

2025 International Symposium on Data Science and Artificial Intelligence (ISDSAI 2025)

14th – 15th May 2025

Asian Institute of Technology, Pathum Thani, Thailand

Day 1: Wednesday 14th May 2025

08:15 – 08:45 Registration

08:45 – 09:00 Opening Ceremony

Welcome Remarks

Dr. Chutiporn Anutariya, ISDSAI 2025 Chair

Dr. Sarawut Ninsawat, Head of ICT Department, AIT

Opening Remarks

Professor Sangam Shrestha, Dean of School of Engineering and Technology, AIT

Dato' Prof. Dr. Shamala K. Subramaniam, Dean of Faculty of Computer Science and Information Technology, UPM

Prof. Dr. Maya Silvi Lydia, Dean of Faculty of Computer Science and Information Technology, USU

Online

09:00 – 09:30 Keynote Presentation

(Chair: Chutiporn)

- 1 Human-Agent AI in Personalised Learning for Transformative Education

09:30 – 10:15 Technical Session 1: Health Tech, Well-being, and Assistive AI

(Chair: Chantri Polprasert)

- 13 Automated Attendance and Child Safety Monitoring System using Face Recognition
- 23 A Telerehabilitation and Telemonitoring framework for Post-Stroke patients: Human Factor Engineering Based Approach
- 14 Oncologychain: A Blockchain-based Personal Health Record Management System for Cancer Patients

Online

10:15 – 10:30 Coffee break

10:30 – 11:15 Technical Session 2: Cybersecurity, Identity & Privacy

(Chair: UPM)

- 4 Enhanced Insider Threat Detection with Isolation Forest: A Feature Synthesis Approach
- 20 Hybrid Machine Learning for Real-Time Anomaly Detection System in Computer Network with ELK Stack using System Log and NetFlow Data.
- 10 Convolutional Long Short-Term Memory for Fileless Malware Detection

Online

11:15 – 12:15 Technical Session 3: Smart & Sustainable Agriculture

(Chair: Chaklam S.)

- 2 Digital Twin for Young Urban Farming
- 3 Real Time Machine Tracking for Smart Farming with Interactive Visualization Enabled by Edge Computing
- 5 Beyond Gardening: UI/UX Design Challenges and Opportunities in Urban Farming
- 6 CropCare-DANN: Domain Adaptation for Visually Impaired Farmers Using Adversarial Learning

12:15 – 13:15 Lunch Break

13:15 – 14:00 Technical Session 4: AI in Education

(Chair: Nurul Amelina Nasharuddin)

- 24 Evaluating AI-Generated Literature Reviews: A Comparative Analysis of ChatGPT and Gemini
- 28 Can AI support Students in Mitigating their Own Confirmation Bias?
- 29 A Study on the Foundation and Learning application on Gamification Framework and Cybersecurity Literacy for adult in Social Engineering

14:00 – 15:15 Technical Session 5: AI Infrastructure, Green Computing & Optimization

(Chair: UPM)

- 33 Performance Improvement of Fog Computing Based Communication Infrastructure with Proximal Policy Optimaztion (PPO) and Evolutionary Computing Algorithm
- 30 Enhancing the Quality of Clustered Data Using the Perceptual-CURE Approach
- 31 Reinforcement Learning Approach Based on MCMC and CSA for Marketing Budget Allocation
- 22 Green AutoML: A Framework for Energy-Efficient Machine Learning Pipelines with Enhancements Based on Green AI Principles
- 26 Generative AI in software development: A case study on real-time SQL code generation using SLMS

Online

Online

Online

15:15 - 15:30 Coffee break

15:30 – 16:15 Technical Session 6: AI in Communication and Society (Chair: USU)

- 27 Analyzing the Impact of Phonological Clustering on Sequential Word Level Bangla Sign Language Recognition
- 18 Enhancing Sign Language Recognition with Video Swin Transformer Based on Thai Sign Language and WLASL100
- 25 Robust Sign Language Production System

Day 2: Thursday 15th May 2025

08:30 – 09:00 Registration

09:00 – 09:30 Technical Session 7: Recommender Systems, Vision, and ML Techniques (Chair: Chaklam S.)

- 12 Performance Analysis and Application of the Improved Coherent Point Drift Algorithm with Covariance Descriptors in Point Cloud Registration
- 19 A Hybrid Recommender System based on LightGCN and GraphSAGE

09:30 – 10:15 Technical Session 8: Health Tech, Well-being, and Assistive AI (Chair: UPM)

- 9 Gait for Emotion Detection
- 21 Decoding BCI Literacy: Investigating the Effect of P300 amplitude and response time, SSVEP fidelity, Gender, Attention and Times of the Day
- 16 Sarcasm Detection Using Deep Multi-Task Learning

10:15 – 10:30 Coffee break

10:30 – 11:00 Technical Session 9: Cybersecurity, Identity & Privacy (Chair: UPM)

- 11 Decentralized Digital Identity: Leveraging Blockchain for Enhanced Privacy and Security
- 30 A New Variant of RSA Cryptosystem

11:00 – 12:00 Technical Session 10: Smart & Sustainable Agriculture (Chair: Chantri Polprasert)

- 8 Recommendation Systems for Smart Farmer
- 17 Innovative Applications of Palm Oil in Sustainable Technology
- 7 Transfer Learning-Based Classification of Butterfly Species
- 15 SolanumCare: A Mobile Application for Tomato Disease Detection Using CNN

Online

12:00 - 12:15 Closing Ceremony

Closing Remarks

Dr. Romi Fadillah Rahmat, Faculty of Computer Science and Information Technology, USU

Professor Dr. Rahmita Wirza O.K. Rahmat, Faculty of Computer Science and Information Technology, UPM

Dr. Chutiporn Anutariya, ISDSAI 2025 Chair, AIT

Online

12:15 - 13:15 Lunch