Thursday, October 1 9:00 - 12:00

INV: Invited Paper

9:00 IoT-Enabled Community Care for Ageing-in-Place: The Singapore Experience
Hwee Pink Tan (Singapore Management University & TCS-SMU iCity Lab, Singapore)

10:00 Security and Privacy for the Internet of Things
Biplab Sikdar (National University of Singapore, Singapore)

11:00 Memory Prediction on Real-Time User Behavior Traffic Detection
Rahmat Budiarto (Al Baha University, Saudi Arabia)

Thursday, October 1 13:00 - 17:00

R1: Parallel Room 1

R1.1 13:00 Experimental Investigation of Algorithms for Simultaneous Localization and Mapping
Tamara Zhukabayeva (Gumilyov Eurasian National University, Kazakhstan); Aigul Adamova (Saken Seifullin University, Kazakhstan); Laula Zhumabayeva (Eurasian National University, Kazakhstan)

R1.2 13:15 Practical application of IOT and its implications on the existing software
Israa Saduq, MISS (UTeM & Universiti Teknikal Malaysia Melaka, Malaysia)

R1.3 13:30 IoT Botnet Malware Classification Using Weka Tool and Scikit-learn Machine Learning
Susanto Susanto (Sriwijaya University & Universitas Bina Insan, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); M. Agus Syamsul Arifin (Universitas Sriwijaya & Universitas Bina Insan, Indonesia); Mohd. Yazid Idris (Universiti Teknologi Malaysia, Indonesia); Rahmat Budiarto (Al Baha University, Saudi Arabia)

R1.4 13:45 Aquatic Iguana: A Floating Waste Collecting Robot with IoT Based Water Monitoring System
Mirza Turesinin, Abdullah Md Humayun Kabir, Tanzina Mollah, Sadvan Sarwar and Shazzad Hosain (North South University, Bangladesh)

R1.5 14:00 Analysis of Autopsy Mobile Forensic Tools against Unsent Messages on WhatsApp Messaging Application
Fahdiaz Alief, Yohan Suryanto, Linda Roselina and Tofan Hermawan (University of Indonesia, Indonesia)

R1.6 14:15 Improving the Anomaly Detection by Combining PSO Search Methods and J48 Algorithm
Kurniabudi Kurniabudi, Abdul Harris and Albertus Edward Mintaria (STIKOM Dinamika Bangsa, Indonesia); Darmawijoyo Hanapi (Sriwijaya University, Indonesia); Deris Stiawan (University of Sriwijaya, Indonesia); Mohd. Yazid Idris (Universiti Teknologi Malaysia, Malaysia); Rahmat Budiarto (Al Baha University, Saudi Arabia)

R1.7 14:30 Email classification via intention-based segmentation
Sanjay Kumar Sonbhadra and Sonali Agarwal (Indian Institute of Information Technology, Allahabad, India); Muhammad Syafullah and Krisna Adiyarta (Universitas Budi Luhur, Indonesia)

R1.8 14:45 Prototype Design of Mobile Application 'Hydrolite' for Hydroponics Marketplace
Salsabila Ramadhina (UIN, Indonesia); Angga Aditya Pemona (University of Muhammadiyah Tangerang, Indonesia); R Taufiq (Binus University & Universitas Muhammadiyah Tangerang, Indonesia)

15:00 COFFEE BREAK

R1.9 15:15 Automatic Grading System for Spreadsheet Formula
Kurniandha Sukma Yunastrian, Saiful Akbar and Fitra Arifiansyah (Institut Teknologi Bandung, Indonesia)

R1.10 15:30 Implementation of Secure Work From Home System Based on Blockchain using NS3 Simulation
Mega Apriani, Diwandaru Rousstia, Fajar Rifai and Ruki Harwahyu (Universitas Indonesia, Indonesia); Riri Fitri Sari (University of Indonesia, Indonesia)

R1.11 15:45 Designing Android-Based Fasting Reminder (Shiyam) Applications
Salsabila Ramadhina (UIN, Indonesia); Desi Nurnaningsih and Angga Aditya Pernama (University of Muhammadiyah Tangerang, Indonesia); Ahmad Rodoni (UIN, Indonesia)

R1.12 16:00 Data Reduction Approach Based on Fog Computing in IoT Environment
Rawaa Majid Obaise (University of Babylon, Iraq)

R1.13 16:15 Software Defect Prediction Using Neural Network Based SMOTE
Rizal Broer Bahaweres (UIN Jakarta - IP University & IEEE, IEEE Computer, ComSoc IEEE, Indonesia); Fajar Agustian (UIY Syarif Hidayatullah Jakarta, Indonesia); Irman Hermadi and Arif Imam Suroso (IPB University, Indonesia); Yandra Arkeman (Bogor Agricultural University, Indonesia)

R1.14 16:30 The Improvement Impact Performance of Face Detection Using YOLO Algorithm
Rakha Asyrofi and Yoni Azhar Winata (Institut Teknologi Sepuluh Nopembar, Indonesia)

R2: Parallel Room 2
R2.1 13:00 Energy cost analysis for Different Characteristic of Building
Marwan Marwan (Polytechnic State of Ujung Pandang Makassar, Indonesia); Muhammad Dihyah Marwan (The University of Gajah Mada, Indonesia); Apollo Apollo (Polytechnic State of Ujung Pandang, Indonesia)

R2.2 13:15 Design of Regenerative Damper for Energy Harvester in Playground Seesaw
Reyhan Ramadhan, Muhammad Ul Haq and Estiyanti Ekawati (Institut Teknologi Bandung, Indonesia); Tri Prakosa (Bandung Institute of Technology, Indonesia)

R2.3 13:30 SCADA Solution by Installing DTM6000 and Trunking Tier Three
Marsul Siregar, Jr (Atma Jaya Catholic University of Indonesia Jakarta & PT WTE, Indonesia); Ikar Mustikaswara (PT Aplikasinusa Lintasarta, Indonesia); Dhian Wahyudi (PT. Radio Komunikasi Indonesia, Indonesia); Tajuddin Nur (Atma Jaya Catholic University, Indonesia)

R2.4 13:45 Optimal Sizing of Micro Hydropower to Improve Hybrid Renewable Power System
Syafii Syafii, Heru Dibyo Laksono, Novizon Novizon and Rahmad Fahreza (Universitas Andalas, Indonesia)

R2.5 14:00 Potential for Reducing CO2 Emissions in the Operation of Subcritical Power Plants into Supercritical
Sunaryo Sunaryo and Arian Putra (Unissula Semarang, Indonesia); Arief Marwanto (Universiti Islam Sultan Agung (UNISSULA) Semarang, Indonesia); Muhamad Haddin (Universitas Islam Sultan Agung, Indonesia)

R2.6 14:15 Multi-years Observation of Lightning Characteristics in West Java Region
Nur Widi Priambodo, Brian Bramantyo S.D.A. Harsono and Putu Agus Aditya Pramana (PLN Research Institute, Indonesia); Achmad Syerif Habibie (PLN Research Institute & PT PLN (Persero), Electricity Company of Indonesia, Indonesia); Andreas Putro Purnomoadi (PLN Research Institute, Indonesia & Delf University of Technology, The Netherlands); Dhandis R. Jintaka (PT. PLN (Persero) Research Institute, Indonesia)

R2.7 14:30 Steering System of Electric Vehicle using Extreme Learning Machine
Sofyan Ahmad, SA (Universitas Jember, Indonesia); Khaarul Anam (University of Jember, Indonesia); Azmi Saleh (Jember University, Indonesia)

R2.8 14:45 The Contribution of Styrofoam to Build Wall on Reduce Energy Consumption for Residential Buildings
Marwan Marwan (Polytechnic State of Ujung Pandang Makassar, Indonesia); Muhammad Dihyah Marwan (The University of Gajah Mada, Indonesia); Jamal Jamal (Polytechnic State of Ujung Pandang, Indonesia)

15:00 COFFEE BREAK

R2.9 15:15 Analysis on the Cogging Torque of Permanent Magnet Machine for Wind Power Applications
R2.10 15:30 A Remote User Authentication Scheme in IoT Using Cancelable Biometrics and Honey Templates
Rachid Zagrouba (Imam Abdulrahman Bin Faisal University, Saudi Arabia)

R2.11 15:45 Features Extraction on IoT Intrusion Detection System Using Principal Components Analysis (PCA)
Sharipuddin Sharipuddin (STIKOM Dinamika Bangsa, Indonesia); Benni Purnama (STIKOM Dinamika Bangsa Jambi, Indonesia); Kurniabudi Kurniabudi (STIKOM Dinamika Bangsa, Indonesia); Eko Arip Winanto (Universiti Teknologi Malaysia, Malaysia); Deris Stiawan (University of Sriwijaya, Indonesia); Darmawijoyo Hanapi (Sriwijaya University, Indonesia); Mohd. Yazid Idris (Universiti Teknologi Malaysia, Malaysia); Rahmat Budiarto (Al Baha University, Saudi Arabia)

R2.12 16:00 A New Hybrid Spreading and Scrambling based Multiple Access Technique for Capacity Improvement
Tabinda Ashraf (NUST College of EME, Pakistan); Muhammad Zeeshan (College of Electrical & Mechanical Engineering, National University of Sciences and Technology, Pakistan)

R2.13 16:15 Radio Resource Allocation Algorithm for Device-To-Device Communication Underlying on 4G LTE Networks
Mohamad Yasin Ramadhan and Muhammad Imam Nashiruddin (Telkom University, Indonesia)

R2.14 16:30 Performance Comparison of Schedulers in MmWave Communication using NS-3
Victor Lamboy Sinaga, Rakhmat Yuniarto and Tofan Hermawan (University of Indonesia, Indonesia); Ruki Harwahyu and Riri Fitri Sari (Universitas Indonesia, Indonesia)

R3: Parallel Room 3

R3.1 13:00 Characterization of Polydimethylsiloxane Dielectric Films for Capacitive ECG Bioelectrodes
Alhassan Haruna (Jigawa State Polytechnic Dutse Nigeria & Universiti Teknologi Malaysia Johor Bahru, Malaysia); Fauzan Khairi Che Harun and Yusmeeraz Yusof (Universiti Teknologi Malaysia, Malaysia)

R3.2 13:15 Dynamic Hand Gesture Recognition Using Temporal-Stream Convolutional Neural Networks
Fladio Armandika, Esmeralda Contessa Djamal, Fikri Nugraha and Fatan Kasyidi (Universitas Jenderal Achmad Yani, Indonesia)

R3.3 13:30 Aggressive driving behaviour classification using smartphone's accelerometer sensor
Sanjay Kumar Sonbhadra and Sonali Agarwal (Indian Institute of Information Technology, Allahabad, India); Muhammad Syafrullah and Krisna Adiyarta (Universitas Budi Luhur, Indonesia)

R3.4 13:45 Steady-state response feature extraction optimization to enhance electronic nose performance
Dyah Kurniawati Agustika (The University of Warwick, United Kingdom (Great Britain) & Universitas Negeri Yogyakarta, Indonesia); Shidig Hidayat and Kuwait Triyana (Universitas Gadjah Mada, Indonesia); Doina D Iliescu and Mark S Leeson (University of Warwick, United Kingdom (Great Britain))

R3.5 14:00 Deep Convolutional Architecture for Block-Based Classification of Small Pulmonary Nodules
Ahmed Samy Ismaeil (German University in Cairo, Egypt); Mohammed A.-Megeed Salem (German University in Cairo & Ain Shams University, Egypt)

R3.6 14:15 Classification of Post-Stroke EEG Signal Using Genetic Algorithm and Recurrent Neural Networks
Ella Wahyu Gunarti, Esmeralda Contessa Djamal, Fikri Nugraha and Sandi Lesmana Liem (Universitas Jenderal Achmad Yani, Indonesia)

R3.7 14:30 IoT in Patient Respiratory Condition & Oxygen Regulator’s Flowrate Monitor
Ayu Jati Puspitasari, Arya Nicosa, Dian Bayu Prakarsa and Djiwo Harsono (Polytechnic Institute of Nuclear Technology, National Nuclear Energy Agency of Indonesia)

R3.8 14:45 A Wireless ECG Device with Mobile Applications for Android
Mohamad Hafis Nornaim, Nurul Ashikin Abdul-Kadir, Fauzan Khairi Che Harun and Mohd Azhar Abdul Razak (Universiti Teknologi Malaysia, Malaysia)

15:00 COFFEE BREAK

R3.9 15:15 Hand Movement Identification Using Single-Stream Spatial Convolutional Neural Networks
Aldi Sidik Permana, Esmeralda Contessa Djamal, Fikri Nugraha and Fatan Kasyidi (Universitas Jenderal Achmad Yani, Indonesia)

R3.10 15:30 Person tracking with non-overlapping multiple cameras
Sanjay Kumar Sonbhadra and Sonali Agarwal (Indian Institute of Information Technology, Allahabad, India); Muhammad Syafrullah and Krisna Adiyarta (Universitas Budi Luhur, Indonesia)

R3.11 15:45 Design of Integrated Bioimpedance Analysis and Body Mass Index for Users with Special Needs
Ganjir Winasis, Munawar Riyadi and Teguh Prakoso (Diponegoro University, Indonesia)

R3.12 16:00 Investigation of Structural Parameter Variation on Extended Gate TFET for Bio-Sensor Applications
Sudipta Mukherjee (Indian Institute of Technology, Bombay, India); Somnath Chakraborty (Indian Institute of Technology Bombay, India)
R3.13 16:15 Spoken Word and Speaker Recognition Using MFCC and Multiple Recurrent Neural Networks
   Yoga Utomo, Esmeralda Contessa Djamal, Fikri Nugraha and Faiza Renaldi (Universitas Jenderal Achmad Yani, Indonesia)

R3.14 16:30 Smart Navigation Equipment Monitoring System
   Muhammad Arif Sulaiman (Bandung Institute of Technology, Indonesia); Trio Adiono (STEI ITB, Indonesia)

R3.15 16:45 Ball and Beam Control using Adaptive PID based on Q-Learning
   Brilian Putra Amiruddin and Rusdhianto Effendi Abdul Kadir (Institut Teknologi Sepuluh Nopember, Indonesia)

R4: Parallel Room 4

R4.1 13:00 Framework Design for the Retrieval of Instant Messaging in Social Media as Electronic Evidence
   Linda Rosselina (Universitas Indonesia, Indonesia); Yohan Suryanto, Tofan Hermawan and Fahdiaz Alief (University of Indonesia, Indonesia)

R4.2 13:15 An Overview of Knowledge Mapping in Digital Business Industry: A Systematic Literature Review
   Dana I. Sensuse (Universitas Indonesia, Indonesia); Alifiannisa Lawami Diar and Sofian Lusa (University of Indonesia, Indonesia); Damayanti Elisabeth (Universitas Indonesia, Indonesia)

R4.3 13:30 Human Related Challenges in Agile Software Development of Government Outsourcing Project
   Amaliah Khoirun Nisyak (Universitas Indonesia, Indonesia)

R4.4 13:45 A prediction model on Virtual University of Senegal's educational data thanks to Lambda architecture
   Serigne Mbacke Gueye (Université Alioune Diop de Bamby & TIC4Dev, Senegal); Alassane Diop and Amadou Dahirou Gueye (University Alioune Diop of Bamby, Senegal)

R4.5 14:00 Comparison of Maintainability Index Measurement from Microsoft Code Lens and Line of Code
   Gilang Heru Kencana (Politeknik Elektronika Negeri Surabaya, Indonesia); Akuwan Saleh (Electronic Engineering Polytechnic Institute of Surabaya, in Indonesia, Indonesia); Haryadi Amran Darwito (Politeknik Elektronika Negeri Surabaya, Indonesia); Rizki Rachmadi (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Elsa Sari (Politeknik Elektronika Negeri Surabaya, Indonesia)

R4.6 14:15 Method Using IOT Low Earth Orbit Satellite to Monitor Forest Temperature in Indonesia
   Ariesta Satryoko and Arthur Josias Simon (SKSG, Universitas Indonesia, Indonesia)

R4.7 14:30 KM Maturity for A Gas Company in Indonesia: G-KMMD Assessment and Improvement Recommendation
Handoko Ramadhan and Majesty Permana (University of Indonesia, Indonesia); Dana I. Sensuse (Universitas Indonesia, Indonesia); Sofian Lusa (University of Indonesia, Indonesia); Damayanti Elisabeth (Universitas Indonesia, Indonesia)

R4.8 14:45 Exploring Success Factor for Mobile based Smart Regency Service using TRUTAUT Model Approach
Aang Kisnu Darmawan, Dr (Madura Islamic University & Faculty of Engineering, Indonesia); Daniel Sjahana (Institut teknologi Sepuluh Nopember, Indonesia); Tony Dwi Susanto (ITS, Indonesia); Hoiirah Hoiirah, Busro Umam and Anwari Anwari (Madura Islamic University, Indonesia)

15:00 COFFEE BREAK

R4.9 15:15 Semantic Classification of Scientific Sentence Pair Using Recurrent Neural Network
Agung Besti, Ridwan Ilyas, Fatan Kasyidi and Esmeralda Contessa Djamal (Universitas Jenderal Achmad Yani, Indonesia)

R4.10 15:30 Collaborative Learning in Virtual Learning Environment using Social Network Analysis
Fitria Amastini (Universitas Indonesia & Universitas Terbuka, Indonesia); Cristin Kaunang and Afifah Nefiratika (Universitas Indonesia, Indonesia); Dana Indra Sensuse and Sofian Lusa (Universitas Indonesia, Indonesia)

R4.11 15:45 Intelligent Wheelchair Control System based on Finger Pose Recognition
Iswahyudi Yudi and Khairul Anam (University of Jember, Indonesia); Azmi Saleh (Jember University, Indonesia)

R4.12 16:00 Automation of Incident Prioritization in IT Service Management based on ITIL
Tessa Angela (Institut Teknologi Bandung, Indonesia); Kridanto Surendro (Bandung Institute of Technology, Indonesia)

R4.13 16:15 Designing Feature Application for User Experience to Censor Inappropriate Scene in Indonesia
Ariesta Satryooko and Arthur Josias Simon (SKSG, Universitas Indonesia, Indonesia)

R4.14 16:30 Quality in Use of Digital Wallet based on ISO/IEC 25022
Windy Rahmadia Pradanita and Siti Rochimah (Institut Teknologi Sepuluh Nopember, Indonesia)