UBI-MEDIA 2026/ IC 2026

The 13th International Conference on Ubi-Media Computing and Workshops

The 17th International Symposium on Pervasive Systems, Algorithms, and Networks

The 8th International Conference on Innovative Computing

MIOT   MLMA   SS_IAS   SS_AAOI   SS_SDA

Conference Agenda

January 18-22, 2026

@Penang, Malaysia

Schedule

Day 1 - January 18, 2026 (Sunday)

Executive Committee Meeting

Day 2 - January 19, 2026 (Monday)

	Room #A	Room #B	Room #C
Morning Session			
08:30~09:00	Registration		
09:00~09:30	Opening Conference (Datai Room, Level 2)		
09:30~10:20	Keynote Speaker I (Datai Room, Level 2)		
10:20~10:40	-- Coffee break --		
10:30~12:00	Session1-1	Session1-4	Session1-7
12:00~13:00	Lunch (Café JEN, Level 1)		
Afternoon Session			
13:10~14:00	Keynote Speaker II (Datai Room, Level 2)		
14:00~15:30	Session1-2	Session1-5	Session1-8
15:30~16:00	-- Coffee break --		
16:00~17:30	Session1-3	Session1-6	Session1-9
18:00~	Banquet Dinner (Cha Room, Level 2)		

Day 3 - January 20, 2026 (Tuesday)

	Room #A	Room #B	Room #C
Morning Session			
09:00~10:30	Session 2-1	Session 2-5	X
10:20~10:40	-- Coffee break --		
10:30~12:00	Session 2-2	Session 2-6	X
12:00~13:00	Lunch (Café JEN, Level 1)		
Afternoon Session			
13:30~15:00	Session 2-3	Session 2-7	X
15:00~15:30	-- Coffee break --		
15:30~17:00	Session 2-4	Backup session	X
16:00~17:00	Closing Conference and Best Paper Award (Room #B)		

Room #A - Pangkor Room, Level 3、Room #B – Langkawi Room, Level 3

Room #C Main Room (c) – Datai Room, Level 2

Day 4 - January 21, 2026 (Wednesday)

	Local University
Morning Session	
09:00~10:30	Video Session #1
10:30~10:30	Video Session #2
#1	
13:00~14:30	Student Workshop #1, #2
14:30~16:00	Technology Talk #1, #2
16:00~17:00	Meeting Time

Day 5 - January 22, 2026 (Thursday)

	Local University
Morning Session	
09:00~10:30	Executive Committee Meeting
10:30~12:00	Executive Committee Meeting
Afternoon Session	
16:20~17:20	Executive Committee Meeting

Ubi-media/ IC 2026 Program

January 18-22, 2026

K-I	Room: Main Room (c) – Datai Room, Level 2	
	January 19th, 9:30 - 10:20	**Session Chair: Prof. Timothy K. Shih**
	Conference and Ubi-media Keynote Speaker:	**Prof. David Taniar**

K-II	Room: Main Room (c) – Datai Room, Level 2	
	January 19th, 13:10 - 14:00	**Session Chair: Prof. Timothy K. Shih**
	Conference and Ubi-media Keynote Speaker:	**Prof. Prof. Chia-Hui Chang**

Session	January 19th, 2025 @Room A
Session1-1	10:30 - 12:00 Session Chair: Prof. K P Hewagamage
0362	**Non-Invasive Generative AI in Moodle via RPA and Retrieval-Augmented Generation** Sudam Rohanadeera and K P Hewagamage
3226	**A Multi-Store Recommendation and Route Optimization System for Enhanced Grocery Shopping** Bhathiya Vandebona, Pubudu Satharasinghe, Harsha Gunawardana, Sanduni Thrimahavithana and K. Hewagamage
6554	**Lightweight Multi-Task CNN for Otoscopic Image** Yi Tang Soon and Jun-Wei Hsieh
8084	**Predicting Training Batch Time for ResNet Image Classification: A Lightweight Model for Media Workloads** Shao-Gu Gong, Liang-Tsung Huang and Chao-Chin Wu
8533	**A Multi-Branch Retrofit IoT Smart-Shelf System for Indonesian Restaurant SMEs: Cloud-Based Inventory Visibility to Cut Food Waste** Felicia Evan, Alvian Shanardi Wijaya, Erin, Septian Eka Ady Buananta, Ajeng Wulandari, Valentinus, and Kevin Lie

Session	January 19th, 2026 @Room A
Session1-2	14:00~15:30 Session Chair: Prof. Arun Kumar Sangaiah
0698	**SA-BEF: Deep Fusion of Sentinel-1/2 for Forest Biomass Estimation with Occlusion-Aware Attention Mechanisms** Neelkanth Mawood, Arun Kumar Sangaiah, Alkha Mohan and Hwa-Lung Yu
0726	**Networks Traffic Prediction Based on LSTM** Yong Shi, Bao Li, Chao Wang and Xiaoming Tang
6732	**Research on intelligent development and full life cycle operation and maintenance management of high-speed rail communication network resources** Xia Hua, Yuhuan Wang and Yong Shi
8692	**Intelligent Government Media Services Driven by the Integration of Semantic Graph and Context Awareness** Jinnan Ma, Rizhong Wang, Arun Kumar Sangaiah and Huan-Ming Chuang
9543	**Integrating Cyber Threat Management with AI in Vehicular Security Operation Center** Shih-Hao Chang, Chih-Hsien Kuo, Hsin-Pei Chen and Yu-Shiun Chen

Session	January 19th, 2025 @Room A
Session1-3	16:00~17:30 Session Chair: Prof. Chih-Lin Hu
0900	**Modeling Structural Tones Extraction as a Combinatorial Optimization Problem** Tzu-Wei Huang, Cheng-Yang Tsai, Yun-Chi Cheng, Ssu-Yu Yeh, Chiao-Ying Su and Yu-Cheng Lin
1078	**Phrase Segmentation of Jiangnan Music Using YNote Representation** Yu-Chia Wang, Yung-Chi Tseng, Cheng-Yang Tsai, Tzu-Wei Huang, Shu-Yen Shih and Yu-Cheng Lin
4612	**Game-Based Learning Platform Using Minecraft: A Practica Case of Reconstructing the National Taiwan Science Education Center as a Game Theme** Yi-Chun Kuo and Chih-Lin Hu
5726	**ECTRA: Bridging Video Lectures and Student Queries via a RAG-Based Chatbot for Timestamped and Semantic Responses** Tipajin Thaipisutikul, Khasidech Jiwyam, Kirati Ngampis, Jirayu Saejiam, Jakkrit Tansue, Thanapon Noraset, Sheng-Chih Chen, and Ying-Nong Chen
8195	**HNote: Extending YNote with Hexadecimal Encoding for Fine-Tuning LLMs in Music Modeling** Hung-Ying Chu, Shao-Yu Wei, Guan-Wei Chen, Tzu-Wei Huang, Cheng-Yang Tsai and Yu-Cheng Lin

@Room B (Room #B – Langkawi Room, Level 3)

Session	January 19th, 2026 @Room B
Session1-4	10:30~12:00 Session Chair: Prof. Huang-Chia Shih
1065	VR Tennis Viewing Angle Selection System Huang-Chia Shih, Kuan-Yu Su and Ming-Hsun Liang
2580	An Energy-Aware Caching Algorithm for VVC Video Streaming in Content Delivery Networks Tz-Heng Hsu, Jian-Wei Li and Rui-Han Ju
3096	Monocular Fish Distance Measurement Method Integrating Deep Learning and Adaptive Correction Po-Yen Hsu, Mu-Yen Chen and Kuan-Ying Lee
3417	Human Activity Recognition Based on Wi-Fi CSI Using Bidirectional Temporal Convolutional Network (BiTCN) Thai Duy Quy, Shu-Yen Shih and Chih-Yang Lin
*1168	Algorithmic mediation and multimodal narratives in tier list videos on YouTube Angel Torres-Toukoumidis, Moises Pallo and Ruth S. Contreras Espinosa

Session	January 19th, 2026 @Room B
Session1-5	14:00~15:30 Session Chair: Prof. Ranjit Singh Sarban Singh
*1626	Enhancing Machine Learning-Based Intrusion Detection with Chebyshev-driven Feature Engineering Erdenebat Chuluun, Bayar-Erdene Lkhagvasuren, Dashdorj Yamkhin, Uyangaa Khuchit and Seonuck Paek
2311	LLMAntiPhish: A Hybrid Intelligence Framework for Real-Time Phishing URL Detection using Multi-Modal Deep Learning and Large Language Models Polakrit Krajaisri, Thanapat Wongthongtham, Kwanklao Rattanahem and Kanoksak Wattanachote
3092	Effects of Integrating Generative and Rule-Based Chatbots with Immersive Virtual Reality on University Students' Attention and Learning Performance: A Case of Anti-Phishing Education Jerry Chih-Yuan Sun, Zi-Jie Zhuang, Wen-Li Chang and Li-An Li
3361	An Optimized SSD Framework for Tube Color Detection on Ultra-Low-Power Edge Devices Tsung-Han Tsai and Min-Sheng Chen
*5174	Enhancing Security in Intelligent Hotel Ecosystems Using AI-Based Phishing Detection Mosiur Rahaman, Kartik Vanna, Akshat Gaurav, Kwok Tai Chui and Brij B. Gupta

Session	January 19th, 2026 @Room B
Session1-6	16:00~17:30 Session Chair: Prof. Pimpa Cheewaprakobkit
2063	**A Greedy-based Approach for Simulating an Expert Packer's Container Loading Strategy** Chen-Kun Tsung, Hsiu-Ming Li, Hsuan-Yu Huang, Ya-Ting Huang, Hsiao-Yu Wang and Ching-Hsien Hsu
3963	**Predict influence of rare events in power of combined cycle power plant by Copula method** Hsiao-Yu Wang and Chun-Shih Cheng
6162	**A Multi-Stage Framework for Controllable Symbolic Music Generation via LLaMA Modeling** Pimpa Cheewaprakobkit, Timothy K. Shih, Chun-Cheng Chu, Yu-Cheng Lin
8318	**Deep Learning-Enhanced Hand Gesture Recognition for Robust Mobile Robot Control** Pimpa Cheewaprakobkit, Quang-Thai Dao, Phuoc-Loi Tran, Anh-Trung Le Tran, Van-Ven Phan, Dinh-Tu Nguyen and Worapot Sommool

@Room C (Room #C Main Room (c) – Datai Room, Level 2)

Session	January 19th, 2026 @Room C
Session1-7	10:30~12:00 Session Chair: Prof. Ying-Nong Chen
MLMA_1	**Style-Expression Generation via VQ GAN Scheme** Chin-Ting Lee, Ying-Nong Chen and Kun-Yu Lin
MLMA_3	**Integrating Parametric Workflow with CFD Simulation: Development and Validation of Indoor–Outdoor Ventilation Evaluation Processes** Li-Wei Tsai, Yen-Liang Lin and Min-Hsi Chao
MLMA_4	**Analysis of Risk Perception Among Quanzhou Private Export Enterprises in Coping with Trade Uncertainty: A Q-Methodology Research Design** Chi Shen Chang, Sheng Yuan Wang, Yan Zhang Chen, Wen Wen Wu and Xiao Yin Zhang
MLMA_5	**Research on the Logic and Mechanism of Digital and Intelligent Transformation Empowering New Quality Productivity: A Case Study of East China's Coastal** Yen-Chang Chen and Yun Qiao Zhuo
MLMA_6	**The Influence of Financial Crises on Structural Breaks in the Financials Index** Yen-Chang Chen, Chi-Shen Chang and Sheng-Yuan Wang

Session	January 19th, 2026 @Room C
Session1-8	14:00~15:30 Session Chair: Prof. Lawrence Y. Deng
MLMA_7	**AI-Driven Research on the Current Situation Survey and Organizational Profiling of Disability Support Non-Governmental Organizations in Quanzhou** Sheng-Yuan Wang, Chen-Yen Chang and Chi-Shen Chang
MLMA_8	**AI-Based Repurchase Prediction in Retail Customer Behavior Analysis** Yu-Yu Yen, Jui-Ying Chen, Li-Wei Tsai and Jui-Hung Kao
MIOT_2	**Accelerating AI-Powered Research: The PuppyChatter Framework for Usable and Flexible Tooling** Chun-Hsiung Tseng, Hao-Chiang Koong Lin, Andrew Chih-Wei Huang, Yung-Hui Chen and Jia-Rou Lin
MIOT_8	**Attention Enhanced DUCK-Net for Lung Nodule Detection** Lawrence Y. Deng, Xiang-Yann Lim, Tzu-Ching Lin, Heng-Hsiu Lin, Ming-Hsun Lee and Yu-Cheng Chang
MIOT_10	**Design and Implementation of a Low-cost UHF RFID-based Tracking and Counting Assistance System for Medical Instruments** Wen-Yi Chen, Guan-Yu Chen and Jiun-Yu Tu

Session	January 19th, 2025 @Room C
Session1-9	16:00~17:30 Session Chair: Prof. Jiun-Yu Tu
MIOT_3	**A CycleGAN-Based Weather Translation Approach Enhanced by Attention Mechanisms: Image Quality As-sessment from Rainy to Sunny Conditions** Yung-Hui Chen, Chun-Hsiung Tseng, Jiun-Yu Tu, Peng-Wen Chen, Huang-Wen Huang, Tzu-Yu Wei and Jun-Ru Chen
MIOT_4	**AI-Driven Intelligent Itinerary Generation: A Conceptual Framework Integrating Semantic Reasoning and Geospatial Intelligence** Cheng-Yun Ho and Cheng-Yuan Ho
MIOT_5	**Design and Implementation of a Blockchain-Based Decentralized Time Banking System** Chin-Ling Chen, Yi-Jun Yu, Chun-Che Chang, Jian-Jie Gu, Jia-Kai Shi, Xin-An Chen and Ling-Chun Liu
MIOT_6	**Anonymous Feature-Tracking Framework for Environmental Optimization in Hospital Spaces** Peng-Wen Chen, Shui-Shu Hsiao, Yung-Hui Chen, Ya-Hsun Chang, Hsin-Yu Chang, Yu-Cen Lin and Wen-Qi Zhang
IAS_1	**Automated Medical Report Generation via OCR and Generative AI** Yu-Chih Wei, Wei Shan Lin, Chia-Yun Hsu, Yung-Hsiang Hsu and Yu-Zhe Wang

Session	January 20th, 2026 @Room A
Session2-1	09:00~10:30 Session Chair: Prof. Somchoke Ruengittinun
4272	HML-PTA: A Hybrid Multi-Level Privacy-Preserving Task Assignment for Spatial Crowdsourcing Yu-Chia Lin and Yu-Ling Hsueh
7434	A Vision-Based Architecture for Continuous Path Decision-Making with DDPG Cheng-Hui Chen, Qun-Wei Huang, Wei-Quan Wang and Hao-De Jhan
7981	UAV Path Planning for Building Structure Inspection Wen-Chi Tsai, Yi-Peng Liu, Yu Wu, Yun-Sheng Chen, Chung-Lun Lai, Yu-Yu Chang and Min-Te Sun
MLMA_9	A computer vision approach for verifying the count of surgical material and instruments to prevent retention of surgical items Nutpawee Kawee, Karnnitra Sukpanich, Amphawan Srikrutranan, Tanaboon Tongbuasirilai and Somchoke Rueng-Ittinun
MIOT_7	IoT Learning Device Recognition for Education Lab Management Using YOLO Thaphon Chinnakornsakul, Somchoke Ruengittinun and Soontharee Koompairojn

Session	January 20th, 2026 @Room A
Session2-2	10:30~12:00 Session Chair: Prof. Shih-Yu Chen
3942	An AI-Based System for Automatic Detection and Classification of Wood-Boring Insect Sounds in Cultural Heritage Chuan-Yu Chang, Po-Yu Su, Fan-Nong Yu and Tzu-Hao Liu
4186	AI-Powered Video Editing: Integrating Speech Recognition and Generative AI for Deep Content Analysis Chuan-Yu Chang, Yu-Hsin Cheng, Jia-Yee Chia and Min-Hao Wang
AAOI_1	Nutrient Classification of Meals Based on Dual-Branch Attention Learning Chao-Yang Lee
AAOI_2	Smart Greenhouse Monitoring System for Agricultural IoT: Integrating Environmental Sensing and Data Analytic Shu-Wei He and Shih-Yu Chen
AAOI_3	SmartWaste-YOLO: An Enhanced YOLO-Based Model for Intelligent Trash Classification and Recycling Chuan-Yu Chang, Sheng-Gui Su, Abida Khanum, Po-Yu Su and Yu-Hsin Cheng

Session	January 20th, 2026 @Room A
Session2-3	13:30~15:00 Session Chair: Prof. Chalothon Chootong
1986	**Filtering Method Against Malicious Clients by Edge-based Accuracy Validation in Hierarchical Federated Learning** Geonho Kim, Hyunsu Jeong and Joon-Min Gil
6439	**Bilateral Lesion-Guided Transformers with Patient-Level Graph Reasoning for Multi-Label Retinal Disease Diagnosis** Soo Kyun Kim, Inchul Han and Muhammad Ali Iqbal
5690	**Handling Missing Modalities in Multimodal Federated Learning for Healthcare Data Analytics** Vichayuth Ngamsittipong, Thannatorn Thongsuk, Jakkaphat Jumratboonsom, Watthanan Jatuviriyapornchai, Yipeng Zhou and Petch Sajjacholapunt
9136	**An Improved Camera-Based People Counting System with Identity Tracking and Multi-State Line-Crossing Logic** Isack Farady, Chatchai Kasemtaweechok, Chalothon Chootong, Piyaphum Muetkhambong, Boonphithak Phompech and Arnon Phongrusamepane
9927	**Fine-Tuning a Multilingual Transformer Model for Thai Medical Named Entity Recognition on Medicine Labels** Nonpawit Silabumrungrad, Natchanan Lordee, Jirawan Charoensuk and Chalothon Chootong

Session	January 20th, 2026 @Room A
Session2-4	15:30~17:00 Session Chair: Prof. Zhenyao Liu
4724	**A Cross-Attention Enhanced Approach for Hybrid Text Summarization.** Yi-Cheng Chen, Lin Hui, Sheng-Chih Chen, Chuan-Wang Chang and Jun-Zhe Liu
IAS_3	**Development of a Graph Attention Network Model for EEG-Based Cognitive Assessment in Dementia** Yu-Ching Tai, Si-Zhen Chen and Po-Lei Lee
IAS_4	**Remote Ultrasonic Scanning System via Multi-View 3D Modeling and Dual-Force Sensor Based Fuzzy Neural Network Control** Wun-Hao Sie, Dong-Lin You and Po-Lei Lee
IAS_5	**Cross-Subject LSTM Model Using sEMG Signals for Assistive Force Estimation in Pneumatic Exoskeletons** Song Yu Wu, Che-Ming Hu and Po-Lei Lee
IAS_6	**Combining A Global Path Planning and DQN-based Local Obstacle Avoidance for Biped Robot Navigation** Hao-Yan Hu and Po-Lei Lee

@Room B (Room #B – Langkawi Room, Level 3)

Session	January 20th, 2026 @Room B
Session2-5	09:00~10:30 Session Chair: Prof. Min-Te Sun
8152	**Semantic Segmentation for Shuttlecock Trajectory Understanding** Ciao-Lin Cheng, Jiun-Jer Chen, Tsì-Uí Ik, Jen-Hao Hsu, Jiun-Long Huang and Lo-Yao Yeh
SDA_2	**HT-ConvFormer: A Hierarchical Framework for Multi-Scale Temporal Modeling in Table Tennis Analytics** Yu-Min Zhang, Jui-Han Lin, Pei-Jan Peng, Wen Yen Chang, Chun-Chieh Lee and Kuo-Chin Fan
SDA_3	**Development of a New Force Platform for Athletic Performance Assessment Using Load Cells** Mehmet Yıldız, Uğur Fidan, Zeki Akyıldız and İrem Güdücü
SDA_4	**Predicting strike types in Table Tennis Using Sequence to Sequence Models** Hsuan-Cheng Chu, Chao-Wei Cai, Po-Cheng Cheng and Hung-Hsuan Chen

Session	January 20th, 2026 @Room B
Session2-6	10:30~12:00 Session Chair: Prof. Kun-Yu Lin
IC-02	**AI/AR Smart Glasses in Nursing: Frontiers, Risks, and Governance** Chao-Ting Chu, Hsiung-Mao Lin, Yueh-Tao Chiang and Wen-Yen Lin
IC-09	**An MLOps Framework for Real-Time BI-RADS Classification** Wan Mohd Amir Fazamin Wan Hamzah, Nur Farah Afifah Ahmad Sukri, Mohd Kamir Yusof, Mumtazimah Mohamad, Ismahafezi Ismail and Harmy Mohamed Yusoff
IC-11	**Human Anomalous Activity Detection System Based on Infrared Grid Sensor** Ololade Babatunde and Raqibul Hasan
IC-15	**Why Users Complain: Service Quality Gaps in Nepal's Leading E-Wallets** Kapil Gurung
IC-16	**Reinforcement-Guided Swarm Drones: Effects of PSO and Pheromones on Collective Behaviour** Neha Gupta, Vivek Tetarwal and Amit Mathur

Session	January 20th, 2026 @Room B
Session2-7	13:30~15:00 Session Chair: Prof. Lin Hui
IC-12 (Veido)	**Nomophobia in University Students: A Machine Learning and Data Analysis Approach to Smartphone-Related Anxiety** Carlos Alberto Espinosa-Pinos, Paola Silvana Valencia-Medina and Camila Alessandra Valarezo-Calero
IC-13 (Veido)	**Automatic Assessment of Cognitive, Social, and Emotional Skills in University Students Using Machine Learning Models** Carlos Alberto Espinosa-Pinos, Jorge Luis Cisneros-Bedón, Noemí Viviana Rodríguez-Ortiz, Daniela Jaramillo and Alejandro Llerena
IC-14 (Veido)	**Indigenous Knowledge Management System Cycle in Papua** Melkior N. N. Sitokdana, Apol Pribadi and Reny Nadlifatin

Session	January 20th, 2026 @Room B
Backup	16:00~17:00 Session Chair: Prof. Lin Hui
16:00~17:00	**Closing Conference and Best Paper Award (Room #B)** Session Chair: Prof. Po-Lei Lee