ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : Titanium 1
Session : Engineering Science
Moderator : Adnan Rachmad Anom Besari, Ph.D
Date : October 9, 2026

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571275652	Systematic Literature Review of Software Engineering in Education: Learning Management System	Reza Fauzan (Politeknik Negeri Banjarmasin, Indonesia); Daniel Siahaan (Institut teknologi Sepuluh Nopember, Indonesia); Iqbal Fadhil, Karim, Kevin Ashil Faadilah and Muhammad Alfian (Institut Teknologi Sepuluh Nopember, Indonesia)
2	13.15 - 13.30	1571309011	Ensemble Learning Based on ConvNeXt and EfficientNetV2 for Sugarcane Leaf Disease Classification	Muhammad Ulil Abshar and Abas Setiawan (Universitas Negeri Semarang, Indonesia)
3	13.30 - 13.45	1571309874	Simultaneous Net Plant Heat Rate Efficiency Improvement and Emission Reduction in Coal Fired Power Plant Through Adaptive Machine Learning	Rizqi Priatna (PLN Indonesia Power, Indonesia); Bobby Prayogo and Agus Kurniawan (PT PLN Indonesia Power, Indonesia)
4	13.45 - 14.00	1571318140	An Interpretable KNN-Based Mobile System for Early Obesity Risk Classification	Reza Fauzan, Eliza Putri Zulkarnain, Nur Shadrina Apriliany and Koes Wiyatmoko (Politeknik Negeri Banjarmasin, Indonesia)
5	14.00 - 14.15	1571318902	Truncated Spline Algorithm for Binary Classification in a Regression Model: Application to Human Development Index and Simulation Data	Afiqah Saffa Suriaslan (Institut Teknologi Sepuluh Nopember, Indonesia); I Nyoman Budiantara (Institut Tekhnologi Sepuluh Nopember, Indonesia); Vita Ratnasari, Muhammad Zulfadhli and Risdiana Chandra Dhewy (Institut Teknologi Sepuluh Nopember, Indonesia)
6	14.15 - 14.30	1571319102	Role Division between AI and Humans in Training Decision-Making: A Measurement System and Its Preliminary Experiment	Kota Aziz Marone, Yusuke Takahashi and Asako Uraki (Musashino University, Japan)
7	14.30 - 14.45	1571319152	3D Clay Animation (Claymation) as a Creative Approach to Supporting Viral Content on Social Networks	Almasari Aksenta (Samarinda State Polytechnic, Indonesia & Politeknik Negeri Samarinda, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571319864	Improving Indonesian Medical Speech Recognition through Low-Rank Adaptation (LoRA) Fine-Tuning of Whisper Large-v3	Tessy Badriyah (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Sulistyo Fajar Pratama and M. Rizqi Putra Nugroho (Politeknik Elektronika Negeri Surabaya, Indonesia); Budi Irmawati (University of Mataram, Indonesia); Yuliana Setiowati (Politeknik Elektronika Negeri Surabaya, Indonesia); Andik Jatmiko (RSI Surabaya, Indonesia)
9	15.15 - 15.30	1571320341	Classification of Disturbance Levels Using the DT-ID3 Method as a Basis for Technical Team Allocation at PT PLN ULP Samarinda Seberang	Bedi Suprapty, Mulyanto, Muhammad Fachri Hardinata and Aam Shodiqul Munir (Politeknik Negeri Samarinda, Indonesia)
10	15.30 - 15.45	1571320377	Integrated Oil and Winding Temperature Monitoring for Multi-Transformer Units Toward Unmanned Substation Operation	Rahman Azis Prasojo and Dendy Arya Prayoga (Politeknik Negeri Malang, Indonesia); I Gusti Ngurah Mahendrayana (PT PLN (Persero), Indonesia); Achsanul Khabib and Muhammad Fahmi Hakim (Politeknik Negeri Malang, Indonesia); Irwan Eryk (State Polytechnic of Malang, Indonesia)
11	15.45 - 16.00	1571320426	Optimizing Distorted Barcode Decoding via Adaptive Local Binarization and Sub-band Wavelet Reconstruction	Aam Shodiqul Munir, Mohammad Zainuddin, Brilian Satria Pamungkas and Asrina Astagani (Politeknik Negeri Samarinda, Indonesia)
12	16.00 - 16.15	1571320594	Implementation Of Random Forest Algorithm For Cyber Threat Classification On Wazuh Logs	Muhammad Taufiq Sumadi (Politeknik Negeri Samarinda, Indonesia); Achmad Gaffar (State Polytechnic of Samarinda, Indonesia); Muhammad Rifqi Fayyadh and Fransisca Angelia Sebayang (Politeknik Negeri Samarinda, Indonesia)
13	16.15 - 16.30	1571320000	Closing the Loop: Verdict-Informed Stopping for Autonomous Brand-Consistent Image Revision	Achmad Zahir Wajdi (OZU-Inc, Japan & Musashino University, Japan); Obed Christian Sanjaya, Sr (Ozu Inc, Japan & Musashino University, Japan); Takahiro Tamura and Yoshiaki Shinjo (OZU Inc. & Musashino University, Japan); Yusuke Takahashi and Asako Uraki (Musashino University, Japan)

ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : Titanium 2
Session : Engineering Science
Moderator : Dr.Eng. Indra Ferdiansyah
Date : October 9, 2026

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571320635	Optimizing AI-Driven Data Analytics through Metadata-Centric Multi-Agent Architectures	Dewi Yanti Liliana (State Polytechnic of Jakarta, Indonesia); Muhammad Bintang Ramadhan (Politeknik Negeri Jakarta, Indonesia); Malisa Huzaifa (Jakarta State Polytechnic, Indonesia); Hata Maulana (Politeknik Negeri Jakarta, Indonesia)
2	13.15 - 13.30	1571320648	Digitalization of Material Transaction Recording and Monitoring at PT PLN ULP Samarinda Seberang	Rheo Malani, Mohammad Zainuddin, Rengga Saputra and Bedi Suprapty (Politeknik Negeri Samarinda, Indonesia)
3	13.30 - 13.45	1571320652	Implementation of the C4.5 Algorithm for Classifying Electrical Disturbance Vulnerability Levels in Samarinda Seberang District, East Kalimantan Province	Achmad Gaffar (State Polytechnic of Samarinda, Indonesia); Rheo Malani (Politeknik Negeri Samarinda, Indonesia); Immanuel Bagas Tri. P (Politeknik Negeri samarinda, Indonesia); Muhammad Taufiq Sumadi (Politeknik Negeri Samarinda, Indonesia)
4	13.45 - 14.00	1571326597	A Multi-Seed Evaluation of YOLO and Hybrid Attention-Context Modules for Real-World Road Damage Detection	Hendra Kurniawan, Habrio Ilva and Muhamad Fadli (Universitas Maritim Raja Ali Haji, Indonesia); Aria Bagiasa Chidmahdjati (Raja Ali Haji Maritime University, Indonesia)
5	14.00 - 14.15	1571326986	Optimization of Healthcare Service Queue Under High Utilization Using Forecasting Holt-Winters Driven Simulation	Mulyanto (Politeknik Negeri Samarinda, Indonesia); Achmad Gaffar (State Polytechnic of Samarinda, Indonesia); Aurelia Amanda and Muhammad Taufiq Sumadi (Politeknik Negeri Samarinda, Indonesia)
6	14.15 - 14.30	1571328484	Generative Data Augmentation and Multi-Objective Optimization of CNC Milling Parameters using CVAE-NSGA-III	A M. Mufarrih and Hariyanto Gunawan (Chung Yuan Christian University, Taiwan)
7	14.30 - 14.45	1571328535	Continuous Streaming for Real-Time Chili Pest Edge Detection: An Optimized YOLOv8-TFLite Framework on Mobile Hardware	Selvi Riska Nisa (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia & PENS, Indonesia); Fitri Setyorini, Fitrah Maharani Humaira and Hero Yudo Martono (Politeknik Elektronika Negeri Surabaya, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571328538	Performance Evaluation of a YOLOv5-Based Safety Helmet Detection System on Edge Device Across Distance and Lighting Conditions	Agung Nugroho Pramudhita (Politeknik Negeri Malang, Indonesia); Puteri Ardista Nursisda Mawangi (University Negeri Malang, Indonesia); Meytieka Apriyani and Farid Angga Pribadi (State Polytechnic of Malang, Indonesia); Elok Nur Hamdana and Vipkas Al Hadid Firdaus (Politeknik Negeri Malang, Indonesia)
9	15.15 - 15.30	1571328935	Cascaded Classification for Predicting and Identifying Fault Causes in 20 kV Distribution Networks: A Case Study of PLN UP3 Bengkulu	Novriansyah, Adhistya Erna Permanasari and Noor Akhmad Setiawan (Universitas Gadjah Mada, Indonesia)
10	15.30 - 15.45	1571328993	Vision-Based Precision Docking Framework for a Mecanum-Wheel Robot Using AprilTag and ROS 2	Muhammad Thamyis Nur Abbadi and Reni Soelistijorini (EEPIS, Indonesia); Adnan Rachmat Anom Besari (Politeknik Elektronika Negeri Surabaya (PENS) & Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia); Fernando Ardilla (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia & EEPIS, Indonesia)
11	15.45 - 16.00	1571329060	Robust-Scaled KNN-MICE Imputation for Wastewater Effluent Prediction	Wahyu Widyananda, Maskur, Prayitno, Cahyo Sunu Widagdo and Fatkhur Rochman (State Polytechnic of Malang, Indonesia); Aziz Fajar (Universitas Airlangga, Indonesia)
12	16.00 - 16.15	1571326684	Layered Narrative Value Vectorization	Shigehiro Moriya, Asako Uraki and Yusuke Takahashi (Musashino University, Japan)
13	16.15 - 16.30	1571329213	Design of an Open Journal System via Docker Containers on a Virtual Private Server	Arsan Kumala Jaya (Politeknik Negeri Samarinda, Indonesia); Fajerin Biabdillah (Poilteknik Negeri Samarinda, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : Titanium 3
Session : Engineering Science
Moderator : Dr. Rakhmat Arianto
Date : October 9, 2026

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571329062	Analysis of The YOLOv8 and OCR Methods For Detecting Characteristics on Indonesia License Plates	Fabianus Priyambada Ragamedho (Politeknik elektronika negeri Surabaya, Indonesia); Afifah Dwi Ramadhani (Politeknik Elektronika Negeri Surabaya, Indonesia); Prima Kristalina (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia)
2	13.15 - 13.30	1571329134	Real-Time Road Detection and Obstacle Detection on Unstructured Roads with Machine Learning Approach on Miniature Vehicle	Ferdinand Nathan (Binus University, Indonesia); Sofyan Tan (BINUS ASO School of Engineering, Bina Nusantara University, Indonesia)
3	13.30 - 13.45	1571329154	Prototyping a Mobile Application to Reduce Physical Queuing and Increase Customer Satisfaction in Theme Parks	Henkie Ongowarsito, Mary Faith Hadiwidjaja and Faqih Muqodam (Bina Nusantara University, Indonesia); Erwin Halim (Bina Nusantara University, Indonesia & School of Information Systems, Indonesia)
4	13.45 - 14.00	1571329302	Ablation Study of Heading Representations and Backbone Modifications in VoteNet for Indoor 3D Landmark Detection from LiDAR Point Clouds	Dana Yoga Setya Ikhwandi (Politeknik Elektronika Negeri Surabaya, Indonesia); Adnan Rachmat Anom Besari (Politeknik Elektronika Negeri Surabaya (PENS) & Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia); Fernando Ardilla (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia & EEPIS, Indonesia)
5	14.00 - 14.15	1571329344	Interactive Flipbook for Food Safety Education Platform Based on Hazardous Food Additive Analysis of Street Foods in Tanjungpinang	Nina Adriani, Wisnu Prammana Surya and Anggra Prasetya Cahya (Universitas Maritim Raja Ali Haji, Indonesia); Sanhanut Kesornsit (Walailak Universit, Thailand); Ahmad Husaini Mohamed (UiTM Cawangan Negeri Sembilan, Kampus Kuala Pilah, Malaysia)
6	14.15 - 14.30	1571337740	Real-Time Path Planning and Steering Control on Unstructured Roads with Machine Learning Approach on Miniature Vehicle	Ferdinand Nathan (Binus University, Indonesia); Sofyan Tan (BINUS ASO School of Engineering, Bina Nusantara University, Indonesia)
7	14.30 - 14.45	1571341560	Air Pollution Forecasting Using Boosting and Deep Learning Time Series Models	Novri Suhermi, Auliya Nasywa Hafiyyanti, Naifa Adila Balqis, Revalina Putri Nailah, Shafa Insan Kamillia Ashari, Diena Eka Justitia and Arsyilia Dwinindi Adyar (Institut Teknologi Sepuluh Nopember, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571344361	Online Javanese Handwriting Recognition on a Virtual Canvas: An Exploration of Lightweight Models and Knowledge Distillation	Abas Setiawan and Shona Chayy Bilqisth (Universitas Negeri Semarang, Indonesia); Ho Thi Trang (Tamkang University, Taiwan)
9	15.15 - 15.30	1571344395	Optimization of Integrated Energy System Operations Considering Low Carbon Technology and Tiered Carbon Trading Mechanism	Gilbert Ginaro Hutabarat (Sepuluh Nopember Institute of Technology, Indonesia); Rony Seto Wibowo and Ni Ketut Aryani (Institut Teknologi Sepuluh Nopember, Indonesia)
10	15.30 - 15.45	1571345212	Short-Term, One-Day-Ahead Electrical Load Forecasting: A Statistically Rigorous Comparison of RNN, LSTM, and GRU	Nasruddin, I Wayan Mustika and Adhistya Erna Permanasari (Universitas Gadjah Mada, Indonesia)
11	15.45 - 16.00	1571345443	Data-Driven Forecasting of Intermittent Rice Production for Regional Food Security Planning with Hurdle Model	Mohammad Imam Mahmudin and Novri Suhermi (Institut Teknologi Sepuluh Nopember, Indonesia); Anis Setiyorini (Badan Pusat Statistik, Indonesia)
12	16.00 - 16.15	1571345578	Comparative Analysis of CC-CV and CV Charging for LiFePO4 Batteries under Different Photovoltaic Irradiance Conditions	Renny Rakhmawati (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Ahmad Firyal Adila and Nabilla Khoirun Nisa (Politeknik Elektronika Negeri Surabaya, Indonesia); Irianto (Electronics Engineering Polytechnic, Indonesia); Diah Yanaratri (Politeknik Elektronika Negeri Surabaya, Indonesia)
13	16.15 - 16.30	1571327482	Ingest-Time Fact Compilation for Cost-Efficient and Reliable Question Answering over Revised Corpora	Kyle Wild (Endgame Labs, Inc., USA); Yusuke Takahashi and Asako Uraki (Musashino University, Japan)

ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : **Breakout room 1 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Dwi Kurnia Basuki, Ph.D**
Date : **October 9, 2026**

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571290410	Transfer Learning for Rice Disease Classification: Addressing Class Imbalance and Model Efficiency in a Ten-Class CNN Comparative Study	Dhiyaussalam, M. Helmy Noor, Kun Nursyaiful Priyo Pamungkas, Ahmad Yusuf and Wanvy Arifha Saputra (Politeknik Negeri Banjarmasin, Indonesia)
2	13.15 - 13.30	1571296328	Optimal Hybrid Renewable Microgrid Configurations under Diverse Load Profiles: A Case Study of Buru Island Electrical Subsystems	Mario Norman Syah, Agus Suryanto and Khoirudin Fathoni (Universitas Negeri Semarang, Indonesia); Saian Nur Fajri (National Yunlin University of Science & Technology, Taiwan)
3	13.30 - 13.45	1571296886	A Systematic Literature Review of Ensemble and Neural Network Models for Stunting Prediction	Sulistyowati (STMIK Palangkaraya, Indonesia & Post Graduate School Universitas Diponegoro, Indonesia); Catur Edi Widodo (Doctoral Information System, Indonesia); Budi Warsito (Diponegoro University, Indonesia)
4	13.45 - 14.00	1571304262	In-Situ Compressive Strength Evaluation of Multi-Story Reinforced Concrete Educational Buildings Using Rebound Hammer Testing	Jan Denniel B Escano and Jozel Bryan Mestiola Terrible (National University, Philippines & NU Dasmariñas, Philippines); Justin Kyle V. Lao and Kian Ace P. Perea (National University, Philippines)
5	14.00 - 14.15	1571305825	Imbalanced Multi-Class Rainfall Intensity Nowcasting Using Two Stage XGBoost and Resampling Strategies	Ratna Ika Putri and Devira Anggi Maharani (Politeknik Negeri Malang, Indonesia); Mohamad Ramdany (PT KA Properti Manajemen, Indonesia); Ichbal Maulana Darma (PT KAI PERSERO, Indonesia); Zakiyah Amalia and Achsanul Khabib (State Polytechnic of Malang, Indonesia)
6	14.15 - 14.30	1571306325	Phygital Interaction: A Hardware-Driven Augmented Reality Board Game for Biodiversity Education	Muhammad Daffa Husen Nadia and Harun Budiseto (EEPIS, Indonesia); Muhammad Agus Zainuddin (Politeknik Elektronika Negeri Surabaya, Indonesia); Akhmad Alimudin (PENS, Indonesia)
7	14.30 - 14.45	1571315766	Lightweight Acoustic Sexing of Day-Old Ducks on Edge Hardware Using a Compact MFCC Subset	Heldiansyah and Novi Shintia (Politeknik Negeri Banjarmasin, Indonesia); Muchtar Salim (Politeknik Negeri Banjarmasin); Riswan Yunida, Rizky Amelia and Nurmahaludin (Politeknik Negeri Banjarmasin, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571316098	Design and Performance Analysis of a Solar-Powered Multi-Spectral LED System Integrated with IoT for Microalgae Microsample Synthesis	I Gede Suputra Widharma, I Gde Nyoman Sangka, I Made Sajayasa and I Ketut Darminta (Politeknik Negeri Bali, Indonesia); I N Sunaya (Electrical Engineering & Politeknik Negeri Bali, Indonesia); A. A. Made Dewi Anggreni (Udayana University, Indonesia)
9	15.15 - 15.30	1571317070	Can Large Language Models Explain Hybrid Intrusion Detection Decisions? An Empirical Study on DeepSeek-V4-Flash with a SVM+RF+DST Model	Maulana Bintang Irfansyah, Bilal Waheed, Idris Winarno and Akhmad Alimudin (Politeknik Elektronika Negeri Surabaya, Indonesia)
10	15.30 - 15.45	1571318420	An RPA-Based Framework for Automated Book Metadata Integration in Library Information Systems	Mohammad Noer Dafiq, Damar Galih Aji, Arif Basofi, Sritrusta Sukaridhoto, Daffa Muhammad Irhamni, Mohammad Robihul Mufid, Mu'arifin M, Wahyu Nur Hidayat and Danar Ikram Tirtakusuma (Politeknik Elektronika Negeri Surabaya, Indonesia)
11	15.45 - 16.00	1571318470	An Empirical Study of RAG and Fine-Tuning Interactions in LLM-Based Institutional Chatbots	Muhammad Rizqi Erliyanto (Politeknik Elektronika Negeri Surabaya, Indonesia); Wiratmoko Yuwono (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Entin Martiana Kusumaningtyas (Politeknik Elektronika Negeri Surabaya - Indonesia, Indonesia); Idris Winarno (Politeknik Elektronika Negeri Surabaya, Indonesia)
12	16.00 - 16.15	1571318471	Towards Lightweight Software-Defined Vehicle: A Performance Benchmark of Automotive Grade Linux and Android Automotive	Faris Muhammad Abdullah, Muhammad Tsaqif Mukhayyar and Febby Ronaldo (Politeknik Elektronika Negeri Surabaya, Indonesia); Iwan Syarif (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Idris Winarno (Politeknik Elektronika Negeri Surabaya, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : **Breakout room 2 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Dr. Ony Asrarul Qudsi**
Date : **October 9, 2026**

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571318512	Implementation of Double LSB Steganography and AES Encryption for Multi-Layered Protection of Medical Record Data in Medical Images	Meytieka Apriyani and Tirta Nurrochman Bintang Prawira (State Polytechnic of Malang, Indonesia); Vipkas Al Hadid Firdaus and Ade Ismail (Politeknik Negeri Malang, Indonesia); Sofyan Noor Arief (State Polytechnic of Malang, Indonesia)
2	13.15 - 13.30	1571318837	Design of a Smart Monitoring System Integrated with Nautical Charts (SIMPEL) to Improve Technology Usage on Fishing Vessels	Mohammad Abu Jamiin (Politeknik Perkapalan Negeri Surabaya, Indonesia)
3	13.30 - 13.45	1571319131	Appliance-Level Energy Consumption Prediction Using LSTM with Genetic Algorithm Optimization	Az - Zahra Chikal Erliandi, Muhammad Ary Murti and Astri Novianty (Telkom University, Indonesia)
4	13.45 - 14.00	1571319134	Development and Calibration of an Electromagnetic Vibration Sensor for Aeroelastic Wind Tunnel Experiments	I P G Sopan Rahtika and I Made Agus Putrawan (Politeknik Negeri Bali, Indonesia); Ketut Bangse (Bali State Polytechnic, Indonesia)
5	14.00 - 14.15	1571319155	AI-Optimized PID Control for Voltage Regulation in Floating Photovoltaic Systems	Edmar Tobie G. Mortera, Ardlee R Natividad, Lyka Joy A Obado and Kevin Kristian L Penaserada (Mapua University, Philippines); Edward B Panganiban (Isabela University, Philippines)
6	14.15 - 14.30	1571319214	Simulation-based Modeling, Stability Analysis, and PID Control of Photovoltaic-Thermoelectric Cooling System	Brian P. Broñola, Alex Casantusan Jr, Navy Gale Gacilo and Lyrapolen P Domacia (Mapua University, Philippines); Edward B Panganiban (Isabela University, Philippines)
7	14.30 - 14.45	1571319227	Designing a Smart Low-Code Spreadsheet Framework for Generative AI-Assisted Formula Learning	Andhik Ampuh Yunanto (Politeknik Elektronika Negeri Surabaya, Indonesia); Darlis Herumurti (Institut Teknologi Sepuluh Nopember, Indonesia & ITS, Indonesia); M Udin Harun Al Rasyid (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Siska Arifiani (Institut Teknologi Sepuluh Nopember, Indonesia); Wanvy Arifha Saputra (Politeknik Negeri Banjarmasin, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571319422	Bridging the Digital Divide: An Asynchronous Agentic RAG Framework for Offline Agricultural Advisory via Tani-Cerdas	Satria Tegar Bimantara and Jonathan Kevin Binsar Pangaribuan (Politeknik Siber dan Sandi Negara, Indonesia); Raden Budiarto Hadiprakoso (Poltek Siber dan Sandi Negara, Indonesia); Fanov Fasha Armawan (Badan Siber dan Sandi Negara, Indonesia)
9	15.15 - 15.30	1571319439	Hydroponic Water Quality Prediction and Fuzzy Classification for Mobile Applications Using Long Short-Term Memory	Keisya Nabila Putri (Politeknik Elektronika Negeri Surabaya, Indonesia); Aries Pratiarso (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Mochammad Zen Samsono Hadi and Hendri Darmawan (Politeknik Elektronika Negeri Surabaya, Indonesia)
10	15.30 - 15.45	1571319454	RSSI-Based Secret Key Generation for LoRa V2I Networks with Limited Samples	Muchammad Hafish Kamal (EEPIS, Indonesia); Mike Yuliana and Weny Mistarika Rahmawati (Politeknik Elektronika Negeri Surabaya, Indonesia); Reni Soelistijorini (EEPIS, Indonesia); Nailul Muna (Politeknik Elektronika Negeri Surabaya, Indonesia)
11	15.45 - 16.00	1571319505	A Raspberry Pi-Based UHF-HF Cross-Band Repeater with Voice/Noise Discrimination and Real-Time RTL-SDR Monitoring	Tri Budi Santoso, Windi Eka Rahma Putri and Mahyeksi Kalyana Addin (Politeknik Elektronika Negeri Surabaya, Indonesia)
12	16.00 - 16.15	1571319516	A Mobile-Based Hand-Object Interaction System for Augmented Reality Using Spasial-Temporal Graph Convolutional Network	Shafwan Ilyas (PENS, Indonesia); Adnan Rachmat Anom Besari (Politeknik Elektronika Negeri Surabaya (PENS) & Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia); Reni Soelistijorini (EEPIS, Indonesia); Azhar Saputra (Kobe University, Japan); Naoyuki Kubota (Tokyo Metropolitan University, Japan)

ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : Breakout room 3 (Zoom: https://pens.id/icast2026)
Session : Engineering Science
Moderator : Ahmad Zainudin, Ph.D
Date : October 9, 2026

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571319534	A Deep Learning-Based Basic Pilates Movement Recognition System Using Pose Estimation	Nurul Izzah (EEPIS, Indonesia); Tri Budi Santoso and Muhammad Agus Zainuddin (Politeknik Elektronika Negeri Surabaya, Indonesia)
2	13.15 - 13.30	1571319701	Comparative Analysis of OCR Models for Text Extraction in Academic Documents	Bagas Cahya Fajar Bastian, Tri Hadiah Muliawati and Renovita Edelani (Politeknik Elektronika Negeri Surabaya, Indonesia)
3	13.30 - 13.45	1571319718	State-Space Modeling and Robust PID Control of a DC Motor Conveyor Drive Under Stochastic Load Disturbances	Mariane Molina, Paul David Lozano and Kayvin Karl Gawat (Mapua University, Philippines); Reniel Albert D. Leron (Central Luzon State University, Philippines); Edward B Panganiban (Isabela University, Philippines)
4	13.45 - 14.00	1571319841	Multivariate Time-Series Forecasting Models for Battery Voltage Prediction in Photovoltaic-Powered Monitoring Systems	Devira Anggi Maharani, Muchlis Fajar Hidayat and Ratna Ika Putri (Politeknik Negeri Malang, Indonesia); Suci Aulia (Telkom University, Indonesia)
5	14.00 - 14.15	1571319907	Comparative Study of Unipolar and Bipolar Trapezoidal Drives in BLDCM Drives with PWM-Duty Ratio Control	Syechu Dwitya Nugraha and Gigih Prabowo (Politeknik Elektronika Negeri Surabaya, Indonesia); Muhammad Husein Nur Aiman (EEPIS, Indonesia); Era Purwanto (Electronic Engineering Polytechnic Institute Of Surabaya, Indonesia); Muhammad Rizani Rusli (Politeknik Elektronika Negeri Surabaya, Indonesia)
6	14.15 - 14.30	1571319965	Decarbonizing Surabaya Port Operations through PV-Based Green Hydrogen Using a Modelling Approach	Parman, Leonard and Abdul Gafur (Politeknik Perkapalan Negeri Surabaya, Indonesia)
7	14.30 - 14.45	1571319985	An Implementation of Certificateless Anonymous Authentication for Bluetooth-Based Telemetry in the Internet of Vehicles	Amang Sudarsono (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Wildan Dharma Walidaniy, Rahardhita Sudibyo, Haniah Mahmudah and Nihayatus Sa'adah (Politeknik Elektronika Negeri Surabaya, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571320006	A Hybrid Physics: Artificial Intelligence Stochastic Degradation Model for Marine Machinery with Kijima Imperfect Repair Dynamics	Galih Anindita (Institut Teknologi Sepuluh Nopember, Indonesia); Edy Setiawan (Sepuluh Nopember Institute of Technology (ITS), Indonesia & Politeknik Perkapalan Negeri Surabaya, Indonesia); Totok R. Biyanto (ITS Surabaya, Indonesia)
9	15.15 - 15.30	1571320062	Design and Implementation of an IoT-Based Smart Cane for Visually Impaired Individuals	Much Chafid and Fahmi Wulidan Abdi (Politeknik Elektronika Negeri Surabaya, Indonesia); Agung Teguh Setyadi (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Agus Fahruddin (Politeknik Elektronika Negeri Surabaya, Indonesia)
10	15.30 - 15.45	1571320104	A Smartphone-Based Wearable Sensing System for Real-Time Welding Activity Recognition: A Comparative Analysis of Sensor Modalities, Placements, and Learning Algorithms	Amang Sudarsono (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Mohammad Basuki Rahmat and Mike Yuliana (Politeknik Elektronika Negeri Surabaya, Indonesia); I Putu Arta Wibawa (Politeknik Perkapalan Negeri Surabaya, Indonesia)
11	15.45 - 16.00	1571320192	Technology Innovation in Social Commerce: Stimulus-Organism-Response Analysis of TikTok Skincare Content and Generation Z Purchase Decisions	Aghgenia Putri Al Ghifary, Angeltika Clara Sinaga and Tasha Amelia Satriani (Bina Nusantara University, Indonesia); Lianna Wijaya (Binus University, Indonesia); Sudip Wagle (Tribhuvan University, Nepal); Sri Nurhayati (IKIP Siliwangi, Indonesia)
12	16.00 - 16.15	1571320219	Solar-Powered Hybrid Incubator for Free-Range Chicken Eggs: Automating Temperature, Humidity, and Rack Shifting	Muhammad Prasha Risfi Silitonga (Politeknik Negeri Jakarta, Indonesia); Radhi Maladzi (Jakarta State Polytechnic, Indonesia); Sepriandi Parningotan (Politeknik Negeri Jakarta, Indonesia & Jakarta State Polytechnic, Indonesia); Antonius Danny Nugroho (Jakarta State Polytechnic, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 1)

Platinum Hotel Surabaya, October 9, 2026

Room : **Breakout room 4 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Dr.Eng. Teguh Hady Ariwibowo**
Date : **October 9, 2026**

No	Time	Paper ID	Title	Authors
1	13.00 - 13.15	1571320282	Dynamic Task Offloading in Hybrid Edge-Cloud Architecture for Industrial IoT: Enhancing Latency and Energy Efficiency	Wahyu Nur Hidayat and Muhaimin Toh-arlim (Politeknik Elektronika Negeri Surabaya, Indonesia); Naufal Fattah Rizqi (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Namubiru Jaliilah, Sritrusta Sukaridhoto and Idris Winarno (Politeknik Elektronika Negeri Surabaya, Indonesia)
2	13.15 - 13.30	1571320288	FAHP-Based Decision Support System for Water Quality Assessment in Low-Salinity Vaname Shrimp Pond: A Case Study	Ainul Muhlasin (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Arna Fariza (Politeknik Elektronika Negeri Surabaya, Indonesia); Agus Indra Gunawan (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Rengga Asmara (Politeknik Elektronika Negeri Surabaya, Indonesia)
3	13.30 - 13.45	1571320320	Comparative Study of Text Summarization Methods for Doctor Responses in Online Health Consultation Platforms	Selvia Ferdiana Kusuma, Muhammad Misbahus Sholihin Anwar and Weny Mistarika Rahmawati (Politeknik Elektronika Negeri Surabaya, Indonesia); Tita Karlita (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia)
4	13.45 - 14.00	1571320328	Comparative Evaluation of Audio Features and Machine Learning Classifiers for Acoustic Train Sound Detection	M Hilmi, Devira Anggi Maharani and Ratna Ika Putri (Politeknik Negeri Malang, Indonesia); Sapto Wibowo (State Polytechnic of Malang, Indonesia)
5	14.00 - 14.15	1571320370	An IoT-Based Dual-Mode Automated Pest Control System Using Microwave Radar and PIR Sensors	Muhammad Turmudzi, Much Chafid, Muhammad Rizal Firman, Darmawan Aditama, Pratama Eskaluspita and Agus Wibowo (Politeknik Elektronika Negeri Surabaya, Indonesia)
6	14.15 - 14.30	1571320392	Performance Evaluation of Cross-Platform Mobile Augmented Reality for Cultural Heritage Visualization: Rendering Latency and Resource Consumption Analysis	Rizky Amelia (Politeknik Negeri Banjarmasin, Indonesia); Damar Galih Aji (Politeknik Elektronika Negeri Surabaya, Indonesia)
7	14.30 - 14.45	1571320419	Beyond Connectivity: Spatial-Digital Tourism Readiness and Facility Inequality in Banyuwangi, Indonesia	Randhi Nanang Darmawan, Ahmadintya Anggit Hanggraito and Adetiya Prananda Putra (Politeknik Negeri Banyuwangi, Indonesia)
	14.45 - 15.00	**Coffee Break**		
8	15.00 - 15.15	1571320430	Development of an Intelligent Green Mussel Harvester Architecture Based on Mechanization and Artificial Intelligence to Support Sustainable Aquaculture	Leonard and Parman (Politeknik Perkapalan Negeri Surabaya, Indonesia)
9	15.15 - 15.30	1571320433	Multi-Feature Fusion and Support Vector Machine for Smartphone-Based Smart Waste Classification	Erica Nur Rahmatina, Afifah Dwi Ramadhani and Rahardhita Sudibyo (Politeknik Elektronika Negeri Surabaya, Indonesia)
10	15.30 - 15.45	1571320476	Parametric Performance Analysis of a Three-Phase Squirrel-Cage Induction Motor Using Torque-Speed Characteristic Modeling	Edy Setiawan (Sepuluh Nopember Institute of Technology (ITS), Indonesia & Politeknik Perkapalan Negeri Surabaya, Indonesia); Galih Anindita (Institut Teknologi Sepuluh Nopember, Indonesia); Totok R. Biyanto (ITS Surabaya, Indonesia)
11	15.45 - 16.00	1571320488	Analysis of the Implementation of a Hybrid Flexible Solar Photovoltaic and Wind Turbine System for Fish Cooling Machines on Fishing Vessels	Tatun Hayatun Nufus (Politeknik Negeri Jakarta & PNJ, Indonesia); Muhammad Bintang Jiaurrahman and Andi Ulfiana (Politeknik Negeri Jakarta, Indonesia); Dana Saputra (PT. Alana Green Electric, Indonesia); Cecep Slamet Abadi (Politeknik Negeri Jakarta, Indonesia)
12	16.00 - 16.15	1571345325	Parameter Sensitivity and Irradiance-Dependent Break-Even of Numerical Maximum Power Point Estimation in Photovoltaic Arrays	Dimas Nur Prakoso and Adi Soeprijanto (Institut Teknologi Sepuluh Nopember, Indonesia); Dimas Fajar Uman Putra (Institut Teknologi Sepuluh Nopember (ITS), Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 2)

Platinum Hotel Surabaya, October 10, 2026

Room : **Breakout room 1 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Reesa Akbar, Ph.D**
Date : **October 10, 2026**

No	Time	Paper ID	Title	Authors
1	09.00 - 09.15	1571320492	Fuzzy Logic-based Simulation for Optimizing Electric Train Specifications	Muhammad Arief Satria Wibawa, Ali Ridho Barakbah and Mu'arifin M (Politeknik Elektronika Negeri Surabaya, Indonesia); Entin Martiana Kusumaningtyas (Politeknik Elektronika Negeri Surabaya - Indonesia, Indonesia)
2	09.15 - 09.30	1571320552	The Evolving Landscape of Cardiac Arrhythmia Classification Using Deep Learning: A Systematic Literature Review (SLR)	Muhammad Furqon, Achmad Afandi, Arif Rahman Hakim, Mukhlish Hidayat, Agoesta Pralita Sari and Zainab Poltera (Politeknik Negeri Madura, Indonesia)
3	09.30 - 09.45	1571320617	Evaluating Architectural Robustness In Deep Learning For Non-Destructive Melon Multi-Class Ripeness Classification	Reyhana Aqilah Jilan (Politeknik Elekronika Negeri Surabaya, Indonesia); Arna Fariza (Politeknik Elektronika Negeri Surabaya, Indonesia); Agus Indra Gunawan (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Yuliana Setiowati and Dian Septiani Santoso (Politeknik Elektronika Negeri Surabaya, Indonesia)
4	09.45 - 10.00	1571320627	A Feature-Centric Modular SaaS Architecture for Cross-Platform Application Development: A Comparative Study on Microsoft Azure Cloud Infrastructure	Damar Galih Aji, Mu'arifin M, Sritrusta Sukaridhoto, Arif Basofi, Daffa Muhammad Irhamni, Mohammad Noer Dafiq and Wahyu Nur Hidayat (Politeknik Elektronika Negeri Surabaya, Indonesia)
5	10.00 - 10.15	1571320664	Structural Strength Assessment of a High-Density Polyethylene Floating Pontoon Deck Supporting Floating Photovoltaic Systems Using Finite Element Analysis	Kharis Abdullah and Aditya Maharani (Politeknik Perkapalan Negeri Surabaya, Indonesia); Sumardiono and Denny Radianto (Shipbuilding Institute of Polytechnic Surabaya, Indonesia); Muhammad Lukman Arif (PPNS, Indonesia)
6	10.15 - 10.30	1571320674	A Preliminary Study of AppCare Generator for MSE Using Role-Based LLM	Stalis Ahmad Sholeh (EEPIS, Indonesia); Yunia Ikawati and Evianita Dewi Fajrianti (Politeknik Elektronika Negeri Surabaya, Indonesia)
7	10.30 - 10.45	1571320814	Design and Development of an IoT-Integrated Smart Wearable for The Early Detection of Atrial Fibrillation Using a Cloud-Based Support Vector Machine	M Udin Harun Al Rasyid (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Achmad Alfitri Mulyawan (Politeknik Elektronika Negeri Surabaya, Indonesia); Grezio Arifiyan (Institut Teknologi Sepuluh Nopember, Indonesia & Politeknik Elektronika Negeri Surabaya, Indonesia); Tita Karlita (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Putri Liana (Universitas Nahdlatul Ulama Sunan Giri Bojonegoro, Indonesia)
8	10.45 - 11.00	1571322360	Detecting Cryptojacking Attacks Via Machine Learning: A Comparative Study Of XGBoost, Random Forest, And KNN Algorithm	Dylan Hansen Wijaya (Binus University, Indonesia); Nathanael Vincent Hadinoto (University of Bina Nusantara, Indonesia); Nadia (Bina Nusantara University, Indonesia)
	11.00 - 11.15	**Coffee Break**		
9	11.15 - 11.30	1571323085	Quantitative Identification of Translation-Consideration Words in Japanese I-Adjectives via Semantic Dimensionality: Proposal of the Translation Cost Index (TCI)	Ryoji Suzuki, Asako Uraki, Yusuke Takahashi, Yusuke Miyabe and Shigehiro Moriya (Musashino University, Japan)
10	11.30 - 11.45	1571323685	Design and Evaluation of a Dual-Mode Wi-Fi/GPRS GPS Tracking Node for Cloud-Based Motorcycle Rental Fleet Monitoring	Herry Langi (Manado State Polytechnic, Indonesia); Marike Amelda Kondoj (Manado State Polytechnic, Indonesia & Politeknik Negeri Manado, Indonesia); Nathaniel Bijang (Politeknik Negeri Manado, Indonesia); Eliazer Rongre (Manado State Polytechnic, Indonesia); Fitria Claudya Lahinta (Manado State of Polytechnic, Indonesia); Marcia Miracle Waney (Politeknik Negeri Manado, Indonesia)
11	11.45 - 12.00	1571341759	ANN-Based Smart Battery Identification and PID Controlled SEPIC Converter for Adaptive Battery Charging	Endro Wahjono, Suryono and Syechu Dwitya Nugraha (Politeknik Elektronika Negeri Surabaya, Indonesia)
12	12.00 - 12.15	1571324334	A Mobile-Based Smart Governance System for Monitoring Street Vendor Activities and Productivity	Dony Ahmad Hisyam, Selvia Ferdiana Kusuma and Weny Mistarika Rahmawati (Politeknik Elektronika Negeri Surabaya, Indonesia); Nirwana Haidar Hari (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Sritrusta Sukaridhoto (Politeknik Elektronika Negeri Surabaya, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 2)

Platinum Hotel Surabaya, October 10, 2026

Room : **Breakout room 2 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Dr. Ony Asrarul Qudsi**
Date : **October 10, 2026**

No	Time	Paper ID	Title	Authors
1	09.00 - 09.15	1571325263	Improved Artificial Potential Field with Tangential Force and PID-Based Attractive Function for Obstacle Avoidance in ERSOW Soccer Robots	Guntur Bagus Permadi (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Muhammad Nizar Habibi (Politeknik Elektronika Negeri Surabaya, Indonesia); Iwan Kurnianto Wibowo and Mochamad Mobed Bachtiar (Institut Teknologi Sepuluh Nopember, Indonesia & Politeknik Elektronika Negeri Surabaya, Indonesia); Daffa Mudzaky Anwar and Ocdyvian Alfin Ramadhani (EEPIS, Indonesia); Novian Fajar Satria (Politeknik Elektronika Negeri Surabaya, Indonesia)
2	09.15 - 09.30	1571326405	Development of an Integrated Vessel Smart Monitoring Architecture Based on Plug-and-Play Multi-Box Sensors for Propulsion Performance and Fuel Consumption Efficiency Analysis	Leonard and Mohammad Abu Jamiin (Politeknik Perkapalan Negeri Surabaya, Indonesia)
3	09.30 - 09.45	1571326464	Analysis Of The Dynamic Response Of A Semi-Submersible Structure Using Numerical FSI Simulations As A Support Structure For Offshore Floating Wind Turbines	Niken Magaretha Apriliana (EEPIS, Indonesia); Sony Junianto and Nu Rhahida Arini (Politeknik Elektronika Negeri Surabaya, Indonesia)
4	09.45 - 10.00	1571326622	Implementing Agile Scrum Methodology in The Development of LECTRA Web-Based IoT Smart Class Platform	Dwi Mulyo and Wahyu Nur Hidayat (Politeknik Elektronika Negeri Surabaya, Indonesia); Reyhana Aqilah Jilan (Politeknik Elekronika Negeri Surabaya, Indonesia); Ainul Muhlasin (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Nailus Nailus Nailussa'ada, Arna Fariza and Hestiasari Rante (Politeknik Elektronika Negeri Surabaya, Indonesia)
5	10.00 - 10.15	1571326696	Low-Resource One-Shot Logo Similarity Detection for Indonesian Trademark Registration Using Siamese Neural Networks	Rosiyah Faradisa and Gilang Ahmad Chaeral (Politeknik Elektronika Negeri Surabaya, Indonesia); Iwan Syarif (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Moh Hasbi Assidiqi (Politeknik Elektronika Negeri Surabaya, Indonesia & King Abdulaziz University, Saudi Arabia)
6	10.15 - 10.30	1571327076	Selection of Smart Grid Communication Media on an Isolated Island Using AHP Method: A Case Study Of Bawean Island	Azhar Agustian Gunawan, St and Jangkung Raharjo (Telkom University, Indonesia); Sudarmono Sasmono (Telkom University & PT Quadran Energi Rekayasa, Indonesia)
7	10.30 - 10.45	1571327525	Development and Experimental Evaluation of an ESP32-Based IoT Flood Mitigation System with Automated Floodgate Control and Blynk Cloud Monitoring	Ronny Katuuk (Manado State Polytechnic, Indonesia); Ali Ramschie, Marson James Budiman and Sulastri Eksan (Politeknik Negeri Manado, Indonesia); Leony Ariesta Wenno (Manado State Polytechnic, Indonesia)
8	10.45 - 11.00	1571327614	An AIoT-Enabled Smart Parcel Box with Hybrid Face Recognition and QR Code Authentication for Secure Last-Mile Delivery	Norma Ningsih (Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia & PENS, Indonesia); Nailul Muna and Nanang Syahroni (Politeknik Elektronika Negeri Surabaya, Indonesia); Manik Adinda Risalatul Pilpres (EEPIS, Indonesia); Musayyanah (Politeknik Elektronika Negeri Surabaya, Indonesia)
	11.00 - 11.15	**Coffee Break**		
9	11.15 - 11.30	1571327725	An IoT-Based Smart Monitoring Platform for Supporting Fish Quality Assessment in Traditional Fish Markets	Maksy Sendiang (Manado State Polytechnic, Indonesia); Robby Tangkudung (State Polythecnic of Manado, Indonesia); Margresye Rompas and Jemmry Recy Winokan (Manado State Polytechnic, Indonesia)
10	11.30 - 11.45	1571327943	Design and Inverse Kinematics Analysis of a Mirrored Dual-Wheel Dribbling Mechanism for ERSOW Middle Size League Soccer Robot	Qaedy Qashmal Robbani and Muhammad Nizar Habibi (Politeknik Elektronika Negeri Surabaya, Indonesia); Iwan Kurnianto Wibowo and Mochamad Mobed Bachtiar (Institut Teknologi Sepuluh Nopember, Indonesia & Politeknik Elektronika Negeri Surabaya, Indonesia); Ariko Theofilus Prayoga and Abyan Keane Muhammad (Politeknik Elektronika Negeri Surabaya, Indonesia)
11	11.45 - 12.00	1571327946	FA-OCR: A Format-Aware Adaptive OCR Pipeline for Multi-Format Receipt Digitization in Micro and Small Enterprises	Putriana Salman (Politeknik Negeri Banjarmasin, Indonesia); Damar Galih Aji (Politeknik Elektronika Negeri Surabaya, Indonesia); Rizky Amelia, Muhammad Syahid Pebriadi and Tino Kemal Fattah (Politeknik Negeri Banjarmasin, Indonesia)
12	12.00 - 12.15	1571328110	Face ID-Based Authentication for an iOS Attendance System to Enhance Security and Prevent Fraud: A Case Study of ASN in the Lamongan Regency Government	Nurfarida Mardzyska Azidah Adzim (Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia); Mohammad Robihul Mufid (Politeknik Elektronika Negeri Surabaya, Indonesia); Agung Teguh Setyadi (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 2)

Platinum Hotel Surabaya, October 10, 2026

Room : **Breakout room 3 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Ahmad Zainudin, Ph.D**
Date : **October 10, 2026**

No	Time	Paper ID	Title	Authors
1	09.00 - 09.15	1571328249	Design and Performance Evaluation of a 5GHz Wearable MIMO Antenna with Asymmetric Dual-Slit for Wireless Body Area Network Communication	Sitti Rabial Isnani (Hasanuddin University, Indonesia); Wardi (Universitas Hasanuddin, Indonesia); Merna Baharuddin (Hasanuddin University, Indonesia)
2	09.15 - 09.30	1571328292	Deciduous Teeth Detection and Enumeration on Dental Panoramic Radiographs Using YOLOv11 Algorithm	Aprilia Dwi Cristyana (EEPIS, Indonesia); Arna Fariza and Fitri Setyorini (Politeknik Elektronika Negeri Surabaya, Indonesia); Eha Renwi Astuti and Ramadhan Hardani Putra (Universitas Airlangga, Indonesia); Yanuar Risah Prayogi (Politeknik Elektronika Negeri Surabaya, Indonesia)
3	09.30 - 09.45	1571328371	An Integrated Server Virtualization and Monitoring System Using Proxmox, Prometheus, and Grafana for Network Laboratories	Bagus Akmal Nazhif, Mohammad Robihul Mufid and Much Chafid (Politeknik Elektronika Negeri Surabaya, Indonesia)
4	09.45 - 10.00	1571328466	Design and Implementation of a Web-Based Attendance Management Platform Integrated with Real-Time Visual Input Acquisition	Harson Kapoh (polimdo.ac.id & Goverment, Indonesia); Ivonne Putong (Politeknik Negeri Manado, Indonesia); Muchdar Patabo and Vincent Pantow (Manado State Polytechnic, Indonesia)
5	10.00 - 10.15	1571328472	Calibration Sensitivity of a Contextual-Bandit Prompt Selector: Forced-Exploration and Exploitation Trade-offs in Adaptive Code Generation	Raihan Putra Darmawan (Universitas Telkom, Indonesia); Aulia Aushaf Abidah (Telkom University, Indonesia); Aldi Wiranata (Telkom Indonesia, Indonesia); Fiky Suratman and Koredianto Usman (Telkom University, Indonesia)
6	10.15 - 10.30	1571328525	A Dual-Band Fractal Microstrip Antenna with U-Slot Defected Ground Structure for Wireless Power Transfer Application	Okkie Puspitorini, Paramita Wahyu Eka Lestari and Doni Ardiansyah (Politeknik Elektronika Negeri Surabaya, Indonesia); Ari Wijayanti (Institut Teknologi Sepuluh Nopember, Indonesia & Politeknik Elektronika Negeri Surabaya, Indonesia)
7	10.30 - 10.45	1571328556	Design and Development of a Passive Acoustic Monitoring System with UAV-Based Wireless Data Harvesting	Sutryanto, Hendrik Leo, Roslidar, Fardian and Rahmad Dawood (Universitas Syiah Kuala, Indonesia)
8	10.45 - 11.00	1571328598	Does Composition Dilute Context? Context-Gated Multi-Role Self-Representation (CMSR) for Explainable Consumer Preference Models	Yusuke Miyabe, Yusuke Takahashi and Asako Uraki (Musashino University, Japan)
	11.00 - 11.15	**Coffee Break**		
9	11.15 - 11.30	1571328722	Optimization of Nonlinear Control Systems Using Genetic Algorithms in the MATLAB Environment	Imam Sutrisno Bin (Politeknik Perkapalan Negeri Surabaya, Indonesia); Muhammad Khalil (Politeknik Negeri Tanah Laut, Indonesia); Iskandar (Politeknik Ilmu Pelayaran Semarang, Indonesia); Ari Wibawa (Universitas Diponegoro, Indonesia)
10	11.30 - 11.45	1571345713	Visual Analytics Gaps in Wildfire Risk Management Decision Support Systems: A Systematic Literature Review	Rahimi Fitri (Politeknik Negeri Banjarmasin, Indonesia & Politeknik Elektronika Negeri Surabaya, Indonesia); Era Purwanto (Electronic Engineering Polytechnic Institute Of Surabaya, Indonesia); Sritrusta Sukaridhoto (Politeknik Elektronika Negeri Surabaya, Indonesia); Reza Fauzan (Politeknik Negeri Banjarmasin, Indonesia); Ony Qudsi (Politeknik Elektronika Negeri Surabaya & Institut Teknologi Sepuluh Nopember, Indonesia); Abdul Rozaq (Politeknik Negeri Banjarmasin & Politeknik Elektronika Negeri Surabaya, Indonesia); Isna Wardiah (Politeknik Negeri Banjarmasin, Indonesia)
11	11.45 - 12.00	1571328731	A Multi-Role Dynamic Content Management System for Augmented Reality-Based Batik Learning Platform	Anisa Faza, Hestiasari Rante and Tri Budi Santoso (Politeknik Elektronika Negeri Surabaya, Indonesia)
12	12.00 - 12.15	1571328937	A Retrieval-Augmented Generation Framework for Preserving the Sangihe Language and Cultural Knowledge in Low-Resource Language Settings	Asnia Viviawaty Biringang (Universitas AMIKOM Yogyakarta, Indonesia); Robert Marco (Universitas Amikom Yogyakarta, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 2)

Platinum Hotel Surabaya, October 10, 2026

Room : **Breakout room 4 (Zoom: https://pens.id/icast2026)**
Session : **Engineering Science**
Moderator : **Dr.Eng. Teguh Hady Ariwibowo**
Date : **October 10, 2026**

No	Time	Paper ID	Title	Authors
1	09.00 - 09.15	1571328982	System Thinking Analysis of Fruit Suppliers for the MBG Program and Financial Technology Use in Supporting Efficient Business Transactions	Khildah Al Mursyidah (Binus University, Indonesia)
2	09.15 - 09.30	1571329037	Dissolved Oxygen Control via PI-Based Single-Phase Controller Rectifier in a Venturi Aeration System for Shrimp Aquaculture	Gigih Prabowo (Politeknik Elektronika Negeri Surabaya, Indonesia); Candra Dwi Mahendra (EEPIS, Indonesia); Muhammad Rizani Rusli (Politeknik Elektronika Negeri Surabaya, Indonesia); Arman Jaya (Electronics Engineering Polytechnic Institute of Surabaya, Indonesia); Era Purwanto (Electronic Engineering Polytechnic Institute Of Surabaya, Indonesia)
3	09.30 - 09.45	1571329077	A Grounded RAG-Based Mobile Conversational Agent for Traditional Acupressure Therapy Education	Entin Martiana Kusumaningtyas (Politeknik Elektronika Negeri Surabaya - Indonesia, Indonesia); Ali Ridho Barakbah and Ira Prasetyaningrum (Politeknik Elektronika Negeri Surabaya, Indonesia); Fauzan Abderrasheed (EEPIS, Indonesia)
4	09.45 - 10.00	1571329174	Design of a UAV Drone-Based Detection System for Coffee Berry Borer (Hypothenemus hampei) Infestation Damage in Coffee Plants Using IoT	Veronica, Felice Viery and Anthony Christiano Lumino (Bina Nusantara University, Indonesia); Erwin Halim (Bina Nusantara University, Indonesia & School of Information Systems, Indonesia)
5	10.00 - 10.15	1571329188	Conceptual Design of an E-Procurement System to Improve Procurement Process Efficiency in Indonesia's Fish-Canning Industry	Venny Vita Ponggawa (Manado State of Polytechnic, Indonesia); Franky Gerald Cliford Manoppo and Tjerie Pangemanan (Manado State Polytechnic, Indonesia); Stephy Beatrix Walukow (Manado State of Polytechnic, Indonesia); Valent Laorens (Manado State Polytechnic, Indonesia)
6	10.15 - 10.30	1571329269	Design of an AI-Based Traffic Monitoring System for Real-Time Vehicle Detection	Nada Salsabila (EEPIS, Indonesia); Norma Ningsih (Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia & PENS, Indonesia); Nailul Muna (Politeknik Elektronika Negeri Surabaya, Indonesia)
7	10.30 - 10.45	1571329278	Optimal Photovoltaic Tilt Angle for Improving Electrical Performance of Solar-Powered Paddle Wheel Aerators under Tropical Climate	Eky Novianarenti (Politeknik Perkapalan Negeri Surabaya, Indonesia); Arrad Ghani Safitra (Politeknik Elektronika Negeri Surabaya, Indonesia); Muchammad Nidhor Fairuza (Politeknik Perkapalan Negeri Surabaya, Indonesia); Imaniah Sriwijayasih (Shipbuilding Institute of Polytechnic Surabaya, Indonesia & Polytechnic, Indonesia); Adrian Rizky Maulana and Zindhu Maulana Ahmad (Politeknik Perkapalan Negeri Surabaya, Indonesia)
8	10.45 - 11.00	1571329296	Auditing Teacher-Linked Feature Overlap in Pseudo-Label-Based INA-CBG Claim Prioritization	Fernando Michael Panjaitan (EEPIS, Indonesia); Rosiyah Faradisa (Politeknik Elektronika Negeri Surabaya, Indonesia); Tessy Badriyah (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia)
	11.00 - 11.15	**Coffee Break**		
9	11.15 - 11.30	1571329313	YOLOv11-Based Weed Detection and Vegetation Density Analysis to Support Precision Herbicide Application	Natty Novia Ramadhani and Nailul Muna (Politeknik Elektronika Negeri Surabaya, Indonesia); Norma Ningsih (Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Indonesia & PENS, Indonesia); Muhammad Nizar Habibi (Politeknik Elektronika Negeri Surabaya, Indonesia)
10	11.30 - 11.45	1571345727	Integral Super-Twisting Extended-State Observer for Quadrotor Trajectory Tracking under Wind Gusts and Actuator Faults	Reesa Akbar (Politeknik Elektronika Negeri Surabaya, Indonesia)
11	11.45 - 12.00	1571329319	Performance Analysis of PID and Model Predictive Control for Filament Quality Improvement in Pellet-Based 3D Printing Extrusion Systems	Annisa Maulidia Damayanti (State Polytechnic of Banjarmasin, Indonesia); Q Qamariah (Lambung Mangkurat University, Indonesia); Katiko Imamul Muttaqin and Muhammad Wahyu (Politeknik Negeri Banjarmasin, Indonesia); Hanifa Shofia Balqis (Universitas Islam Balitar, Indonesia)
12	12.00 - 12.15	1571329324	Implementation of the Internet of Things (IoT) in a Real-Time Chicken Feed Stock Monitoring Information Systems	Roy Kurniawan (Binus University, Indonesia); Dawson Armando Yandra and Ricco Dave Haryanto (Bina Nusantara University, Indonesia); Erwin Halim (Bina Nusantara University, Indonesia & School of Information Systems, Indonesia)
13	12.15 - 12.30	1571328138	Kernel Based Feature Selection for Landslide Data Classification	Iwan Riyadi Yanto (Universitas Ahmad Dahlan, Indonesia); Ani Apriani (Institute Teknologi Nasional Yogyakarta, Indonesia); Joko Purwadi (Universitas Ahmad Dahlan, Indonesia); Aldo Erianda (Politeknik Negeri Padang, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 2)

Platinum Hotel Surabaya, October 10, 2026

Room : Breakout room 5 (Zoom: https://pens.id/icast2026)
Session : Engineering Science
Moderator : Adnan Rachmad Anom Besari, Ph.D
Date : October 10, 2026

No	Time	Paper ID	Title	Authors
1	09.00 - 09.15	1571329349	A Machine Learning-Driven Kansei Engineering Framework for Reusable Tumbler Design	Abdillah Nur Fatah, Novi Purnama Sari, Wiwi Prastiwinarti, Anggi Nuraini, Aisyah Nur Zahirah and Shalsaffa Muhammad Daffa (Politeknik Negeri Jakarta, Indonesia)
2	09.15 - 09.30	1571329366	3D Asset Optimization Pipeline for Immersive Climate Change XR Booth	Mochamad Rafi Dimas Putra Arijatno and Rajanuar Oky Giono (EEPIS, Indonesia); Hestiasari Rante, Sritrusta Sukaridhoto and Moh. Zikky (Politeknik Elektronika Negeri Surabaya, Indonesia)
3	09.30 - 09.45	1571329380	Implementation and Performance Evaluation of Raspberry Pi-Based Gunshot Direction Estimation	Syahru Rohmana Adi (Universitas Telkom, Indonesia); Muhsin and Risdilah Mimma Untsa (Telkom University, Indonesia); Fajar Febrio Putra Novlyawan (Universitas Telkom Surabaya, Indonesia); R. Hedi Tabah Pratama Putra (Universitas Telkom, Indonesia)
4	09.45 - 10.00	1571329393	Effect of Clearance, Punch Radius, and Material Hardness on Burr Formation during the Blanking Process	Fajar Mulyana, Dhiya Luqyana, Nugroho Eko Setijogiarto, Azam Milah Muhamad, Achmad Adfa Alfiansyah and Fio Izzafur Rahman (Politeknik Negeri Jakarta, Indonesia)
5	10.00 - 10.15	1571329399	Development of a Web-Based Interactive Platform for Collaborative Digital Storytelling	Qoulan Sadiyda, Hestiasari Rante and Ashafidz Dianta (Politeknik Elektronika Negeri Surabaya, Indonesia)
6	10.15 - 10.30	1571336587	The Physics Severity Index is a weighted linear composite of normalized physics-derived biomarkers extracted from the integral-domain representation of nerve conduction signals	Anis Sulalah (Universitas Brawijaya, Indonesia)
7	10.30 - 10.45	1571337650	Automatic Gram Bacteria Detection from Microscopic Images Using Convolutional Neural Networks	Nufus Akmalul Mafaza (EEPIS, Indonesia); Tita Karlita (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia); Ira Prasetyaningrum and Riyanto Sigit (Politeknik Elektronika Negeri Surabaya, Indonesia)
8	10.45 - 11.00	1571339224	FCLNet: An Efficient Hybrid CNN-Transformer Framework for Apple Leaf Disease Classification	M Aldiki Febriantono (Bina Nusantara University, Indonesia & BINUS, Indonesia)
	11.00 - 11.15	**Coffee Break**		
9	11.15 - 11.30	1571339774	Development and Experimental Validation of a Dual-Layer IoT-Enabled PLC-HMI Educational Platform for Real-Time Overvoltage and Undervoltage Protection	Deitje Pongoh, Leony Ariesta Wenno, Stephy Walukow, Josephin Sundah and Adhityo Samola (Manado State Polytechnic, Indonesia); Asnia Viviawaty Biringang (Universitas AMIKOM Yogyakarta, Indonesia)
10	11.30 - 11.45	1571346308	An Analytical Study of Multi-Class Rice Threat Detection: Diagnostic Evaluation of YOLOv11n Across Thirteen Categories in Field Conditions	I Kadek Dipastra Arka Dananjaya (EEPIS, Indonesia); Mike Yuliana and Ahmad Zainudin (Politeknik Elektronika Negeri Surabaya, Indonesia)
11	11.45 - 12.00	1571340136	A Systematic Review of Edge AI Techniques for Real-Time Fire and Smoke Detection in IoT Systems	Abdul Rozaq (Politeknik Elektronika Negeri Surabaya & Politeknik Negeri Banjarmasin, Indonesia); Era Purwanto (Electronic Engineering Polytechnic Institute Of Surabaya, Indonesia); Syechu Dwitya Nugraha (Politeknik Elektronika Negeri Surabaya, Indonesia); Reza Fauzan (Politeknik Negeri Banjarmasin, Indonesia); Ony Qudsi (Politeknik Elektronika Negeri Surabaya & Institut Teknologi Sepuluh Nopember, Indonesia); Ahmad Yusuf and Dhiyaussalam (Politeknik Negeri Banjarmasin, Indonesia); Rahimi Fitri (Politeknik Elektronika Negeri Surabaya & Politeknik Negeri Banjarmasin, Indonesia); Effan Najwaini (Politeknik Negeri Banjarmasin, Indonesia)
12	12.00 - 12.15	1571340333	Omnidirectional Vision-Based Obstacle Detection for ERSOW Middle Size League Soccer Robots Using 360-Degree Ray Scanning and Region Growing Clustering	Bima Adji Kusuma and Muhammad Nizar Habibi (Politeknik Elektronika Negeri Surabaya, Indonesia); Iwan Kurnianto Wibowo and Mochamad Mobed Bachtiar (Institut Teknologi Sepuluh Nopember, Indonesia & Politeknik Elektronika Negeri Surabaya, Indonesia); Moch. Faris Afif (EEPIS, Indonesia); Hari Tammim M (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia)
13	12.15 - 12.30	1571338462	Capture Configuration and Reconstruction Quality in 3D Gaussian Splatting: A Characterization Across Cameras, Environments, and Capture Extents	Rendra Suprobo Aji (Politeknik Elektronika Negeri Surabaya Surabaya, Indonesia); Ikhsan Nur Alim, Moh. Zikky and Aris Bahari Rizki (Politeknik Elektronika Negeri Surabaya, Indonesia); Widita Trisniani (Electronic Engineering Polytechnic Institute of Surabaya, Indonesia)

ICAST-ES 2026 Presentation Schedule (Day 2)

Platinum Hotel Surabaya, October 10, 2026

Room : Breakout room 6 (Zoom: https://pens.id/icast2026)
Session : Engineering Science
Moderator : Dr.Eng. Indra Ferdiansyah
Date : October 10, 2026

No	Time	Paper ID	Title	Authors
1	09.00 - 09.15	1571342991	Integrating SHAP Explanations and Knowledge Graphs for Financial Risk Decision Support: An Imbalance-Aware Bankruptcy Prediction Framework	Muhammad Syahid Pebriadi, Fitria, Heldalina, Emy Iryanie, Tino Kemal Fattah and Putriana Salman (Politeknik Negeri Banjarmasin, Indonesia); Muhammad Arfan (Universitas Halu Oleo, Indonesia)
2	09.15 - 09.30	1571343507	Interpretable Machine Learning for Monthly Oil Palm Productivity Prediction in South Kalimantan Using Autoregressive and Agroclimatic Features	Kun Nursyaiful Priyo Pamungkas and Ahmad Yusuf (Politeknik Negeri Banjarmasin, Indonesia); Nitami Lestari Putri (Politeknik Negeri Banjarrmasin, Indonesia); Wanvy Arifha Saputra, Dhiyaussalam and Joni Riadi (Politeknik Negeri Banjarmasin, Indonesia)
3	09.30 - 09.45	1571344653	Evaluating Trust and Usefulness in AI-Driven Recommendation Systems: A PLS-SEM Analysis of E-Commerce Purchase Behavior	Jeremy Jip (Binus University, Indonesia); Lim Sanny (Bina Nusantara University, Indonesia); Rachel Zefania Sutanto (Binus University, Indonesia)
4	09.45 - 10.00	1571344663	A PLC-HMI-VSD-Based Dual-Mode Speed Control System for Three-Phase Induction Motors: Analog and Multi-Speed Approaches	Yoice Putung and Sukandar Sawidin (Manado State Polytechnic, Indonesia); Anthoinete Waroh (Manado State Polythecnic, Indonesia); Maruto Loegimin, Muchdar Patabo and Samsu Tuwongkesong (Manado State Polytechnic, Indonesia)
5	10.00 - 10.15	1571344671	A Usability Study of Markerless Indoor Navigation System Using Immersal Mapper and A* Algorithm	Bryan Royvaldo All Assyura and Muhammad Marshal Putra Al Barry (EEPIS, Indonesia); Evianita Dewi Fajrianti, Amma Liesvarastranta Haz and Sritrusta Sukaridhoto (Politeknik Elektronika Negeri Surabaya, Indonesia)
6	10.15 - 10.30	1571344735	Development and Electromechanical Characterization of Self-Sensing Carbon-Elastomer Composites for Soft Robotic Applications	Septriandi Wirayoga (Politeknik Negeri Malang, Indonesia); Azam Muzakhim Imammuddin (State Polytechnic of Malang, Indonesia); Mohammad Abdullah Anshori and Hadiwiyatno (Politeknik Negeri Malang, Indonesia)
7	10.30 - 10.45	1571345089	Sustainable Microstrip Antenna Design with Electromagnetic Exposure Assessment under the ICNIRP 2020 Guidelines	Ni'matut Tamimah (Shipbuilding Institute of Polytechnic Surabaya, Indonesia); Aslam Chitami Priawan Siregar (Universitas Pembangunan Nasional "Veteran" Jawa Timur, Indonesia); Eky Novianarenti (Politeknik Perkapalan Negeri Surabaya, Indonesia); Devina Puspita Sari (Shipbuilding Institute of Polytechnic Surabaya, Indonesia); Imah Luluk (PPNS, Indonesia)
8	10.45 - 11.00	1571345437	Isolating the Contribution of Temporal and Nontemporal Features in LSTM Load Forecasting	Yuli Prasetyo and Adi Soeprijanto (Institut Teknologi Sepuluh Nopember, Indonesia); Dimas Fajar Uman Putra (Institut Teknologi Sepuluh Nopember (ITS), Indonesia)
	11.00 - 11.15	**Coffee Break**		
9	11.15 - 11.30	1571345560	AI-Based Meeting Management System for Digital Invitations and Automatic Meeting Minutes Generation	Aisyah Nur Aini (EEPIS, Indonesia); Yesta Medya Mahardika and Evianita Dewi Fajrianti (Politeknik Elektronika Negeri Surabaya, Indonesia)
10	11.30 - 11.45	1571325121	A Deep Learning Approach for Assessing Architectural Floor Damage Severity using Lightweight YOLO and CLAHE Enhancement	Prakas Dwi Sanjaya (Politeknik Elektronika Negeri Surabaya, Indonesia); Prima Kristalina (Politeknik Elektronika Negeri Surabaya (PENS), Indonesia); Bambang Sumantri (Politeknik Elektronika Negeri Surabaya, Indonesia)
11	11.45 - 12.00	1571328133	The effectiveness of the weighted Rough set feature selection in graduate prediction	Iwan Riyadi Yanto and Ardiansyah (Universitas Ahmad Dahlan, Indonesia); Ani Apriani (Institute Teknologi Nasional Yogyakarta, Indonesia); Rahmat Hidayat (Politeknik Negeri Padang, Indonesia)
12	12.00 - 12.15	1571328966	Design of Modified Meanderline-Based Bandpass Filter for S-Band Radar Applications	Achmad Dany Marchellio (Telkom University, Indonesia); Fannush Shofi Akbar (Telkom University, Surabaya Campus, Indonesia); Muhsin (Telkom University, Indonesia); Mohammad Rio Ferdihansyah Rohmatul Huda and Muhammad Falih Al Itisham (Universitas Telkom, Indonesia)
13	12.15 - 12.30	1571329346	Effectiveness of Virtual Reality-Based Learning in Improving Basic Communication Understanding among University Students with Borderline Intellectual Functioning	Tika Dwi Ariyanti (Politeknik Negeri Jakarta, Indonesia & Universitas Indonesia, Indonesia); Innas Rovino Katuruni, Rahma Nur Praptiwi, Genesa Vernanda and Iwan Sonjaya (Politeknik Negeri Jakarta, Indonesia)