

2026 International Conference on Advances in Artificial Intelligence and Machine Learning (AAIML 2026)

Tokyo, Japan

20-22 March 2026

Pages 1–536

IEEE Catalog Number:
ISBN:

CFP264AP-POD
979-8-3315-6807-8



Copyright © 2026, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP264AP-POD
ISBN (Print-On-Demand):	979-8-3315-6807-8
ISBN (Online):	979-8-3315-6806-1

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com

TABLE OF CONTENTS

GFT: Gradient Focal Transformer	1
<i>Boris Kriuk, Simranjit Kaur Gill, Shoaib Aslam, Amir Fakhrutdinov</i>	
Automatic Construction of Pattern Classifiers Capable of Continuous Class Incremental Learning and Unlearning	11
<i>Tetsuya Hoya, Shunpei Morita</i>	
Independent Coordinate Kolmogorov-Arnold Networks: Exploiting Structural Constraints for Dimensionality Reduction	21
<i>TzeHoung Lee, Suthawan Prukumpai, Patrick Ghali</i>	
Transfer Learning across Optimization Problems via the Constraint Composite Graph	27
<i>Kexin Zheng, T. K. Satish Kumar</i>	
Deep Reinforcement Learning and the IID Assumption	36
<i>Fatih Özgan, Herman Engelbrecht, Gregor Schiele</i>	
On the Reliability of Feature Selection under Non-linear and Complex Data Geometries	42
<i>Omairah S. Al Hosni</i>	
ML-EWRF: Exponential Weighted Random Forest for High Dimensional Multi-label Classification	50
<i>Sheetal Sisodia, Nipur Patel, Rishabh Gupta, Niharika Singh</i>	
Layerwise Training and Convergence Analysis of Deep Graph Convolutional Networks	56
<i>Xinge Zhao, Zhuohan Li, Chien Chern Cheah</i>	
Pattern-Aware Graph Neural Networks for Handling Missing Data	62
<i>Minett Tran, Taehee Jeong</i>	
Class-Wise Streaming for Detecting Minority Class Drift in Machine Learning Classifiers	68
<i>Dileesha Kannangara, Uthayasanker Thayasivam</i>	
FnF-CZSL: Fast Non-Adversarial Feature Synthesis for Conventional Zero-Shot Learning	74
<i>Md Shakil Ahamed Shohag, Q. M. Jonathan Wu</i>	
Exploring Continual Learning and NeuroEvolution for Decentralized Continual Learning	80
<i>Anaïs L. C. Lavorel, Nadia Kabachi, Elhadj Benkhelifa</i>	
Privacy-Preserving Multimodal News Recommendation through Federated Learning	86
<i>Mehdi Khalaj, Shahrzad Golestani Najafabadi, Julita Vassileva</i>	
Federated Split Learning: Distributed Local Training for Low Computational Unit Clients	96
<i>Kazi Habibur Rahaman, Lilatul Ferdouse, Yang Liu</i>	
Evasion of Malware Classifiers by Injecting Category-Specific Benign Features	102
<i>Juozas Dautartas, Juozapas Rokas Čepas, Olga Kurasova, Viktor Medvedev</i>	
Beyond Shared Embedding Spaces: Towards LLM Architectures with Explicit Authority Control for Prompt Security	110
<i>Jonas Kemnitzer, Christian Groth</i>	

Adaptive Speaker Verification Under Degradation: A Drift-Aware Security Framework	117
<i>Oyebode Oluwatobi Oyewale, Yuzo Taenaka, Youki Kadobayashi</i>	
Privacy-Preserving Federated Learning for MRI-Based Brain Tumour Detection Using Xception CNN	124
<i>Anik Sen, Swee-Huay Heng, Shing-Chiang Tan</i>	
Enhancing Security of Android Devices against Obfuscated Malware Attacks by using Machine Learning Techniques	130
<i>Monika Sharma, Ajay Kaul, Naveen Kumar Gondhi</i>	
Evolution of Phishing Detection: From Traditional Methods to Explainable AI	136
<i>Anıl Sezgin</i>	
Hold the Prompt (HODPOT): Defense Design for Securing the System Prompt of LLM Agents	142
<i>Lilian Tai Do Khac, Marc Fabian Mezger, Daniel Thürck</i>	
Building Trustworthy Threat Detection: A Comparative Analysis and Explainable AI Framework for Memory Forensics	148
<i>Srinivasa Kranthi Kiran Kolachina, Ruth Agada, Jie Yan</i>	
A Blockchain Aided Resource/Role Hierarchy Based Access Control Framework for Federated Learning	156
<i>Yongtao Huang, Ayu Tiwari, I-Ling Yen, Farokh Bastani</i>	
Advancing Security in Android Devices for malware detection using Machine Learning and Deep Learning Techniques	162
<i>Monika Sharma, Ajay Kaul, Naveen Kumar Gondhi</i>	
Trust-aware Explainable Federated Learning (TEFL) for Privacy-Preserving Medical Diagnosis	168
<i>Janice A. Abellana, Ephraimuel Jose L. Abellana</i>	
DABBIT: A Drift-Adaptive Behavioral Biometrics Framework for Continuous Authentication in Tanzanian Internet Banking	175
<i>Festus Edward Ndalama, Yuzo Taenaka, Patrick Mutabazi, Youki Kadobayashi</i>	
Ransomware Detection with ML and Deep Learning: An Evidence-Based Survey and Drift-Aware Taxonomy	181
<i>Suratose Tritilanunt</i>	
Design and Implementation of a Fine-Tuned BERT-based Web Filter toward Parental Control Applications	187
<i>Nuntanut Bhooanusas, Veerakul Tukoonpanich, Isana Banjongsil, Farida Rachuratchata</i>	
Adaptive Hierarchical Evaluation of LLMs and SAST tools for CWE Prediction in Python	193
<i>Muntasir Adnan, Carlos C. N. Kuhn</i>	
Culture and AI Trust: Cross-National Evidence from the World Values Survey	201
<i>K. Komatsu, N. Ždanovič, R. Shineha, S. Takeda</i>	
Correlation-Aware Feature Attribution Based Explainable AI	210
<i>Poushali Sengupta, Yan Zhang, Frank Eliassen, Sabita Maharjan</i>	
Reviewing Model Collapse and Countermeasures	220
<i>Xihao Xie, Beichen Hu</i>	

Explainable AI Survival Models for Enhanced Reliability and Decision-Making in Industrial Operations	231
<i>Lalit Kumar</i>	
Interpretable AI and Classical Statistics: Revisiting the Surrogate Model Paradigm	237
<i>Osama Abdelhay, Taghreed Altamimi, Adam Shatnawi, Hussam Abdelhay</i>	
ARC in Practice: Applying the Automation Risk Checklist for Responsible AutoML Deployment	247
<i>Osama Abdelhay, Taghreed Altamimi, Hussam Abdelhay</i>	
Novel aspects of how trust in human-AI collaboration is formed	254
<i>Lilian Tai Do Khac, Michael Leyer</i>	
Can AI Invent Calculus, or Just Mimic Math?	260
<i>Gauri Kale, Ava Hedayatipour, Rahul Vishwakarma, Holly Diamond, Amin Rezaei</i>	
Bridging AI and Sustainability: The Role of Explainable AI in Climate Policy and Ethical Decision-Making	270
<i>Alfredo L. Calimbo, Angelo C. Arguson, Ronel F. Ramos, Joseph G. Gonzales</i>	
Human-Machine Collaboration Dynamics - A Sustainable AI Perspective	276
<i>Robert Kozma, Imre Rudas</i>	
LLM is Not All You Need: A Systematic Evaluation of ML vs. Foundation Models for text and image based Medical Classification	282
<i>Meet Raval, Tejul Pandit, Dhvani Upadhyay</i>	
A Physics-Space Explainable AI Framework for Speed-Aware Motor Torque Estimation	291
<i>Thananya Janhuaton, Nitikorn Junhuathon</i>	
Improving Thematic Balance in Press Release Generation with GMMs and Dimensionality Reduction	297
<i>Imed Keraghel, Mohamed Nadif</i>	
Improving Aspect-Category-Sentiment Detection through a Weighted Attentional Graph Framework	306
<i>Neda Keivandarian, Marco Carvalho</i>	
A Transformer-Based Aspect-Level Sentiment Analysis Framework for Analyzing Public Discourse on Generative AI	316
<i>Neltjie Mendy Martutty, Muhammad Nur Rizal, Guntur Dharma Putra</i>	
Enhanced Sentiment Classification using Ensemble Transformer Vectors and Adaptive Synthetic Oversampling (ADASYN)	322
<i>Yaakov HaCohen-Kerner, Aviel Levy, Mickael Balensi</i>	
Source Code Error Categorization and Explanation by Retrieval Augmented Generation	331
<i>Md Faizul Ibne Amin, Yutaka Watanobe, Md. Mostafizer Rahman, Md. Shahajada Mia, Daniel M. Muepu</i>	
BizQuery: Agentic Financial Question Answering over Structured Data	337
<i>Akash Mondal, Sourav Karmakar, Shrutendra Harsola, Abhishek Yadav, Vignesh Subrahmaniam Reeti Sarup</i>	
A State-Driven Planning Framework for Research Dialogue Agents with Selective Retrieval-Augmented Generation	347
<i>Hiryu Kimura, Yuhei Yamada, Takafumi Nakanishi</i>	

Autonomous Knowledge Pipeline for AI Research: LLM Agents for Automatic Paper Curation, Multimodal Media Generation, and Online Publishing	357
<i>Yuhei Yamada, Takafumi Nakanishi</i>	
Persona-Driven Feedback Agents for High-Stakes Documents: A Multi-Perspective Evaluation of Global Talent Visa Submissions	367
<i>Anthonette Chidinma Adanyin, Oluwole Fagbohun, Akinyemi S. Akintola, Oluwatosin Oyeladun</i> <i>Promise Udem Akwaowo, Chinomso Okere, Felicia Ene Anyogo, Olaonipekun Olaitan Olajuwon</i>	
LLMDebug: Prompt-Engineered Large Language Models for Automated Root Cause Analysis in Microservices Architectures	373
<i>Tejas Pravinbhai Patel, Siva Rama Krishna Varma Bayyavarapu, Vinay Soni, Rajesh Purushothaman</i> <i>Gajendra Babu Thokala, Viswanathan Ranganathan</i>	
CALM: Cost-efficient, model Agnostic, Low-latency Modular LLM Deployment framework	381
<i>Ashish Bansal, Deepkamal Kaur Gill, Rajeev Joshi, Hung Pham, Lee Zamparo, Wenxuan Liu</i>	
Large-Scale Data Preparation for Malay Language LLM Development	389
<i>Muhammad Ajrul Amin Mohd Zaidi, Nur Amalina Baharom, Abdul Hadi Abd Rahman</i> <i>Lailatul Qadri Zakaria, Wandeep Kaur Ratan Singh, Masnizah Mohd, Afrina Rosa Mohamad Sattar</i> <i>Shazwan Hakim Muhamad</i>	
High Quality Malay Corpus via LLM-Aided Validation	397
<i>Nur Amalina Baharom, Wandeep Kaur Ratan Singh, Muhammad Ajrul Amin Mohd Zaidi, Masnizah Mohd</i> <i>Abdul Hadi Abd Rahman, Lailatul Qadri Zakaria, Shazwan Hakim Muhamad, Afrina Rosa Mohamad Sattar</i>	
Ordinal-Aware Fine-Tuning of Multilingual LLaMA Models for Thai Cyberbullying Severity Classification	404
<i>Bandhita Plubin, Thanasak Mouktonglang, Suwika Plubin</i>	
An LLM-Based Framework for Generating Synthetic Legal Contract Benchmark Datasets: A LowResource Language Case Study	410
<i>Zofran Aqsha, Nur Hanis Sabrina Suhaimi, Said Ah Saad, Muhamad Helmi Md Said</i> <i>Muhammad Harieth Zaini, Afrina Rosa Mohamad Sattar, Maisarah Mustaffa</i>	
Cross-Modality Attention Bridge Model for Mandarin-to-Vietnamese S2TT	416
<i>Chiao-Jung Chen, Bor-Shen Lin, Ming-Hsiu Chiang, Van-Truc Vo, Po-Sheng Ho, Bo-Yu Chen</i>	
Hybrid Data Preprocessing of Office Actions in Patent Prosecution History	422
<i>Jieh-Sheng Lee</i>	
BERTopic for Disaster Response Needs Assessment: Insights from Twitter(X) Data	430
<i>Jessa O. Poe, Jeffrey S. Ingosan</i>	
A Literature Review about Federated Learning in Recommendation Systems	436
<i>João Gaspar, João Cruz, Carlos Rodrigues, André Rodrigues, Isabel Ribeiro, Diogo Martinho</i> <i>Joaquim Santos, Goreti Marreiros</i>	
URes2Net: U-Net Architecture with Res2Net for Skin Lesion Segmentation	447
<i>S,Eyma Karagozoglu, Frat Hardalac</i>	
Evaluation of Cross-Domain Semantic Segmentation of Driving Scenes Using Transformer Models	453
<i>Wei Huang, Yurun Hao, Jinwu Liu, Qinglei Bu, Fan Zhang, Jie Sun</i>	

CAR-Net: A Cascade Refinement Network for Rotational Motion Deblurring under Angle Information Uncertainty	461
<i>Ka Chung Lai, Ahmet Cetinkaya</i>	
A Diffusion Model-based Data Augmentation Framework to Enhance Few-Shot Fine-Grained Image Classification	471
<i>Yi-Hsiang Tsai, Jiun-Feng Chang, Chun-Rong Huang</i>	
QWnet: a visual defect detection for quartz wafer	477
<i>Yizhong Xin, Ming Ren, Lijun Zhang, Sha Yi</i>	
Fixation-Spike Gate: A Visual-Neuroscience-Inspired Framework for Robust Railway Object Detection in Adverse Environments	483
<i>Ohbyung Kwon, Feng Gao, Jiahao Liang, Yujin Kang</i>	
Morphological Change Detection for Scanning Electron Microscope Images of Lung Cell Surfaces	489
<i>Jarin Ritu, Taylor Jefferis, Christie M. Sayes, Joshua Peebles</i>	
Multi-Resolution Feature Stem for Diabetic Retinopathy lesion segmentation	497
<i>Indranil Dutta, Taehee Jeong</i>	
Integrating Semantic Segmentation with Parallax Geometry for UAV-Based Structure Height Estimation	503
<i>Arjun Maganti, Luis A. Jauregui, Nelson Nishio, Amun Reddy, Pablo Silva, Albert Siryaporn</i>	
A Feasibility Study on YOLO-Based Primary Tumor Classification from CECT of Brain Metastases	510
<i>Chaipatr Setprapha, Thanapat Mahayot, Vichan Suraratdecha, Hattapark Dejakaissaya Payothorn Decharin, Paniti Achararit</i>	
Beyond Data Scarcity: Optimizing R3GAN for Medical Image Generation from Small Datasets	516
<i>Tsung-Wei Pan, Chang-Hong Wu, Jung-Hua Wang, Ming-Je Chen, Yu-Chiao Yi, Tsung-Hsien Lee</i>	
Prompt-Guided Contrastive Learning for Robust Retinal Disease Classification	522
<i>Abdulrahman M. Qahtani</i>	
RPGD: RANSAC-P3P Gradient Descent for Extrinsic Calibration in 3D Human Pose Estimation	530
<i>Zhanyu Tuo</i>	
A Comparative Study of Machine Learning and Deep Learning Models for Predicting Diabetic Retinopathy Severity in Retinal Fundus Image Datasets	537
<i>Oluwafisayo Babatope Ayoade, Nabil Giweli, Jeewani Anupama Ginige</i>	
Real-time Semantic Segmentation of Laparoscopic Instruments in Training Environments: Dataset Generation and Benchmarking	546
<i>Dehlela Shabir, Nihal Abdurahiman, Julien Abinahed, Khaled Shaban, Nikhil V. Navkar</i>	
CAPE: Test-Time Iterative Optimization for Copyright-Aware Multimodal Image Generation	554
<i>Zeyu Jiang, Lai-Man Po, Yongqi Peng, Yuyang Liu, Peter H. W. Wong, David C.Y. Hong, Jingjing Xiong Zhuoxuan Li, Yi Li, Adele Y. C. Wang</i>	
Post-Disaster Damage Assessment using Deep Learning Techniques	564
<i>C Valliyammai, A K Vaishnavi, Sri Vaishnavi Devi, D Vijay</i>	

Enhancing Nutritional Data Literacy Through an AIDriven Pipeline for Object Detection and Label Interpretation	570
<i>Christlei Daniel B. Aguila, Sean S. Arnisto, Fil Edward F. Buitizon, James Emanuel M. Carillo</i>	
<i>Dwyght Dani V. Dela Cruz, Rex P. Bringula, Marc Rodin C. Ligas</i>	
BELLEVUE: An Automated Product Detection And Inventory Tracking System Using Deep Learning	575
<i>Aliya Jadik, Muhammad Abdurrahman, Amr Derhem, Seba Alarab, Vinod Pangracious</i>	
3MNet: A novel multi-omics deep ensemble model for melanoma survival analysis	583
<i>Stanley Chen</i>	
A Dual-Branch CNN Fusion Approach for Robust Chest X-ray Disease Classification	590
<i>Amjad Alshahrani, Abdulmohsen Algarni, Eman Alqaissi</i>	
A Data-Driven Approach to Tachycardia Detection in ECG using Machine Learning Model	598
<i>Sirazz Sanjida, Uddin Md Rayhan, Eisuke Hanada</i>	
Self-Organizing Map Feature Selection Method for Diagnosing Early-Stage Parkinson's Disease Patients	604
<i>Weikang Hou, Changqin Quan, KangRen, Zhiwei Luo</i>	
Longitudinal Graph Neural Networks for Prognostic Modeling of Alzheimer's Disease Progression	610
<i>Medet Ashimgaliyev, Ainur Zhumadillayeva, Miras Mussabek, Peiwu Qin</i>	
Trajectory-centric Probing of Frozen Chest CT Foundation Embeddings for Multi-endpoint Lung Cancer Phenotyping	620
<i>Kuan-Ting Wu, Hsu-Ching Huang, Wei-Kai Lee, Wei-An Chen, Chien-Ying Huang, Heng-Sheng Chao</i>	
<i>Yung-Hung Luo, Jing-Yao Weng, Yi-Chen Yeh, Yuh-Min Chen, Yu-Te Wu</i>	
Time-Frequency Cross-Attention Network with Stimulus Intensity Modulation for Automated ABR Classification	626
<i>Xiaohan Zhou, Ke Zhang, Zichen Peng, Wenbo Ding, Shixiong Chen</i>	
Multi-Agent AI System for Personalized Medication Adherence in Retail Pharmacies	632
<i>Roopam Dhanraj Choudhari</i>	
SkinCheck: A Lightweight CNN-Powered Mobile App for Early Detection of Skin Cancer	640
<i>Wenting Kate Li, Ruth Agada</i>	
Neuro-Symbolic Agentic Framework for Decoupled Perception and Clinical Reasoning in Medical AI	644
<i>Morris Jhennong Chen, Ya-Ning Chang</i>	
Towards a Unified Heavyweight Ontology For Therapeutic Targeting	650
<i>Cheikh Brahim El Vaigh, Simon Stephan, Leila Zineb Outemzabet, Stéphane Galland</i>	
<i>Ouassila Labbani Narsis, Aurélie Bertaux, Nicolas Gaud, Stéphane Gerart, Kenji Shoji, Christophe Nicolle</i>	
Treating the Image as a System: A Hybrid Signal-AI Approach to Mammogram Analysis	658
<i>Azra Asiksoy</i>	
Hyperparameter Tuning Approach on Deep Learning for Biomedical Image Analysis Using Big Data Analytics	665
<i>Mashaël M. Asiri</i>	

Performance Comparison of Machine Learning Algorithms for Stunting Detection with Recursive Feature Elimination and SMOTE	676
<i>Reza Aulia, Hizir Sofyan, Asep Rusyana</i>	
Neuro-RAGX: An Interpretable Graphical Decoding Framework for Functional Connectivity Using Multi-View Graph Attention Networks and Retrieval-Augmented Generation	681
<i>Prince Isaac R. Pantino, Fitzsixto Angelo L. Singh, Christine F. Peña</i>	
Discerning Implicit Digital Persuasion: A Multimodal Framework and Corpus for Covert Content Identification	686
<i>Meet Amin</i>	
Bayesian Emotion Recognition with Gaussian Mixture-Based Distributional Consistency	691
<i>Qiyuan Xiao, Changqin Quan, Sheng Cao, Zhiwei Luo</i>	
The Museum That Feels: AI-Driven Affective Computing for Emotion-Adaptive AR Experiences	697
<i>Eleftheria Iakovaki, Markos Konstantakis, John Aliprantis, Konstantinos Ordoumpozanis, Stavroula Pyroti, Athanasios Angioplastis, Alkiviadis Tsimpiris</i>	
Uncertainty-Aware Visual Sequence Models for Depression Severity Assessment	703
<i>Seyedehmoniba Ravan, Fabian Schmidt, Vladimir Vlassov</i>	
Establishing a Localized Facial Emotion Dataset for Enhanced Affective Computing in the Northern Philippines Context	711
<i>Zyra Yell Fagyan, Paul Terese Catala, Kyrilyn Busaing</i>	
Scaffl.ed: A Multimodal, LLM-Driven Intelligent Tutoring System for Java Debugging Using Gaze and Mouse Interactions	716
<i>John Mark M. Gatche, John Adrian B. Cruz, Racy Anne M. Dumable, Jamie Noreen C. Ferrer, John Lawrence H. Urcia, Rex Bringula, Sheila Geronimo</i>	
BRIGHTER MM+: A Multimodal and EmojiEnriched Emotion Recognition Framework for LowResource Languages	723
<i>Haseena Bibi Zulfiqar, Toubha Ahmed Zulfiqar, Arslan Sher</i>	
Development of an AI-Based Eye-Tracking System Using Iris Features and Eye-Movement Intention Points	729
<i>Yen-Chiu Chen, Chien-Lung Li</i>	
User-oriented intent classification based on gait characteristics	735
<i>Yi Zhong Xin, Shiyao Wang, Lijun Zhang, Sha Yi</i>	
Sentiment Prediction for Market Volatility	740
<i>Meet Amin</i>	
Hybrid Ensemble Approach for Film Revenue Forecasting with Sentiment Features	745
<i>Warunya Udomkhamsuk, Areenta Lertyongphati, Nawasawan Yenrompho, Nuntanut Bhooanusas</i>	
Impulse Buying in the Indonesian E-Commerce Market: The Role of AI-Driven Personalization	751
<i>Roosbeh Babolian Hendijani, Kathrin Jaszus</i>	
Perceived Human-Likeness' Effect on Attitude Towards AI-Ads with Virtual Brand Ambassador	757
<i>Artha Sejati Ananda, Eriko Ananta Kurniawan, Gilang Setiawan Yusuf</i>	

Salary Prediction in Thailand's IT Sector Using Supervised Learning Models	763
<i>Arocha Saengwirojanapat, Jirachaya Nongbualang, Natthida Theepakornsukkasem, Nuntanut Bhooanusas</i>	
AI-driven Stock Price Forecasting in Technology Stocks with Model-Based Feature Selection for a Quantum-Inspired GAN	769
<i>Suwatchai Piewfad, Phet Aimtongkham, Pakarat Musikawan</i>	
Machine Learning Forecasts of Heavy Goods Vehicles Traffic for Prioritising EV Fast-Charging Locations	775
<i>Maryam Roudneshin, Aisling Reynolds-Feighan</i>	
Monodense Deep Neural Model for Determining Item Price Elasticity	781
<i>Lakshya Garg, Sai Yaswanth, Deep Narayan Mishra, Karthik Kumaran, Anupriya Sharma, Mayank Uniyal</i>	
Physics-Informed Neural Networks for Multi-Horizon Volatility Modeling with Uncertainty Quantification	787
<i>TzeHoung Lee, Xue-Ming Yuan</i>	
Data-driven troubleshooting using the LightGBM algorithm for industrial machine failure prediction	792
<i>Sania Partovian, Francesco Flammini, Alessio Bucaioni, Marlon Antonin Lehmann, Johan Thornadtsen</i>	
Predictive Modeling of LED Luminaire Degradation Using Artificial Neural Networks and Environmental Input	798
<i>Pavol Belany, Zuzana Florkova, Peter Hrabovsky, Roman Budjac</i>	
State-of-Health Prediction and Generalization of Lithium-Ion Batteries Based on Data Fusion and Deep Transfer Learning	804
<i>Jun-Sheng Ye, Shih-Hsien Hsu, Min-Chieh Lin</i>	
Real-Time Performance Prediction Using Tiny Machine Learning in Advanced Catalytic Systems	811
<i>Hakan Karasu, Veysi Adın, Rashid Ali, Fredrik Sikström</i>	
DRL-Based Microgrid Energy Management under Uncertain Supply and Demand	817
<i>Christopher G. Harris</i>	
A Reproducible Benchmark for Tool Wear Prediction Using NASA Milling Dataset	823
<i>Meng-Hua Li, Shu-Fen Li, Rosyidatul Munawaroh</i>	
Deep Learning Based Crack Detection MLOps Pipeline using Incremental Learning	829
<i>Samarth Rai, Roshni Mathur, Ahmed Saad, Marwah Tonse, Imran Zualkernan</i>	
A Framework for Assessing Vehicle Measurement Data Quality for Automotive Machine Learning Applications	835
<i>Sven Dominka, Henrik Smith</i>	
Intelligent manufacturing: Simulating a discretecontinuous model with feedback control	843
<i>Juliana Keiko Sagawa, Gašper Mušič</i>	
A novel, multistep neural network approach to improve anomaly detection in online operational status	849
<i>Aditya Singla, Vamanie Perumal</i>	
Artificial Intelligence Algorithms in Optimization of Supply Chain Networks	860
<i>Dana Althea L. Salaysay, Van Julian D. De Vera, Raymond B. Sedilla, Lyeonna Loris A. Lavadia Czarina Erin Jan A. Buenavidez, Vince Alfred John C. Sunico, Wyatt Ace L. Alano</i>	

Data Driven Analytics Framework for Frequency Domain Signal Analysis of Coupled Maneuvering Systems	865
<i>Bipin Krishna, S Meenatchi Sundaram, Cyril Joseph</i>	
Thermal Comfort Process Control	871
<i>Pavol Belany, Zuzana Florkova, Peter Hrabovsky, Roman Budjac</i>	
HTFSN: A Hierarchical Temporal Feature Sedimentation Network Multi-Zone For Energy Consumption Forecasting	877
<i>Dengke Ruan, Xinggan Peng, Zijian Lei, Xingjie Zhang, Kai Li, Wei Luo, Maoyu He, Fei Xiong, Yu Tang Zhiping Lin</i>	
Optimizing Deep Learning Models for Environmental Sustainability: A Model-Centric Approach	884
<i>Samar Garrab, Sarra Boughriou</i>	
Predicting Wildfire Burn Severity from Pre-Fire SAR Signatures: A Deep Learning Approach	890
<i>Kris Mannino, Deb Zani Deb, Karen An</i>	
Forest Fires Forecasting: A Radical Approach to Combat Climate Change	897
<i>Nahid Boustani, Jithendra Katta, Zachary Holland, Emmanuel D Leonce, Dae Won Hwang</i>	
Uncertainty-Aware Self-Consistency Learning for Low-Altitude UAV-Based Crop Health Assessment	904
<i>Arundhati Boruah, Suman Kumar Pal, Rajendra Machavaram, Shyamal Kumar Das Mandal</i>	
Artificial Neural Network-Based Assessment of Flood Control and Public Safety in the Philippines	910
<i>Samantha Krayelle M. Estose, Dana Althea L. Salaysay, Jose Benedict Macado, Van Julian D. De Vera Maela Madel L. Cahigas, Althea Angel F. Fernando, Sebastian Luis D. Bugayong</i>	
Predicting Urban Farming Participation Intention in the National Capital Region, Philippines using Machine Learning Approaches	916
<i>Aviona Bianca S. Bernil, Jericho Nheil C. Colina, Godwin Aldrich M. Ablao, Alexander A. Hernandez Roman M. De Angel</i>	
Narrative AI and Environmental Awareness in Higher Education: Evaluating a Customized GPT Intervention	922
<i>Sergio Palomino-Gómez, José Carlos Vázquez-Parra</i>	
Towards accessible and ethical AI tools for disability services: a stakeholder-informed study	928
<i>Nina Ždanovič, Lara Bezzina, Marco Antônio Florenzano Mollinetti, Shutaro Takeda</i>	
Playing Telephone with AI: How Uninformed Use of AI Tools May Distort Educational Outcomes	936
<i>Konstantinos Ordoumpozanis, Markos Konstantakis, John Aliprantis, Athanasios Angeioplastis Dimitrios Varsamis, George Caridakis, Alkiviadis Tsimpliris</i>	
LEAP: A Deep Learning Pipeline for Early Prediction of Student Learning Outcomes from LMS Logs	945
<i>Athanasios Angeioplastis, Markos Konstantakis, John Aliprantis, Konstantinos Ordoumpozanis Paraskevi Vourla, Dimitrios Varsamis, George Caridakis, Alkiviadis Tsimpliris</i>	
Examining the Influence of ChatGPT on Programming Courses in Higher Education	954
<i>Jonel B. Prado, Thelma D. Palaoag</i>	
Empowering Educators with Microsoft Copilot: A Framework for AI-Assisted Lesson Design and Assessment	960
<i>Roman M. De Angel, Ronel F. Ramos, Juan Paulo H. Magcuyao, Ace C. Lagman</i>	

Explainable AI for Personalized Learning: Enhancing Transparency in Adaptive Education Systems	966
<i>Angelo C. Arguson, Shaneth C. Ambat, Ace C. Lagman, Ronel F. Ramos</i>	
Exploring Gemini AI's Text-to-Image Capabilities for Adaptive Learning in Education	972
<i>Ronel F. Ramos, Roman M. De Angel, Juan Paulo H. Magcuyao, Alfredo L. Calimbo</i>	
Human-AI Collaboration in Higher Education: The Role of Copilot Vision in Real-Time Learning Support	978
<i>Ronel F. Ramos, Janice A. Abellana, Juan Paulo H. Magcuyao, Von Erick Mortel Magbitang</i>	
From Impulse to Introspection: Two-Round Peer-Aware Architectures for Large Language Model Trading Agents	984
<i>Jung-Hua Liu, Yiqing Ma</i>	
Multi-Agent System Approach for Constructing Three-Layer Knowledge Graph Architectures for Efficiently Leveraging Engineering Data	988
<i>Maximilian Kretzschmar, Sebastian Schwoch, Bernhard Saske, Jan Mehlstäubl, Kristin Paetzold-Byhain</i>	
Volleyball Lineup Recommendation using GraphSAGE with Knowledge Distillation and Feature-Aware Modeling	995
<i>Wei-Chi Lin, Jenn-Jier James Lien, Ya-Ning Chang</i>	
Deadlock Prevention in Multi-Agentic Systems for Regulated Content Authoring	1003
<i>Mohit Sood, Prakash Prakash, Anoop Tripathi, Shivam Shivam, Aditya Sharma, Snigdha Biswas Abhiraj Sen</i>	
ARES: Adaptive Real-Time Evaluation System for Cognitive and Tactical Performance in Football Training	1013
<i>Markos Konstantakis, John Aliprantis, Konstantinos Ordoumpozanis, Eleftheria Iakovaki Georgios Alexandris, Athanasios Agioplastis, Alkiviadis Tsimpliris</i>	
Evaluating Agentic AI Systems in Manufacturing: A Review of Taxonomy, Challenges and Future Directions	1020
<i>Nastaran Moradzadeh Farid, Sara Shafiee</i>	
Learning Hierarchical Structure for Efficient Automated Negotiation of Interdependent Issues Through Analysis of Bid Sequence	1026
<i>Adnan Ahmed, Behrouz Far, Clinton Purtell</i>	
Team Synergy-Aware Workforce Scheduling: Integrating Interpersonal Compatibility and Endogenous Turnover Dynamics	1035
<i>Aijia Liu, Chaeun Hong, Fumin Chang, Shizuka Ebisudani, Sejun Woo, Kiyotaka Shin, Hiroshi Takahashi</i>	
WGrasp: A Universal Dexterous Grasping Framework Guided by Vision and Tactile Perception	1041
<i>Lai Wei, Wuyue Ma, Enchen Zhong, Yuting Pei, Weilong Niu</i>	
Deep Meta Coordination Graphs for Multi-Agent Reinforcement Learning	1046
<i>Nikunj Gupta, James Zachary Hare, Jesse Milzman, Rajgopal Kannan, Viktor Prasanna</i>	
Application of Intelligent Robotics in the Recognition of Medical Instruments: Technical Approach	1056
<i>Mariana Ribeiro, Diogo Martinho, Joaquim Santos, Goreti Marreiros</i>	
Multi-Task CAD Generation Using Compact Decoder-Only Models	1063
<i>Elias Berger, Jan Mehlstäubl, Bernhard Saske, Kristin Paetzold-Byhain</i>	