ECTI DAMT and NCON 2025

30-Jan-25

08:30 – 10:15	
Room1	**Title**
DAMT 6: AI and ML	
9090	Does Data Balancing Play an Important Role in Classifying Road Accident Severity in Thailand? (Pichit Boonkrong and Teerawat Simmachan) (#9090)
9135	Improving Image Super-Resolution Reconstruction with InceptionV3 and Dual Perceptual Loss (Siriwan Chuengtheerapanit, Warawut Kesornsukhon, Kanabadee Srisomboon, Luepol Pipanmekaporn and San Ratasanya) (#9135)
9299	Ant Colony Optimization for Multi-Label Correlation-based Feature Selection Method (Suwimol Jungjit, Amonrat Prasitsupparote, Shelena Soosay Nathan and Thanawit Rattanakietkhajorn) (#9299)
6898	Forecasting Customer Baseline Load Based on Similar Electricity Usage Patterns (Kanya Pliansaad, Duangjai Jitkongchuen and Panita Thusaranon) (#6898)
9656	Designing a Gamified Mixed Reality System for Social Skills Development in High-Functioning Children with Autism Spectrum Disorder (Natchaya Wongwan) (#9656)

08:30 – 10:15	
Room2	**Title**
DAMT 3: DT	
947	The modern 3D technologies as a catalyst for the digital transformation of the education and industry (Plamen Zahariev, Georgi Hristov, Nina Bencheva, Diyana Kinaneva, Georgi Georgiev and Liliya Ilieva)
4447	Classroom Attendance System using Bluetooth Low Energy (Amonrat Prasitsupparote and Suwimol Jungjit) (#4447)
4937	Customer Service Transformation for Admission in Mae Fah Luang University Using Chatbots Technology (Subandit Pansombut) (#4937)
7228	Shop Floor Productivity Improvement in Original Equipment Manufacturer Company Using ODOO ERP (Pharadon Suwannatara, Saranya Maneeroj and Somjai Boonsiri) (#7228)
7334	Automating Persona Generation: Leveraging Large Language Models in Educational Digital Services (Thanatat Wongabut, Unhawa Ninrutsirikun and Chonlameth Arpnikanondt) (#7334)

8639	Integrating Marker-based Augmented Reality into Serious Games for Disaster Risk Management Training: Preliminary Technical Insights from the Philippines (Francis Miguel Garcia, Lyndon Rom David, Rosemay Thea Pañares and Kristoffer Berse) (#8639)

08:30 – 10:15	
Room3	Title
SS: IAITA	
2366	Negative Binomial Regression Model for Predicting the Number of Tourists in National Parks of Thailand (Sthaporn Thepsumritporn, Anuchit Jitpattanakul, Sakorn Mekruksavanich and Wikanda Phaphan) (#2366)
6981	Image Classification and Segmentation for Estimating Calories of Food (Udomkan Chanthanuwatkun, Anuchit Jitpattanakul and Narit Hnoohom) (#6981)
6483	Classification Models and Variable Selection for SME Credit Risk Assessment in Balance the Data Set (Sornthun Intharasompong, Anuchit Jitpattanakul, Sakorn Mekruksavanich, Piyada Wongwiwat and Wikanda Phaphan) (#6483)
8611	A Comparative Study of Validation Methods for Sensor-Based Human Activity Recognition Using Deep Learning Models (Sakorn Mekruksavanich, Anuchit Jitpattanakul, Narit Hnoohom and Wikanda Phaphan) (#8611)
4648	Emotion Recognition Using EEG Signals in Human Brain Waves and Deep Learning Approaches (Sakorn Mekruksavanich, Anuchit Jitpattanakul, Narit Hnoohom and Wikanda Phaphan) (#4648)
8691	Integrative Analysis of Gene Co-Expression Networks Combined with Flux Balance Analysis of Metabolic Models for Insights into Chronic Obstructive Pulmonary Disease (Thummarat Paklao, Apichat Suratanee and Kitiporn Plaimas) (#8691)

10:30 – 12:00	
Room1	Title
NCON 5: IOT and Edge	
7545	Enhancing the production of white charcoal and syngas from a stove with an IoT airflow controller (Charnyut Karnjanapiboon, Nattapon Wichan, Chakkraphan Thawonngamyingsakul, Kiattisak Sornjai and Kanyaphorn Chaiwong) (#7545)

167	Development of a Closed Chamber System for Cultivating Lion's Mane Mushrooms using an Internet of Things System to Increase Yield and Economic Value (Pakorn Suntornmeth, Kanitha Homjun, Worawit Fankam-Ai, Charnyut Karnjanapiboon, Athiphong Deenoi, Atigorn Sanguansri and Sirilux Kaewsirirung) (#167)
449	Exploring Young Students' Experiences in IoT Skill Development Through Peer-Assisted Learning (Puthyrom Tep, Chinapat Mongkholsiriwattana, Watchara Thitayanuwat and Kompakron Pianon) (#449)
2389	Enhancing Social and Economic Well-being through Smart Farming: A Case Study in Pa-Laew Pak Dee Dee, Nan, Thailand (Pakorn Suntornmeth, Worawit Fankam-Ai, Kanitha Homjun, Nongnuch Ketui, Atigorn Sanguansri and Sirilux Kaewsirirung) (#2389)
5916	Development of Intelligent Medication Care Taker (Areelak Sukkaew and Suppakarn Chansareewittaya) (#5916)
6892	Improving Robotics and IoT Learning Achievement in Junior High School Students through a Constructionist Project-Based Learning Approach (Watchara Thitayanuwat, Puthyrom Tep and Surat Tanprasertkul) (#6892)
8158	The Optimal Real-time Environment with IoT Technologies for Hemp Propagation (Rabin Palee, Prasert Luekhong and Chanchai Dechthummarong) (#8158)

10:30 – 12:00	
Room2	Title
DAMT 6: AI and ML	
3438	Machine Learning Based Pose Identification System with Force-Sensitive Resistors for Four-Step Balance Testing (Thanapat Sanongyat, Chayapol Kamyod and Punnarumol Temdee) (#3438)
155	Study of CVS Causes and Prevention using Two-Factor Analysis (Chayaporn Kittichusakul, Nattakarn Kangchart, Supasek Rujivipat and Natsuda Kaothanthong) (#155)
4090	Enhancing Dual Aggregation Approach for Remote Sensing Image Super-Resolution using Transformer (Naveed Sultan and Santitham Prom-On) (#4090)
5290	A Hybrid Deep Learning-based Person Re-identification Across Multi-Cameras (Manaschai Aonon, Phasit Charoenkwan, Phudinun Singkhamfu and Porntida Kaewkamol) (#5290)
3053	Perspectives of Mass Media Professionals on AI Adoption in Thailand's News Industry (Nantika Prinyapol, Nathawut Punkabutr and Adisorn Naubon) (#3053)

10:30 – 12:00	
Room3	Title
NCON 1: Device, Circuits and System	
3153	Electrochemical Sensor for Lab on a Chip with Conductive ink by Screen Printing (Anan Saenkhamai, Apichaya Chantaraklud, Kessararat Ugsornrat, Triwit Phurksasukkasem, Chanpen Karuwan and Adisorn Tuantranont) (#3153)
3301	MHICuS-Based Fourth-Order Active Band-Pass Filter Design Optimization (Wattanawong Romsai, Sarot Hlangnamthip, Chaiyo Thammarat and Deacha Puangdownreong) (#3301)
6811	Experimental Study of Screen Printed Carbon Paste Electrochemical Sensors for Lab on a Chip (Kessararat Ugsornrat, Triwit Phurksasukkasem, Chanpen Karuwan, Wichayaporn Kamsong, Thanakrit Thanacharoenchanaphas and Adisorn Tuantranont) (#6811)
8255	Design and Simulation of Broken Gate TFET and its RF Applications (Kh. Alisha Singha, Aditya Singha, Swrang Brahma, Karapallav Chutia and Dr. Bijoy Goswami) (#8255)
9316	Touch Sensors for Safety in Industrial Automation Systems (Tanapong Khumyat and Preecha Mahamai) (#9316)
9232	Experimental Study of Electrochemical Sensor of Lab on a Chip for Depressive Substance Analysis (Warisara Boonsiri, Kessararat Ugsornrat, Wichayaporn Kamsong, Chanpen Karuwan, Assawapong Sappat and Adisorn Tuantranont) (#9232)

15:15 – 16:45	
Room1	Title
DAMT1: DM	
8078	Image-mixed Glitch Sounds (Noriki Amano) (#8078)
6312	The Comparative Study of Artificial Intelligence Techniques: DeepMotion vs. Autodesk Maya in 3D Animation Creation (Setthee Boonchoo) (#6312)
7822	Enhancing Cultural Tourism with VR: A Virtual Tour of Wat Pho (Pitcha Seripanichkarn, Chananart Piyasoranart, San Ratanasanya and Porawat Visutsak) (#7822)
111	Development of a Virtual Reality World for Avatar Thai Costume Dressing with Integrated e-Commerce System (Ariyaphorn Yowaphui, Alongkot Aranpoon and Worawith Sangkatip) (#111)

5038	An Augmented Reality-Based Hazardous Waste Management Learning System: A Case Study of Elementary School Students in Chiang Rai Province (Kemachart Kemavuthanon) (#5038)

15:15 – 16:45	
Room2	Title
DAMT2: KM	
3180	Harnessing AI for Agriculture: Applying Deep Learning Approaches to Detect and Classify Native Thai Vegetables in Specific Areas of Thailand (Wongpanya S. Nuankaew, Kittiphob Saibunyang, Rattanawan Hongmo, Thapanapong Sararat and Pratya Nuankaew) (#3180)
4164	AI for Healthcare: A Classification Model for Personalized Premenstrual Symptoms and Depressive Crisis Risk Tracking Using Data Analytics and Machine Learning (Pratya Nuankaew, Jidapa Sorat, Jindaporn Intajak, Jirapron Inta and Wongpanya Nuankaew) (#4164)
134	Harnessing AI for Agriculture: Thai Handwriting Recognition for Agricultural Accounting and Management Using Vision Transformers (Wongpanya Nuankaew, Chanapa Phikhason, Watthana Kayowaen, Tatsaneewan Yenwattana, Patchara Nasa-Ngium and Pratya Nuankaew) (#134)
8858	Harnessing AI for Agriculture: Aerial Imagery Analysis for Rice and Weed Classification in Paddy Fields Using Deep Learning (Wongpanya Nuankaew, Saweewan Kuisonjai, Raksita Keawruangrit, Patchara Nasa-Ngium and Pratya Nuankaew) (#8858)
7756	Harnessing AI for Agriculture: Plant Pest Detection on Web Application Using Deep Learning (Wongpanya S. Nuankaew, Yotsapron Yangwattana, Sasikan Kamwaree, Thapanapong Sararat and Pratya Nuankaew) (#7756)
7871	Harnessing AI for Agriculture: Oyster Mushroom Disease Detection with IoT and Web Application on Growing Bags Using Deep Learning (Wongpanya S. Nuankaew, Phacharapol Sombutthai, Watchrapong Monkhuan, Thapanapong Sararat and Pratya Nuankaew) (#7871)

15:15 – 16:45	
Room3	Title
DAMT2: KM	
461	Promoting 21st Century Skills in Programming Education through Collaborative and Problem-Based Learning in Smart Farming (Porntida Kaewkamol, Jirapipat Thanyaphongphat and Somkeit Noamna) (#461)
8786	SAFER Framework for Sustainable Tourism: Applying Generative AI in Mountainous and Cave Regions of Thailand (Pruet Putjorn, Jittasak Putjorn, Janyawath Sutumma, Tipsuda Putjorn, Thanakrit Sangchoey, Rachakorn Wachirasirodom, Supparat Sangchatkaew, Kanokwan Kaewuthai, Hathairat Sawasdee, Pit Jitpakdee, Apalai Suksamran and Thanawat Dokchan) (#8786)
9698	From Past to Present: The Role of Ethical Leadership in Shaping Innovation (Chatchanon Chayabutra and Pittawat Ueasangkomsate) (#9698)

31-Jan-25	
09:00 – 10:15	
Room1	Title
NCON 3: Control and Automation NCON 2: Commu and Signal NCON 4: EP and PE	
910	Development and integration of an Industrial automation system based on the MQTT Protocol (Svetozar Yolov, Georgi Hristov and Plamen Zahariev) (#910)
7571	Optimisation of Factors in Coffee Roasting Process with Response Surface Methodology and FTIR Analysis (Muhammad Masbukhin, Mokh Suef and Moses Laksono Singgih) (#7571)
8554	Deverlopment of Automatic Cartesian Robot Cannabis Seeder using LabVIEW (Rujipan Kosarat, Anan Wongjan and Keattipoom Sangwai) (#8554)
6729	Pedagogical Benchmark for Smart Grid Scenarios (Hamed Yahoui, Roungsan Chaisricharoen and Wanus Srimaharaj) (#6729)

7892	Non-invasive blood glucose estimation through vascular contraction signal analysis (Chanidapa Pomarin, Thitiyakon Lakhonphon, Supitchaya Traisaeng, Piyathida J Aroensin, Suchada Tantisatirapong and Theerasak Chanwimalueang) (#7892)

09:00 – 10:15	
Room2	Title
DAMT 6: AI and ML	
5893	Ensemble Approaches for Quartz and Silica Gel Identification using EDX spectra (Sitaporn Anektanarojkul, Seksan Laitrakun, Nattapon Chayopitak, Tsuyoshi Isshiki and Sasiporn Usanavasin) (#5893)
2890	Emotion Classification Using Transformer-Based Language Model (Kamolchanok Laojampa, Konlakorn Wongpatikaseree, Narit Hnoohom and Rangsipan Marukatat) (#2890)

09:00 – 10:15	
Room3	Title
SS: IAITA	
677	Enhancing Performances of Deep Neural Networks with Ensemble Learning Methods for Complex Human Activity Recognition using Wearable Sensors (Sakorn Mekruksavanich and Anuchit Jitpattanakul) (#677)
3854	Satisfaction Analysis of Data and Application Architecture in the Enterprise Blueprint of the Faculty of Dentistry, University of Phayao (Duangjai Jaikla, Kaewarin Jandum and Sitthidet Vachirasricirikul) (#3854)
1127	Smart Web Application for Recommending the Selection of Equipment for Organizing Activities in Educational Institutions (Tanarin Khongtuan and Sakorn Mekruksavanich) (#1127)
3978	The Design of the Conversational Chatbot Using Facebook Messenger to Support Patient Services: A Case Study of a Dental Clinic, University of Phayao (Natthanit Payonyim, Kaewarin Jandum and Sitthidet Vachirasricirikul) (#3978)
5872	Orthopedic Walker Fall Detection and Motion Classification Using Bidirectional Gated Recurrent Unit Neural Network (Sakorn Mekruksavanich, Anuchit Jitpattanakul, Narit Hnoohom and Wikanda Phaphan) (#5872)
8738	Development of an E-commerce System for Designing Identity Patterns of Community and Ethnic Group Products (Kaewarin Jandum, Sitthidet Vachirasricirikul and Thitinon Maneetume) (#8738)

13:00 – 14:45	
Room1	Title
DAMT 6: AI and ML	
5992	UNet-Stream for Segmentation of Ultrasound Images of Breast Cancer (Suman Sharma and Stanislav Makhanov) (#5992)
6525	Leveraging AI Chatbots to Foster Engaged Community Waste Management: A Case Study of Takhian Tia Community (Suwanee Kulkarineetham, Weeriya Supanich and Witchuda Prasatkaew) (#6525)
7840	Developing a RAG Agent for Personalized Fitness and Dietary Guidance (Min Swan Pyae, Sai Sithu Phyo, Saw Thomas Maung Maung Kyaw, Thet Swe Lin and Nacha Chondamrongkul) (#7840)
8890	Improved Cotton Leaf Disease Classification Using Parameter-Efficient Deep Learning Framework (Aswini Kumar Patra and Tejashwini Gajurel) (#8890)
8983	Mitigating Data Sparsity in Point-of-Interest Recommendation Systems Using Multi-Modal User Profiles (Sudarat Arthan and Kreangsak Tamee) (#8983)

13:00 – 14:45	
Room2	Title

13:00 – 14:45	
Room3	Title
DAMT 6: AI and ML DAMT2: KIM SS: IAITA	
4435	Classification Model of Dementia and Heart Failure in Older Adults Using Extra Trees and Oversampling-Based Technique (Pornthep Phanbua, Sujitra Arwatchananukul and Punnarumol Temdee) (#4435)

3838	Proposing ChatGPT as a Transformative Tool for Enhancing ESL Speaking and Listening Skills: Bridging Research Gaps in Thai Language Education (Sirikanya Dawilai, Thongchai Yooyativong and Chayapol Kamyod) (#3838)
8573	Thai Beef Cattle Recognition for Fattening Farms: An Empirical Study of Cattle Cooperative Practices in Chiang Rai (Ant Khon, Myint Myat, Pradorn Sureephong and Santichai Wicha) (#8573)
5225	Understanding Human Balance Strategies Through Clustering of Motion Analysis Data (Werapat Lapawong, Surapong Uttama, Worasak Rueangsirarak, Punnarumol Temdee, Shanfeng Hu and Nauman Aslam) (#5225)
6070	The GREENBEAT project - Optimizing Key Performance Indicators for Sustainable Excellence (Vladimir Poulkov, Yana Tsankova, Agata Manolova and Slavcho Neshev)

15:00 – 16:30	
Room1	Title
DAMT 7: DST DAMT 4: SE	
7016	Topology Study of Urban Railway Networks in Bangkok Metropolitan Area for Route and Distance-based Centralities (Pongwit Promsuwan, Shoichiro Nakayama, Hiromichi Yamaguchi and Shun-Ichi Kobayashi) (#7016)
227	Random Forest Classification of Thai Mangoes Namdokmai Sithong, Mahachanok and R2E2 (Phanuphong Suthawas, Nattapol Aunsri, Saowapa Chaiwong, Rattapon Saengrayap and Sujitra Arwatchananukul) (#227)
1632	Predicting Test Smell Categories based on Issue Descriptions using Information Retrieval and Machine Learning Techniques (Jiramed Withunsapphasiri, Passakorn Phannachitta and Chartchai Doungsa-Ard) (#1632)
3378	Enhancing LMS Design through SUS Analysis and Biometric Usability Testing (Min Thuta Naing, Shwe Sin Tun, Shwin Pyone Thu, Soe Yu Yu Kyaw and Prasara Jakkaew) (#3378)

15:00 – 16:30	
Room2	Title
NCON 2: Commu and Signal	
2766	Aerial Base Station Positioning Evaluation for UAV-assisted Het-Nets (Antoni Ivanov, Vladimir Poulkov and Agata Manolova) (#2766)

1392	Broadband Unidirectional Vivaldi Antenna for Radar Application (Pattawin Changnam, Pisit Janpangngern, Apichart Intarapanich, Chanchai Thongsopa, Nuchanart Santalunai and Samran Santalunai) (#1392)
4319	Slotted Rectangular Microstrip Patch Antenna for 2.4 GHz Applications (Kamon Tabaiya, Jessada Konpang, Adisorn Sirikham, Suttee Tubtongdee, Nathapat Supreeyatitikul and Phatsakul Thitimahatthanakusol) (#4319)
3018	Wideband Circularly Polarized Sequentially-Rotated Cubic-Shaped Dielectric Resonator Array Antenna (Nathapat Supreeyatitikul, Titipong Lertwiriyaprapa, Chuwong Phongcharoenpanich and Jessada Konpang) (#3018)
4476	Prism-Shaped Dielectric Resonator Circularly Polarized Antenna with Loop-Shaped Metasurface-Enhanced Reflector (Nathapat Supreeyatitikul, Titipong Lertwiriyaprapa, Chuwong Phongcharoenpanich and Jessada Konpang) (#4476)
4943	Dielectric Resonator Diplexer without Internal Coupling Iris (Kamon Tabaiya, Nathapat Supreeyatitikul, Phatsakul Thitimahatthanakusol and Jessada Konpang) (#4943)

15:00 – 16:30	
Room3	Title