

ICITEE 2022

Schedule

Tuesday, October 18, 2022

- 07.30 – 08.00 Registration
- 08.00 – 09.00 Opening Ceremony
- 09.00 – 10.00 Plenary Session (Keynote Speech 1) + Q&A
Prof. Johan Debayle (Ecole Nationale Supérieure des Mines de Saint-Etienne, France)
- 10.00 – 11.00 Plenary Session (Keynote Speech 2) + Q&A
Dr.Eng. Anto Satriyo Nugroho, B.Eng., M.Eng. (Research Center for Artificial Intelligence and Cyber Security, BRIN)
- 11.00 – 12.00 Plenary Session (Keynote Speech 3) + Q&A
Dr. Bernardi Pranggono BEng, MDigComms, PhD, FHEA, MIEEE (Department of Engineering and Matematics Sheffield Hallam University, UK)
- 12.00 – 13.00 **Break**
- 13.00 – 15.00 ICITEE Parallel Session
- 15.00 – 15.30 **Break**
- 15.30 – 17.30 ICITEE Parallel Session

Wednesday, October 19, 2022

- 08.30 – 09.00 Registration
- 09.00 – 11.00 CITEE and IBIOMED Parallel Session
- 11.00 – 11.30 Closing Ceremony, Best Papers Announcement, and ICITEE 2023 Location Announcement

Time in UTC+7

PARALLEL SESSION

		Room 1	Room 2	Room 3	Room 4	Room 5	Room 6
Tuesday, October 18, 2022	13.00-15.00 (UTC+7)	CNT-1	CS-1	IT-1	IT-11	SPMI-6	SPMI-1
		CNT-2	CS-2	IT-2	IT-12	SPMI-7	SPMI-2
		ECS-1	CS-3	IT-3	IT-13	SPMI-8	SPMI-3
		ECS-2	CS-4	IT-4	IT-14	SPMI-9	SPMI-4
		ECS-3	CS-5	IT-5		SPMI-10	SPMI-5
	15.30-17.30 (UTC+7)	PS-1	CS-6	IT-6	SPMI-11	SPMI-16	SPMI-20
		PS-2	CS-7	IT-7	SPMI-12	SPMI-17	SPMI-21
		PS-3	ECS-4	IT-8	SPMI-13	SPMI-18	SPMI-22
		PS-4	PS-6	IT-9	SPMI-14	SPMI-19	
		PS-5	PS-7	IT-10	SPMI-15		
Wednesday, October 19, 2022	9.00-11.00 (UTC+7)	Comm-1	TI-1	IB-1	IB-6	IB-11	IB-16
		Comm-2	TI-2	IB-2	IB-7	IB-12	IB-17
		Comm-3	TI-3	IB-3	IB-8	IB-13	IB-18
		Comm-4	SIE-1	IB-4	IB-9	IB-14	
			SIE-2	IB-5	IB-10	IB-15	

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List of Papers

No.	Paper Code	Paper Title	Author(s)
1	CNT-1	Deep Learning-Based Early Detection and Avoidance of Traffic Congestion in Software-Defined Networks	Sumet Prabhavat (King Mongkut's Institute of Technology Ladkrabang, Thailand), Thananop Thongthavorn (King Mongkut's Institute of Technology Ladkrabang, Thailand), Kitsuchart Pasupa (King Mongkut's Institute of Technology Ladkrabang, Thailand)
2	CNT-2	Frequency Domain Energy Detection for Multiband Spectrum Sensing in Cognitive Radio System	Izzun Nafis Ibadik (Universitas Gadjah Mada, Indonesia), Ahmad Fakhruddin Ashari (Universitas Gadjah Mada, Indonesia), Dyonisius Dony Ariananda (Universitas Gadjah Mada, Indonesia), Wahyu Dewanto (Universitas Gadjah Mada, Indonesia)
3	CS-1	Parameter Optimization of Current Estimator for Lithium Polymer Battery (LiFePO ₄)	Ja'Far Madani (Universitas Gadjah Mada, Indonesia), Bobby Rian Dewangga (Universitas Gadjah Mada, Indonesia), Adha Imam Cahyadi (Universitas Gadjah Mada, Indonesia), Samiadji Herdjunanto (Universitas Gadjah Mada, Indonesia)
4	CS-2	Implementation of Improved Artificial Potential Field Path Planning Algorithm in Differential Drive Mobile Robot	Riky Dwi Puriyanto (Universitas Gadjah Mada, Indonesia), Oyas Wahyunggoro (Universitas Gadjah Mada, Indonesia), Adha Imam Cahyadi (Universitas Gadjah Mada, Indonesia)
5	CS-3	Noise Parameterization of Continuous Deep Reinforcement Learning for a Class of Non-linear System	Atikah Surriani (Universitas Gadjah Mada, Indonesia), Oyas Wahyunggoro (Universitas Gadjah Mada, Indonesia), Adha Imam Cahyadi (Universitas Gadjah Mada, Indonesia)
6	CS-4	Dynamic Odometry for Waypoint Tracking of Omnidirectional Mecanum Wheeled Mobile Robot for Efficient Movement	Angga Priyatmoko (Universitas Gadjah Mada, Indonesia), Igi Ardiyanto (Universitas Gadjah Mada, Indonesia), Adha Imam Cahyadi (Universitas Gadjah Mada, Indonesia)
7	CS-5	Modeling of Level Control System Using IMC-PID Tuning Method with Filter Tuning Factor Variation on Steam Drum Boiler of Power Plant	Lailatul Mukarromah (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia), Prima Dewi Permatasari (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia), Erik Tridianto (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia)
8	CS-6	Quadrotor Inertial Navigation Aided by Vehicle Dynamic Model: A Nonlinear Observability Analysis	Bagaskara Primastya Putra (Universitas Gadjah Mada, Indonesia), Adha Imam Cahyadi (Universitas Gadjah Mada, Indonesia), Igi Ardiyanto (Universitas Gadjah Mada, Indonesia)
9	CS-7	Design of Active Magnetic Bearing for Industrial Size Compressor System Using Kalman Filter Based Optimal Controller	Michael Nato Andrey (Universitas Gadjah Mada, Indonesia), Abdul Malik (PT. Kaltim Methanol Industri, Indonesia), Dzuhri Radityo Utomo (Universitas Gadjah Mada, Indonesia), Adha Imam Cahyadi (Universitas Gadjah Mada, Indonesia)
10	ECS-1	Experiment Result of High Frequency Switching SiC Mosfet Gate Driver	Agta Wijaya Kurniawan (Universitas Gadjah Mada, Indonesia), Eka Firmansyah (Universitas Gadjah Mada, Indonesia), F. Danang Wijaya (Universitas Gadjah Mada, Indonesia)
11	ECS-2	FPGA Based Controller of BLDC Motor Using Trapezoid Control	Nurul Hidayat (Hasanuddin University, Indonesia), Faizal Arya Samman (Hasanuddin University, Indonesia), Rhiza S. Sadjad (Hasanuddin University, Indonesia)
12	ECS-3	A High-Frequency Flux Controlled Grounded Memristor Emulator	Pankaj Kumar Sharma (Indian Institute of Technology, India), Prashant Kumar (Indian Institute of Technology,

			India), Rajeev Kumar Ranjan (Indian Institute of Technology, India)
13	ECS-4	Electrical Noise Behaviour of High- k Gate-All-Around MOSFET Based on Two-Port Device Network Analysis	Pankaj Kumar (IIT Dhanbad, India), Kalyan Koley (BIT Mesra, India), Rupam Goswami (Tezpur University, India), Ashish Maurya (IIT Dhanbad, India), Subindu Kumar (IIT Dhanbad, India)
14	IT-1	Analysis of Fleet Management System Network Infrastructure in Open Mining System	Robiyanto (Bina Nusantara University, Indonesia), Seto Kuslaksono (Bina Nusantara University, Indonesia), Dina Fitria Murad (Bina Nusantara University, Indonesia), Taufik Darwis (Bina Nusantara University, Indonesia), Imanuel Revelino Murmanto (Bina Nusantara University, Indonesia)
15	IT-2	Protobot: An Educational Game for Algorithmic Thinking	Thanachote Lertlapnon (King Mongkut's Institute of Technology Ladkrabang, Thailand), Naruebes Lueangrungsudom (King Mongkut's Institute of Technology Ladkrabang, Thailand), Sirion Vittayakorn (King Mongkut's Institute of Technology Ladkrabang, Thailand)
16	IT-3	Semi-Automatic Generating Semantic Markup Webpage from Structured Data with Semantic Matching	Dewi Wardani (Universitas Sebelas Maret, Indonesia), Masya Marshallia (Universitas Sebelas Maret, Indonesia), Ardhi Wijayanto (Universitas Sebelas Maret, Indonesia), Haryono Setyadi (Universitas Sebelas Maret, Indonesia)
17	IT-4	Measuring Trust Perception During Information Evaluation	Umi Proboyekti (Universitas Gadjah Mada, Indonesia), Paulus Insap Santosa (Universitas Gadjah Mada, Indonesia), Ridi Ferdiana (Universitas Gadjah Mada, Indonesia)
18	IT-5	The Digitization of the Indonesian Pasar Market Through an E-Grocery Based Mobile App Solution	Rizkiaji Putro (Universitas Gadjah Mada, Indonesia), Mardhani Riassetiawan (Universitas Gadjah Mada, Indonesia)
19	IT-6	Lessons Learned from Delta and Omicron Variants Transmissions Leveraging Clustering Approach by Sub-Districts in Jakarta	Desy Noor Permata Sari (Jakarta Smart City, Indonesia), Andy Ernesto (Jakarta Smart City, Indonesia), Awidya Firdaus Sahararini (Jakarta Smart City, Indonesia), Gilang Evandyano (Jakarta Smart City, Indonesia), Bahrul Ilmi Nasution (Jakarta Smart City, Indonesia), Yudhistira Nugraha (Jakarta Smart City, Indonesia), Juan Intan Kanggrawan (Jakarta Smart City, Indonesia), Muhammad Erza Aminanto (Jakarta Smart City, Indonesia; Universitas Indonesia, Indonesia)
20	IT-7	Model-Based Systems Engineering Using Structure-Behavior Coalescence Modeling Language	Wei-Ming Ma (Cheng Shiu University, Taiwan), Hsien-Tzu Wang (Cheng Shiu University, Taiwan), William S. Chao (National Sun Yat-sen University, Taiwan)
21	IT-8	Comparative Study of Multi-channel and Omni-channel on Supply Chain Management	Ferra Arik Tridalestari (Universitas Diponegoro, Indonesia; Universitas PGRI Yogyakarta, Indonesia), Mustafid (Universitas Diponegoro, Indonesia), Ferry Jie (Edith Cowan University, Australia)
22	IT-9	A New Web Application Extensibility Platform	Toni Stojanovski (Vodno Pty Ltd, Australia)
23	IT-10	Testing Bluetooth Low Energy as Indoor Positioning Technology Using Measured Path Loss Exponent and Weighted Centroid Localization Methods	Bimo Sunarfri Hantono (Universitas Gadjah Mada, Indonesia), Albertus Eko Suryanto (Universitas Gadjah Mada, Indonesia), Norman Prastianto (Universitas Gadjah Mada, Indonesia)
24	IT-11	An Ontology Model for Formative Assessments	Nur W. Rahayu (Universitas Islam Indonesia, Indonesia; Universitas Gadjah Mada, Indonesia), Aridhanyati Arifin (Universitas Islam Indonesia, Indonesia), Ridi Ferdiana (Universitas Gadjah Mada, Indonesia), Sri Suning Kusumawardani (Universitas Gadjah Mada, Indonesia)

25	IT-12	Mobility of Indonesian During Early Pandemic: Insights from Mobile Positioning Data	Widyawan (Universitas Gadjah Mada, Indonesia), Muhammad Syarif (PT. Global Data Inspirasi, Indonesia), Azkario Rizky Pratama (Universitas Gadjah Mada, Indonesia)
26	IT-13	Gamification-Based E-learning Design for Vocational Software Engineering Subjects	Wahyu Nur Hidayat (Universitas Negeri Malang, Indonesia), Hakkun Elmunsyah (Universitas Negeri Malang, Indonesia), Luluk Iwanatul Bariroh (Universitas Negeri Malang, Indonesia), Tri Atmadji Sutikno (Universitas Negeri Malang, Indonesia)
27	IT-14	The Waste Separation Game to Promote Computational Thinking Through Mixed Reality Technology	Worapat Phatarametravorakul (King Mongkut's Institute of Technology Ladkrabang, Thailand), Suphitsara Cheevanantaporn (King Mongkut's Institute of Technology Ladkrabang, Thailand), Pornsuree Jamsri (King Mongkut's Institute of Technology Ladkrabang, Thailand)
28	PS-1	Implementation of Magnetizing-Freewheeling Control Strategy to Increase SRM Regenerative Braking Performance in a Low-Speed Operation	Mikhael Haryo Abhiseka (Soegijapranata Catholic University, Indonesia), Slamet Riyadi (Soegijapranata Catholic University, Indonesia)
29	PS-2	Implementation and Comparison Study of Single-Pulse and PWM Control Method to Increase Regenerative Braking Efficiency for SRM	Stanislaus Hans RyanDita (Soegijapranata Catholic University, Indonesia), Slamet Riyadi (Soegijapranata Catholic University, Indonesia), Florentinus Budi Setiawan (Soegijapranata Catholic University, Indonesia)
30	PS-3	Implementation of Optimum Switched Reluctance Machine Regenerative Braking Using Magnetizing-Demagnetizing Control with Duty Cycle Settings	Fransiscus Xaverius Rivos Santoso (Soegijapranata Catholic University, Indonesia), Slamet Riyadi (Soegijapranata Catholic University, Indonesia), Leonardus Heru Pratomo (Soegijapranata Catholic University, Indonesia)
31	PS-4	Design of Brushless DC Motor and Drive for Radiographic Mobile Surgery System	Samant Anuradha Ravindra (College of Engineering Pune, India), A.R. Phadke (College of Engineering Pune, India)
32	PS-5	Power Wheeling Hybrid System of PV-Pumped Storage Using MW-KM Method	Frida Hasana (Universitas Gadjah Mada, Indonesia), Sasongko Pramono Hadi (Universitas Gadjah Mada, Indonesia), M. Isnaeni Bambang Setyonegoro (Universitas Gadjah Mada, Indonesia), Tumiran (Universitas Gadjah Mada, Indonesia)
33	PS-6	Multi-Objective Microgrid Generation and Demand Response Scheduling Considering Distribution System Security	Candra Febri Nugraha (Universitas Gadjah Mada, Indonesia), Lukman Subekti (Universitas Gadjah Mada, Indonesia), Muhammad Yasirroni (Universitas Gadjah Mada, Indonesia)
34	PS-7	Dynamic Optimal Power Flow Considering Valve Point Effect and Energy Storage Utilization Using Whale Optimization Algorithm	Kukuh Widarsono (Institut Teknologi Sepuluh Nopember, Indonesia; Politeknik Negeri Madura, Indonesia), Adi Soeprijanto (Institut Teknologi Sepuluh Nopember, Indonesia), Rony Seto Wibowo (Institut Teknologi Sepuluh Nopember, Indonesia)
35	SPMI-1	Vehicle Wheel Hub Recognition Method Based on HOG Feature Extraction and SVM Classifier	Bin Wang (Anhui Technical College of Mechanical and Electrical Engineering, China), Ronaldo Juanatas (Technological University of the Philippines, Philippines), Jasmin Niguidula (Technological University of the Philippines, Philippines)
36	SPMI-2	Real-Time Attribute Based Deep Learning Network for Traffic Sign Detection	Hossamelden Mohamed Elhawary (Universiti Teknologi Malaysia, Malaysia), Upendra Suddamalla (MooVita Pte. Ltd., Singapore), Mohd Ibrahim SHAPIAI (Universiti Teknologi Malaysia, Malaysia), Anthony Wong (MooVita Pte. Ltd., Singapore), Hairi Zamzuri (eMooVit Technology Sdn Bhd., Malaysia)

37	SPMI-3	Corn Plant Disease Identification Using SURF-based Bag of Visual Words Feature	Rohman Dijaya (Institut Teknologi Sepuluh Nopember, Indonesia; Universitas Muhammadiyah Sidoarjo, Indonesia), Nanik Suciati (Institut Teknologi Sepuluh Nopember, Indonesia), Ahmad Saikhu (Institut Teknologi Sepuluh Nopember, Indonesia)
38	SPMI-4	Semantic Segmentation of Rice Field Bund on Unmanned Aerial Vehicle Image Using UNet	Ida Bagus Made Yudha Wirawan (Universitas Pendidikan Ganesha, Indonesia), I Made Gede Sunarya (Universitas Pendidikan Ganesha, Indonesia), I Md Dendi Maysanjaya (Universitas Pendidikan Ganesha, Indonesia)
39	SPMI-5	Knowledge Distillation for Automatic Receipt Identification in Jakarta Super App Platform	Khamzul Rifki (Jakarta Smart City, Indonesia), Irfan Dwiki Bhaswara (Jakarta Smart City, Indonesia), Andi Sulasikin (Jakarta Smart City, Indonesia), Bahrul Ilmi Nasution (Jakarta Smart City, Indonesia), Yudhistira Nugraha (Telkom University, Indonesia), Juan Intan Kanggrawan (Jakarta Smart City, Indonesia), Muhammad Erza Aminanto (Jakarta Smart City, Indonesia; Universitas Indonesia, Indonesia)
40	SPMI-6	Automatic Lymph Node Classification with Convolutional Neural Network	Ason Uthatham (King Mongkut's Institute of Technology Ladkrabang, Thailand), Nutch Yodrabum (Mahidol University, Thailand), Chanya Sinmaroeng (Mahidol University, Thailand), Taravichet Titijaronroj (King Mongkut's Institute of Technology Ladkrabang, Thailand)
41	SPMI-7	3DVAE-LSTM for Extremely Rare Anomaly Signal Generation	Thongchai Kaewkiriya (King Mongkut's Institute of Technology Ladkrabang, Thailand), Kuntpong Woraratpanya (King Mongkut's Institute of Technology Ladkrabang, Thailand)
42	SPMI-8	Classifying Stress Mental State by Using Power Spectral Density of Electroencephalography (EEG)	Adhi Dharma Wibawa (Institut Teknologi Sepuluh Nopember, Indonesia), Ulfi Widya Astuti (Institut Teknologi Sepuluh Nopember, Indonesia), Nophaz Hanggara Saputra (Institut Teknologi Sepuluh Nopember, Indonesia), Arbintoro Mas (Institut Teknologi Sepuluh Nopember, Indonesia), Yuri Pamungkas (Institut Teknologi Sepuluh Nopember, Indonesia)
43	SPMI-9	Binarized and Full-Precision 3D-CNN in Action Recognition	Christoforus Williem Deo Lumoindong (President University, Indonesia), Rila Mandala (Institut Teknologi Bandung, Indonesia)
44	SPMI-10	Analysis and Forecasting of the COVID-19 Epidemic Curve	Mohan Bansal (VIT-AP University, India), Sumit Mohanty (CMR Institute of Technology, India), Anju Das (CMR Institute of Technology, India), Prateek Jain (VIT-AP University, India)
45	SPMI-11	Face and Mouth Openness Detection on Visual Servoing Robot Using Haar-cascade and Adaptive Boosting	Aditia Yulianto (Politeknik Elektronika Negeri Surabaya, Indonesia), Riyanto Sigit (Politeknik Elektronika Negeri Surabaya, Indonesia), Bima Sena Bayu Dewantara (Politeknik Elektronika Negeri Surabaya, Indonesia), Imam Safari Azhar (Airlangga University, Indonesia)
46	SPMI-12	An Automatic Track Initialization Based on Combining the Hough Transform Method and a Multi-level Filter	Tiem M. Nguyen (Viettel High Technology Industries Corporation, Vietnam), Tuan A. Nguyen (Viettel High Technology Industries Corporation, Vietnam), Tao V. Chu (Viettel High Technology Industries Corporation, Vietnam), Huyen T. Dinh (Viettel High Technology Industries Corporation, Vietnam), Ha M. Le (Viettel High Technology Industries Corporation, Vietnam), Duong D. Lam (Viettel High Technology Industries Corporation, Vietnam)
47	SPMI-13	Semantic Segmentation of Whole-Body Bone Scan Image Using Btrfly-Net	Dimas Bayu Nugraha (Telkom University, Indonesia), Ema Rachmawati (Telkom University, Indonesia), Mahmud Dwi Sulistiyo (Telkom University, Indonesia)

48	SPMI-14	Object Selection Using LSTM Networks for Spontaneous Gaze-Based Interaction	Muhammad Ainul Fikri (Universitas Gadjah Mada, Indonesia), Iqbal Kurniawan Asmar Putra (Universitas Gadjah Mada, Indonesia), Sunu Wibirama (Universitas Gadjah Mada, Indonesia)
49	SPMI-15	Automatic Vehicle Classification and Counting System Using Inception Model	Moch. Imam Rifai (Politeknik Elektronika Negeri Surabaya, Indonesia), Arasy Dafa Sulistya Kurniawan (Politeknik Elektronika Negeri Surabaya, Indonesia), Hani'ah Mahmudah (Politeknik Elektronika Negeri Surabaya, Indonesia), Rahardhita Widyatra Sudiby (Politeknik Elektronika Negeri Surabaya, Indonesia), Moch. Zen Samsono Hadi (Politeknik Elektronika Negeri Surabaya, Indonesia), Nihayatus Sa'adah (Politeknik Elektronika Negeri Surabaya, Indonesia)
50	SPMI-16	Transformer Approaches in Image Captioning: A Literature Review	Hilya Tsaniya (Institut Teknologi Sepuluh Nopember, Indonesia), Chastine Fatichah (Institut Teknologi Sepuluh Nopember, Indonesia), Nanik Suciati (Institut Teknologi Sepuluh Nopember, Indonesia)
51	SPMI-17	Flash Defect Detection System of Friction Stir Welding Process Based on Convolutional Neural Networks for AA 6061-T651	Ulya Ganeswara Alamy (Sepuluh Nopember Institute of Technology, Indonesia), Eka Marliana (Sepuluh Nopember Institute of Technology, Indonesia; University of 17 August 1945, Indonesia), Arif Wahjudi (Sepuluh Nopember Institute of Technology, Indonesia), I Made Londen Batan (Sepuluh Nopember Institute of Technology, Indonesia), Latifah Nurahmi (Sepuluh Nopember Institute of Technology, Indonesia)
52	SPMI-18	Face Recognition Using Deep Learning as User Login on Healthcare Kiosk	Alvian Tedy Aditya (Politeknik Elektronika Negeri Surabaya, Indonesia), Riyanto Sigit (Politeknik Elektronika Negeri Surabaya, Indonesia), Bima Sena Bayu Dewantara (Politeknik Elektronika Negeri Surabaya, Indonesia)
53	SPMI-19	Development of CNN Pruning Method for Earthquake Signal Imagery Classification	Bayu Kusuma Atmaja (Universitas Gadjah Mada, Indonesia), I Wayan Mustika (Universitas Gadjah Mada, Indonesia), Risanuri Hidayat (Universitas Gadjah Mada, Indonesia), Hajar Nimpuno Adi (Universitas Gadjah Mada, Indonesia), Ahmad Taufiq Musaddid (Universitas Gadjah Mada, Indonesia)
54	SPMI-20	Speech Emotion Recognition Model Using Support Vector Machine Through MFCC Audio Feature	Arziki Pratama (Universitas Sebelas Maret, Indonesia), Sari Widya Sihwi (Universitas Sebelas Maret, Indonesia)
55	SPMI-21	Smart Self-Isolation System to Monitor the Condition of Covid-19 Patients at Home	Aries Pratiarso (Politeknik Elektronika Negeri Surabaya, Indonesia), Muhammad Hafidz Hismawan (Politeknik Elektronika Negeri Surabaya, Indonesia), Inna Ladayna Mazida (Politeknik Elektronika Negeri Surabaya, Indonesia), Moch. Zen Samsono Hadi (Politeknik Elektronika Negeri Surabaya, Indonesia), Mike Yuliana (Politeknik Elektronika Negeri Surabaya, Indonesia)
56	SPMI-22	Toward Detection of Small Objects Using Deep Learning Methods: A Review	Dwi Wahyudi (Universitas Gadjah Mada), Indah Soesanti (Universitas Gadjah Mada, Indonesia), Hanung Adi Nugroho (Universitas Gadjah Mada, Indonesia)