development Efficiency: A Reusable AI Pathfinding Framework for 2D Platformer Games

Darlis Herumurti (Institut Teknologi Sepuluh Nopember, Indonesia & ITS, Indonesia); Imam Kuswardayan and Brian Akbar Wicaksana (Institut Teknologi Sepuluh Nopember, Indonesia)

13:15 A Deep Reinforcement Learning Approach for the Creation of Non-Player-Characters

Andrea Corradini (Copenhagen School of Design and Technology, Denmark)

13:30 Development of a Job Recommendation System on LinkedIn Based on User CV Using Content-Based Filtering Method

Wanda Armadianti and Renny Pradina Kusumawardani (Institut Teknologi Sepuluh Nopember, Indonesia)

13:45 Gamification Mechanics and AI-Driven Personalization: Enhancing Continuous Use in Freemium Game Platforms

Vera Dumonda Silitonga (Indonesia); Christian Lim (Universitas Bina Nusantara, Indonesia); Gromyko Bongso (Bina Nusantara University, Indonesia)

14:00 A Systematic Review on Explainable AI for Spatial Classification of Digital Readiness in Secondary Schools

Didik Indrayana (Amikom University Yogyakarta, Indonesia & Universitas Muhammadiyah Sukabumi, Indonesia); Kusrini Kusrini and Ema Utami (Universitas AMIKOM Yogyakarta, Indonesia); Ferry Wahyu Wibowo (Universitas Amikom Yogyakarta, Indonesia)

14:15 A Comparative Evaluation of Speech Separation Models on Multi-Speaker Child Speech Recordings

Phie Chyan, Heni Gerda Pesau and Norbertus Tri Suswanto Saptadi (Atma Jaya Makassar University, Indonesia)

14:30 How UI/UX Design Influences E-Commerce Profitability: A Computational Study Using Structural Equation Modeling

Stefania Yuan Maharani, Lydiawati Asalla and Theresia Lesmana (Bina Nusantara University, Indonesia)

14:45 Rainfall Forecasting of Multi-Area Using Hybrid Convolutional Neural Networks and Temporal Neural Networks

Rachmawati Ade Ningsih and Esmeralda Contessa Djamal (Universitas Jenderal Achmad Yani, Indonesia)

15:00 Coffee Break

15:15 Deep Learning-Based Shoplifting Detection Using YOLOv8 on CCTV Footage

Novi Dianasari, Maman Somantri and Aris Triwiyatno (Diponegoro University, Indonesia)

15:30 Ship Route Optimization using Genetic Algorithm on the Capacitated Multi-Vehicle Routing Problem with Pick-Up and Delivery

Tanti Octavia (Petra Christian University, Indonesia)

15:45 Optimizing Inventory Control through Hybrid ABC-VED Segmentation and Adaptive Reorder Points: A Case Study in Electrical Wholesale Operations

Andreas Handojo (Petra Christian University, Indonesia)

16:00 Hybrid of Multipack Grey Wolf Optimizer and Simulated Annealing for Capacitated Vehicle Routing Problem

I Gede Widyadana, Alexander Pratomo and Doddy Prayogo (Petra Christian University, Indonesia)

16:15 Fragility and Hazard Analysis on the Composite Index Risk-Return Using Expectile Regression Neural Network

Wisnowan Hendy Saputra (Bina Nusantara University, Indonesia & Institut Teknologi Sepuluh Nopember, Indonesia); Dedy Dwi Prastyo and Kartika Fithriasari (Institut Teknologi Sepuluh Nopember, Indonesia)

16:30 Optimizing Parallel Computing Using a Raspberry Pi Cluster with the Message Passing Interface (MPI) Protocol

Dian Palupi Rini (Universitas Sriwijaya, Indonesia); Ahmad Ridwan (PT Kuncie Pintar Nusantara, Indonesia); Cipta Atsahlantusay (PT. Pupuk Sriwijaya, Indonesia); Danny Matthew Saputra and Iman Saladin B Azhar (Universitas Sriwijaya, Indonesia); Dwi Prasetya (PLN, Indonesia)

16:45 Why Customers Stay Exploring Satisfaction in Digital Banking Through CRM Systems

Kiemas Arryasa Gumilang (Bina Nusantara University, Indonesia); Riveira Ayuningtyas (Bina Nusantara University, Indonesia); Ernawaty Ernawaty (Bina Nusantara University, Indonesia); Erwin Halim (Bina Nusantara University, Indonesia & School of Information Systems, Indonesia)

Z10: Parallel session Z10

Moderator: Dr. Vincensius Gunawan Slamet K

13:00 Autoencoder-Powered Anomaly Detection: Securing CAN Bus Networks Against Cyber Attacks

Khaled Amer (Ain Shams, Egypt); Ayman Bahaa-Eldin (Ain Shams University, Egypt); Mohamed Ali Sobh (Elsewedy University of Technology, Egypt & Ain Shams University, Egypt)

13:15 Enhancing Security against Outsider SSH Lateral Movement through Rule-Based Detection

Deris Stiawan (University of Sriwijaya, Indonesia); Iwan Pahendra (Electrical Engineering, Universitas Sriwijaya & Informatic, Universitas Sriwijaya, Indonesia); Abdul Rahim (Universitas Dinamika Bangsa, Indonesia); Dian Palupi Rini (Universitas Sriwijaya, Indonesia); Fandi Kurniawan (Universitas Sriwijaya, Indonesia & Universitas Muhammadiyah KotaBumi, Indonesia); Adi Hermansyah (Universitas Sriwijaya, Indonesia & Fakultas Ilmu Komputer, Indonesia); Ahmad Heryanto (Sriwijaya University, Indonesia); Andri Wijaya (Universitas Sriwijaya & Universitas Katolik Musi Charitas, Indonesia); Septiani Kusuma Ningrum (Universitas Sriwijaya, Indonesia)

13:30 Early-Stage Detection of ICMPv6 Flooding Using Decision Trees in Smart Home Systems (Work in Progress)

Adi Hermansyah (Universitas Sriwijaya, Indonesia & Fakultas Ilmu Komputer, Indonesia); Nurul Afifah (Universitas Sriwijaya, Indonesia); Adi Wibowo (Universitas Sriwijaya, Indonesia & Universitas Muhammadiyah Kotabumi, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); Dhani Saputra (Universitas Sriwijaya, Indonesia); Didi Rosiyadi (National Research and Innovation Agency, Republic of Indonesia, Indonesia); Ahmad Heryanto (Sriwijaya University, Indonesia); Ferry Astika Saputra (Politeknik Elektronika Negeri Surabaya, Indonesia); Rahmat Budiarto (Al Baha University, Saudi Arabia)

13:45 A Framework for Enhancing IoT Data Integration with ERP Systems Using Oracle PeopleSoft Integration Broker Event Services

Tirumala Rao Chimpiri (Stony Brook University, USA)

14:00 Azimuth Detection of Doppler VHF Omnidirectional Range (DVOR) Signal Based on Software Defined Radio

Wahyu Pamungkas and Khoirun Ni'amah (Telkom University, Indonesia); Adi Widya Sekar Kinanti (IEEE Member, Indonesia & Telkom University, Indonesia)

14:15 Ansible Optimization for Network Configuration: A Performance Comparison on Routing Protocols

Rita Ulandari (Telkom University, Indonesia); Bongga Arifwidodo (Telkom University, Purwokerto Campus, Indonesia); Jafaruddin Gusti Amri Ginting (IT Telkom Purwokerto, Indonesia)

14:30 Analysis of PHY Parameter and Antenna Variations on LoRa Coverage and Energy Consumption in Irregular Terrain

Sigit Pramono (IPB University & Telecommucation Engineering Study Program, Telkom University, Purwokerto Campus, Indonesia); Sri Wahjuni (IPB University, Indonesia); Imas Sukaesih Sitanggang (Bogor Agricultural University, Indonesia); Heru Sukoco (IPB University, Indonesia)

14:45 *Performance Evaluation and Optimization of Drone Deployment Strategies in Communication Networks*

Ayman N Muhi (University of Technology- Iraq, Iraq); Mustafa Ghanim (University of Technology, Iraq); Jaafar Salim Ali (University of Technology- Iraq, Iraq); Ahmed A. Yousif (University of Technology, Iraq); Mohammed Ahmed Al-janabi and Baqer Basim Alshuwaili (University of Technology- Iraq, Iraq)

15:00 Coffee Break

15:15 *Analyzing the Performance of Complex System Architectures Using Network Calculus*

Md Amirul Islam (Dept. of Information Engineering, University of Pisa, Italy); Giovanni Stea (University of Pisa, Italy)

15:30 *Enhancing Security of MQTT-based IoHT System Using ASCON and ZWC*

Subroto Fajar Siddiq, Favian Dewanta and Danu Dwi Sanjoyo (Telkom University, Indonesia)

15:45 *Improving the Service Level Guarantee (SLG) in Automated Teller Machine (ATM) Management: A Comparative Analysis of Random Forest and XGBoost Machine Learning Models*

Gustommy Bisono (University of Diponegoro, Indonesia & PT. Telekomunikasi Indonesia, Indonesia); Kusworo Adi (Diponegoro University, Indonesia); Komang Budi Aryasa (Telkom Indonesia, Indonesia)

16:00 *SiberBox: Design and Implementation of a Lightweight Sandbox Environment for Cybersecurity Labs Using Containerization*

Herlambang Rafli Wicaksono (Badan Siber dan Sandi Negara, Indonesia); Prasetyo Adi Wibowo Putro (Politeknik Siber dan Sandi Negara, Indonesia); Nathanael Berliano Novanka Putra (National Cyber and Crypto Agency, Indonesia); Rayhan Ramdhany Hanaputra (Politeknik Siber dan Sandi Negara, Indonesia); Muhammad Faturrohman Sugiyarto (National Cyber and Crypto Agency, Indonesia)

16:15 *Hybrid Decision Tree-Deep Neural Network Approach for SME Credit Scoring: Unlocking Insight from Telecommunication Data*

FM Venusiana R (University of Diponegoro, Indonesia); M Agung Wibowo (Universitas Diponegoro, Indonesia); Aghus Sofwan (Diponegoro University, Indonesia)

16:30 *Leveraging Generative AI for Proactive Customer Churn Management in the Telecommunications Sector*

Agus Laksono (Universiti Teknologi Malaysia (UTM), Indonesia & PT Telkom Indonesia, Malaysia); Mohd. Yazid Idris and Farhan Mohamed (Universiti Teknologi Malaysia, Malaysia); Deris Stiawan (University of Sriwijaya, Indonesia)

16:45 *PSO-GA Resource Allocation for Impulsive Noise Mitigation in Power Line Communication*

Ghaith A Mukhlif (University of Ninevah, Iraq); Aws Zuheer Yonis (Ninevah University, Iraq)

17:00 *Estimation Of The Percentage Level Of Poor People Using GWPOR*

Muh Idham Kurniawan, Purhadi Purhadi and Santi P Rahayu (Institut Teknologi Sepuluh Nopember, Indonesia)