



# IAIT2026

The International Conference  
on Advances in Information Technology

## The 14<sup>th</sup> International Conference on Advances in Information Technology

IAIT2026 will be held onsite in Bangkok, Thailand, from 17 to 19 June 2026. Organized by the School of Information Technology (SIT), King Mongkut's University of Technology Thonburi (KMUTT) in collaboration with the IEEE Computational Intelligence Society (IEEE CIS), this year's conference marks a special milestone – the 30<sup>th</sup> anniversary of SIT.

**Conference Program**  
17 - 19 June 2026

**“ Trustworthy AI and Cybersecurity:  
Foundations for a Resilient Digital Future ”**



# SCHEDULE

June 17, 2026



<p>8.30 - 17.30 Registration &amp; Badge Pickup (ongoing all day)</p>
<p>10.30 - 12.45 AI Automation Workshop (online) : Build AI Workflows with n8n + Local AI Model</p>
<p>14.00 - 17.00 Bangkok City Tour (optional with additional payment)</p>

# SCHEDULE

June 18, 2026



<b>8.00 – 8.45</b> <b>Registration</b>					
<b>9.00 – 9.45</b> <b>IAIT 2026 Open Ceremony</b> Welcome by Prof. Narongrit Waraporn (Dean of School of IT, KMUTT)   30th Anniversary Address by the Dean, School of Information Technology, KMUTT   Greetings from IEEE CIS Thailand Chapter					
<b>10.00 – 10.40   KEYNOTE 1 (Online)</b> Prof. Arpan Kar (Indian Institute of Technology Delhi, India) <b>"Computational Theory Building Research for Improving User Experience"</b>					
<b>10.40 – 10.55   Short Coffee Break</b>					
<b>Session 1: JSCI Special Session</b> Session Chair: Assoc. Prof. Dr. Pornchai Mongkolnam, KMUTT, Thailand		<b>Session 2: Large Language Models, RAG, and Prompt Engineering</b> Session Chair: Asst. Prof. Dr. Chakarida Nukoolkit, KMUTT, Thailand		<b>Session 3: AI-Enhanced Education and Learning Technologies</b> Session Chair: Dr. Muhammad Ali Fauzi, UB, Indonesia	
11.00 – 11.20	YOLO – Based IoT Tracking for Academic Labs on Raspberry Pi (#7039) <b>Tamakorn Jiamrachada, Sarayut Nonsiri, Pichitchai Kamin and Nathaphon Nanthajirapong</b>	11.00 – 11.20	Evidence Retention Is Not Sufficient for Answerability: A Diagnostic Study of Context Budgeting for Small Language Model RAG (#2106) <b>Seowan Kim and Jinhong Yang</b>	11.00 – 11.20	Enhancing LLM Tutors with Retrieval-Augmented Generation and Chain-of-Verification for Curriculum-Grounded Formative Feedback: A Case Study on Thai Health Education (#0225) <b>Patiphan Kaseteiam and Vajirasak Vanijja</b>
11.20 – 11.40	Monitoring Irrigated Wheat in Afghanistan: Systematic Literature Review (#8871) <b>Hamid Momand, Watanyoo Suksa-Ngiam, Debajyoti Pal and Pornchai Mongkolnam</b>	11.20 – 11.40	Hallucination in Retrieval-Augmented Generation is a Context Construction Problem: A Constraint-Driven Cross-Modal Framework (#3321) <b>Victor Okolie</b>	11.20 – 11.40	A Persona-based Automated Evaluation Framework for Intelligent AI Teaching Assistants (#0293) <b>Chananyu Limcharoen, Keetaphat Sripinta and Kitsuchart Pasupa</b>
11.40 – 12.00	Lilit to Ramakien: A Five-Work Benchmark for LLM Understanding of Classical Thai Literature (#9846) <b>Tuul Triyason</b>	11.40 – 12.00	A comparison of local LLMs in paragraph decomposition context (#5598) <b>Chayada Muangboonsri, Nattawadee Wuttivoradit, Nannicha Phraemetta, Bunhit Watanapa and Vithida Chongsuphajaisidhi</b>	11.40 – 12.00	Context-Aware Hybrid Probabilistic Model for Portfolio-Based Recognition of Prior Learning (#0334) <b>Stephen O. Omondi, Prof. Joseph Muliaro Wafula and Dr. Agnes N. Mindila</b>
12:00 – 12:30	<b>JSCI Special Talk, Dr. Punnarust Silparattanawong</b> "From Algorithms to Artistry: The Evolution of Intelligent NPC Behavior"	12.00 – 12.20	Prompt Compression for Diffusion Large Language Models: An Empirical Evaluation of LLMingua-2 and LLaDA (#6030) <b>Sterling Huang, Abigayle Brown, Jiyoo Noh, Amy Xu, Vanessa Huo, Kaung Myat Kyaw and Jonathan H. Chan</b>	12.00 – 12.20	Beyond the Veneer of Competence: How Structured Prompting Fosters Knowledge Transfer in LLM-Augmented Education (#3510) <b>I-Ting Lin, Chia-Hao Chiu, Shao-Hsuan Lin, Ko-I Lee and You-Siang Huang</b>
		12.20 – 12.40	A Structured Prompt Design Algorithm for Contextual Health Data Extraction in Elderly Virtual Companion Systems (#8298) <b>Prissadang Suta, and Pornchai Mongkolnam</b>	12.20 – 12.40	Modelfile Engineering for Offline B2 English Tutoring (#5849) <b>Kantima Techadisai and Booncharoen Sirinaovakul</b>
				12.40 – 13.00	Comparative Analysis of Algorithms and Implementation for Course Recommendation System (#8334) <b>Akkarawit Sittiprakan, Papangkorn Kijakulrat, Natsaran Sae-Oueng, Umaporn Supasitthimethee and Niwan Wattanakitrungroj</b>

# SCHEDULE

June 18, 2026



12.45 – 13.55 | Lunch

14.00 – 14.40 | INVITED TALK 1

Dr. Muhammad Ali Fauzi (Universitas Brawijaya, Indonesia)

"Trustworthy AI by Design: Integrating Privacy-Preserving Learning and Explainability in Sensitive Domains"

14.40 – 15.00 | Short Coffee Break

Session 4: Trustworthy Generative AI, Fact Verification, and Compliance Chatbots Session Chair: Assoc. Prof. Jonathan H. Chan, KMUTT, Thailand		Session 5: Agentic, Decentralized, and Interactive AI Systems Session Chair: Dr. Edward T. Chow, NASA Jet Propulsion Lab, USA		Session 6: Human-Centered Recommendation and Digital Services Session Chair: Dr. Deborah Fels, TMU, Canada	
15.00 – 15.20	Managing Hallucination Risk in LLM-Generated Outputs: The Roles of Prompting Literacy, Trust Calibration, and Verification Behavior (#0118) <i>Tam Nguyen Thanh and Phu Nguyen Huynh Hoai</i>	15.00 – 15.20	Model-Specific Echo Chamber Formation Patterns in Repeated LLM Agent Networks (#3698) <i>Soohyun Jo, Junbeom Kim, Seunghyeon Lee and Hong-Woo Seok</i>	15.00 – 15.20	Making Invisible Work Visible: A Rule-Based Digital Coordination Model for Inclusive Back-Office Workplaces (#0067) <i>Weena Nitipaparnan, Parames Chutima and Panita Surachaikulwattana</i>
15.20 – 15.40	Robustness Limits of Claim-Only Fact Verification: A Controlled Comparison of Classical, Neural, and Transformer Models (#6461) <i>Daniil Suvorov, Iryna Afanasieva, Kostiantyn Onyshchenko, Nataliia Golian and Vira Golian</i>	15.20 – 15.40	Deterministic Blackboard Pipelines with Specialized LLM Knowledge Sources: A Generalizable Architecture for Intelligent Multi-Stage Reasoning (#6099) <i>Tim Bass</i>	15.20 – 15.40	Virtue-Based Thai Folklore Recommendation with Ensemble LLMs (#4087) <i>Wassana Daeng-Am, Anuntapat Anuntachai and Ponrudee Netisopakul</i>
15.40 – 16.00	A Generative AI Tool for Constructing Web Frontend with Integration of Quality Feedback Loop (#8158) <i>Warinporn Walloppornlapak and Twittie Senivongse</i>	15.40 – 16.00	Phebe: A Multi-Agent Natural Language Interface for Interactive Data Visualization (#7577) <i>Guntawit Anurakboonying, Ratchaphon Proongpattanaskul, Chalantorn Sawangwongchinsri and Tanasanee Phienthrakul</i>	15.40 – 16.00	Personalized Health Insurance Recommendation with Retrieval-Augmented Generation: A Study of Lexical, Dense, and Hybrid Retrieval (#8941) <i>Phakon Rujireksareekul, Anuntapat Anuntachai and Ponrudee Netisopakul</i>
16.00 – 16.20	A Validation and Governance Framework for Multi-Agent LLM Scientific Software Development (#9799) <i>Tim Bass</i>	16.00 – 16.20	Towards Dynamic QR Representation of Large Verifiable Documents via IPFS Driven Decentralized Storage and Blockchain State Commitments (#8762) <i>Brigita Carolina, Fauzan Khifzan and John Choi</i>	16.00 – 16.20	AI Exposure, Role Change, and Innovation Behaviour in a Large Norwegian Bank: A Job Demands--Resources Perspective (#6773) <i>Marit Oppen</i>
16.20 – 16.40	Enhancing AI Chatbots for Privacy Compliance: Implementing a Prototype for Retriving Regulations from EU GDPR, Thailand PDPA, and Australian APPs through Local LLMs and RAG Techniques (#2236) <i>Charnsak Srisawatsakul, Waransanag Boontarig, Gerald Quirchmayr, Thanatat Wongabut and Sukanya Chinwicha</i>	16.20 – 16.40	Agent-as-an-Asset: A Virtual Marketplace on Blockchain for Distributed Agentic Workflows (#9461) <i>Goshgar Can Ismayilov</i>	16.20 – 16.40	Lumina: Seasonal Color Analysis System with Explainable Machine Learning (#2424) <i>Ngwe Yee Pearl Ou and Jonathan Hoyin Chan</i>

18.00 onwards | Banquet (The Great Harbour)

# SCHEDULE

June 19, 2026



## 09.50 – 10.30 | KEYNOTE 2

Dr. Edward T. Chow (NASA Jet Propulsion Laboratory, USA)

"A Trustworthy Framework for Cross-Domain Autonomous AI Agent Collaboration"

## 10.30 – 10.45 | Short Coffee Break

Session 7: Financial AI, Trading, and Market Intelligence Session Chair: Prof. Dr. Suganya G, Vellore Institute of Technology, India		Session 8: Decision Intelligence, ESG, and Operational Analytics Session Chair: Dr. Watanyoo Suksa-ngiam, KMUTT, Thailand		Session 9: Cybersecurity, Privacy, and Threat Intelligence Session Chair: Assoc. Prof. Dr. Vajirasak Vanijja, KMUTT, Thailand	
10.45 – 11.05	Wavelet-Based Multiresolution Analysis of Commodity Market Dependencies: Gold, Silver and WTI Crude Oil (#0523) <i>Kanit Jompuk and Chutiporn Anutariya</i>	10.45 – 11.05	Analyzing ESG Cluster Characteristics of Thai Equity Market Sectors using Unsupervised Machine Learning (#5907) <i>Paweenuch Tanapornwattana, Bunthit Watanapa and Chakarida Nukoolkit</i>	10.45 – 11.05	Vulnerability Analysis for CBT Exam System (#0715) <i>Chalita Maksakha and Vajirasak Vanijja</i>
11.05 – 11.25	Stock Price Prediction from Multi Data Sources Using LSTM, FinBERT and BERTweet (#2162) <i>Suchart Auensupa, Ponrudee Netisopakul and Supannada Chotipant</i>	11.05 – 11.25	Machine Learning Models for Multi-Horizon Classification of Bitcoin Future Price Movements (#6803) <i>Sirawat Boonpai, Ponrudee Netisopakul and Anuntapat Anuntachai</i>	11.05 – 11.25	Thai Threat News Classification Using Open-Source LLMs: A Comparative Evaluation of Models and Prompt Strategies (#1516) <i>Badeesorn Sittikong, Jiratanuth Rahman, Thirawat Kongnil, Tuul Triyason, Chonlameth Arpnikanondt and Vithida Chongsuphajaisiddhi</i>
11.25 – 11.45	A Comparative Study of Deep Reinforcement Learning Agents for Gold Trading with Technical Indicators and LLM-Filtered News Sentiment (#2521) <i>Thanapong Thanasarn, Anuntapat Anuntachai and Ponrudee Netisopakul</i>	11.25 – 11.45	Dynamic Toll Lane Configuration Using Q-Learning in SUMO-Based Bangkok Case Study (#2211) <i>Thae Nandar Soe, Ei Ei Mon and Chaodit Aswakul</i>	11.25 – 11.45	Organizational Support as a Mediator: Understanding Security Behavior Toward Network-Connected Printers in the Workplace (#7250) <i>Nirachara Chuenjai and Tuul Triyason</i>
11.45 – 12.05	Duration-Aware Student-t Hidden Semi-Markov Modeling for Financial Time-Series Decision Support: Rolling-Window Evidence from S&P 500 Open-to-Open Trading (#4191) <i>Akara Kijkarncharoensin and Sutthirak Sookkhasem</i>	11.45 – 12.05	Forecasting Surgical ICU Bed Availability Using Routine Operational Data and Machine Learning: A Temporal Validation Study (#9230) <i>Orathai Kongchana, Vajirasak Vanijja and Chaitawat Sa-Ngamuang</i>	11.45 – 12.05	Hybrid GCN-LSTM for Privacy-Preserving Fall Detection in Human Pose-Based Elderly Monitoring Systems (#4735) <i>M. Ali Fauzi, Bian Yang, Yati Sri Hayati, Budi Darma Setiawan, Irwati Nurmala Sari, Jeanette Bayona, Norliza Katuk, Deshinta Arrova Dewi and Thattapon Surasak</i>
12.05 – 12.25	Feature Selection for HMM Regime Detection: An Empirical Characterization of Volatility and Trend Features in Equity Markets (#5147) <i>Jiakang Xu, Kaung Myat Kyaw and Jonathan H. Chan</i>	12.05 – 12.25	Machine Learning-Based Prediction of Settled Water Turbidity for Optimizing Alum Dosage in Drinking Water Treatment (#8417) <i>Samadhi Cooray, Dulashi Fernando, Praveen Jeyachandran, Dilesha Jayakodi, Prasanna Sumathipala, Salih Fousdeen and Malithi Nawarathne</i>	12.05 – 12.25	Source-Level Detection of Private Data Collection Misuse and Build-Preserving Mitigation of Write-Transaction Return Leakage in LLM-Generated Hyperledger Fabric Chaincode (#6705) <i>Sungmoon Park and Jinhong Yang</i>
12.25 – 12.45	Stage-Aware Detection of Altcoin Price Bubbles Using Attention-Based LSTM and Multi-Source Sentiment Signals (#5212) <i>Chih-Chieh Hung, Liang-Chi Huang and Chuang-Chieh Lin</i>				

## 12.45 – 14.00 | Lunch

# SCHEDULE

June 19, 2026



14.00 – 14.40   INVITED TALK 2 Dr. Deborah Fels (Toronto Metropolitan University, Canada) "Inclusion and AI: New opportunities and challenges"					
14.40 – 15.00   Short Coffee Break					
Session 10: Data Governance, AI Policy, and Digital Transformation Session Chair: Dr. Debajyoti Pal, KMUTT, Thailand		Session 11: Edge-IoT, Robotics, and Smart Cyber-Physical Systems Session Chair: Assoc. Prof. Dr Charnsak Srisawatsakul, Stamford International University, Thailand		Session 12: Computer Vision, Multimodal Recognition, and Applied Machine Learning Session Chair: Asst. Prof. Dr. Chonlameth Arpikanondt, KMUTT, Thailand	
15.00 – 15.20	Towards a data model for mapping the PDPA onto the EU's GDPR] (Towards a data model for mapping the Personal Data Protection Act (PDPA) of Thailand onto the European General Data Protection Legislation (GDPR) (#2125) <b>Wararat Krathu, Sunisa Sathapornvajana, Maleerat Maliyaem, Hathairat Ketmaneechairat, Guntur Budi Herwanto, Edgar Weippl, Gerald Quirchmayr and A Min Tjoo</b>	15.00 – 15.20	AMRF: A Software Architecture for Autonomous Mobile Robot Fleet Management in Warehouse Environments (#4517) <b>Norawit Nangsue, Tammarat Shubanchong, Teerapat Kasemvesaruchawut, Bhirabhat Klomjit, Thadchai Suksaran and Wuttichai Visarnkuna</b>	15.00 – 15.20	Transfer Learning for Constellation Recognition: A Comparative Study of Lightweight CNNs on Small-Scale Astronomical Image Data (#0959) <b>Kelzang Yuden, Ziaullah Momand, Pornchai Mongkolnam and Debajyoti Pal</b>
15.20 – 15.40	From Data Governance to Contract-Constrained AI Systems: Architecture and Evaluation for Enterprise NL-to-SQL with AI-Ready Data Models (#3066) <b>Ümit Erdem Saltan</b>	15.20 – 15.40	Smart Shopping: Design of an Automated Cart System using EM-18 RFID Reader Module (#7588) <b>Divanshu Jain, Pranab Roy, Debajyoti Pal, Niyati Soni and Akbar Khan</b>	15.20 – 15.40	Adapting Vision Transformer Models for Thai Cat Breed Classification via Dataset Augmentation and Class Cardinality Reduction (#1509) <b>Nudhana Sarutipaisan, Prechaya Maksap, Chawisa Keawphinit and Bunthit Watanapa</b>
15.40 – 16.00	Operational Governance Controls for AI Data Operations: A Scenario-Based Review Framework (#4564) <b>Shuo Han and Ning Mou</b>	15.40 – 16.00	Design and Implementation of Fynix Trans-Lens: A Wearable Edge-IoT Translation Glasses System for Real-Time Multilingual Communication (#9284) <b>Phu Nguyen, Duy Tan Do, Khai Pham Nguyen Hoang, Tam Nguyen Thanh, Tan Duong and Luan Nguyen Trong</b>	15.40 – 16.00	Cross-Modal Emotion Discrepancy Detection: Detecting When Voice Reveals Emotions That Text Conceals (#1691) <b>Kaung Hset Hein and Jonathan Chan</b>
16.00 – 16.20	SAFE AI: Designing a Gender-Responsive and Child-Safe AI Framework (#4575) <b>Henny Rosalinda, Dewi Yanti Liliana and Saseendran Pallikadavath</b>	16.00 – 16.20	"3DFoodColorMatch": A demo for color transformation of plant-based meat substitutes using 3D food printing technology (#1677) <b>Narinee Ninthongkam, Veerapat Dujyongthummakhun, Shisanucha Chengsamo and Punnarust Silparattanawong</b>	16.00 – 16.20	KOPNet++: Ordinal Contrastive Learning for Intermediate-Stage Detection in Knee Osteoporosis Grading (#2990) <b>Saranya M and Suganya G</b>
16.20 – 16.40	Digital Transformation Maturity Model for Higher Education Institutions: A Qualitative Analysis of Assessment Frameworks (#8465) <b>Ghulam Ali Amiri, Watanyoo Suksa-Ngiam, Pornchai Mongkolnam, Suree Funilkul and Debajyoti Pal</b>	16.20 – 16.40	A Parameter-Efficient Cascaded Framework for Mosquito Species Identification using MFCC Features (#2064) <b>Natchapol Kiriwana, Chakarida Nukoolkit and Tuul Triyason</b>	16.20 – 16.40	Geometry-Aware Foundation Makeup Simulation Using Radiative Transfer Models (#3490) <b>Soe Thandar Lwin, Ye Thu, Chonlameth Arpikanondt and Thanatat Wongabut</b>
16.40 – 17.00	Data Localization in Practice: A Network Benchmarking Study of Cloud Compliance Costs for Thai Public Sector (#6912) <b>Tuul Triyason</b>	16.40 – 17.00	A Systematic Review and Empirical Validation of Intelligent Machine Learning-Based Soft Sensor Frameworks for Biochemical Oxygen Demand Estimation (#5192) <b>Jonardo Asor and Chutiporn Anutariya</b>	16.40 – 17.00	Backbone Selection for Packaging Defect Classification: \A Controlled Study of Accuracy, Robustness, and Computational Efficiency (#9531) <b>Amonpan Chomklin, Siam Yamsaengsung, Pornchai Mongkolnam and Niwan Wattanakitrunroj</b>
17.00 – 17.30 Award Distribution and Closing Remarks					