

2024 IEEE Conference on Artificial Intelligence (CAI 2024)

**Singapore
25-27 June 2024**

Pages 1-769



**IEEE Catalog Number: CFP24BJ7-POD
ISBN: 979-8-3503-5410-2**

**Copyright © 2024 by the Institute of Electrical and Electronics Engineers, Inc.
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:	CFP24BJ7-POD
ISBN (Print-On-Demand):	979-8-3503-5410-2
ISBN (Online):	979-8-3503-5409-6

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

CURRAN ASSOCIATES INC.
proceedings
.com

2024 IEEE Conference on Artificial Intelligence (CAI) **CAI 2024**

Table of Contents

Message from the General Chairs	xxxix
Message from the Program Chairs	xl
Organizing Committee	xli
Program Committee	xlv
Sponsors	lix
Keynote Addresses	lxii

CAI 2024

3D Reconstruction and Estimation from Single-view 2D Image by Deep Learning – A Survey	1
<i>Yongfeng Shan (University of Technology Sydney, Australia), Christy Jie Liang (University of Technology Sydney, Australia), and Min Xu (University of Technology Sydney, Australia)</i>	
3D-Convolution Guided Spectral-Spatial Transformer for Hyperspectral Image Classification	8
<i>Shyam Varahaqiri (Indian Institute of Information Technology, India), Aryaman Sinha (Indian Institute of Information Technology, India), Shiv Ram Dubey (Indian Institute of Information Technology, India), and Satish Kumar Singh (Indian Institute of Information Technology, India)</i>	
A Comparative Study of Reinforcement Learning-Based Collision Avoidance for Maritime Autonomous Surface Ships	15
<i>Liangbin Zhao (Institute of High Performance Computing(IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Xingrui Yu (Institute of High Performance Computing(IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), and Xiuju Fu (Institute of High Performance Computing(IHPC), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
A Division Based Neuron for Neural Networks	19
<i>Jaalen Dixon (Howard University, United States) and Jiang Li (Howard University, United States)</i>	
A Knowledge Guided Multi-Population Evolutionary Algorithm for Dynamic Workflow Scheduling Problem	21
<i>Jingyuan Xu (Southern University of Science and Technology, China), Jiajian Yang (Southern University of Science and Technology, China), Peiru Li (Southern University of Science and Technology, China), Ziming Wang (Southern University of Science and Technology, China), Changwu Huang (Southern University of Science and Technology, China), and Xin Yao (Lingnan University, Hong Kong SAR)</i>	
A Lightweight Neural Network with Transformer to Predict Credit Default	29
<i>Zongqi Hu (Nanyang Technological University, Singapore) and Chai Kiat Yeo (Nanyang Technological University, Singapore)</i>	

A Model-Free Deep Reinforcement Learning Approach to Piano Fingering Generation	31
<i>Ananda Phan Iman (Gwangju Institute of Science and Technology, Korea)</i>	
<i>and Chang Wook Ahn (Gwangju Institute of Science and Technology, Korea)</i>	
A Personalised Learning Tool for Physics Undergraduate Students Built On a Large Language Model for Symbolic Regression	38
<i>Yufan Zhu (National University of Singapore, Singapore), Zi-Yu Khoo (National University of Singapore, Singapore), Jonathan Sze Choong Low (Singapore Institute of Manufacturing Technology, Singapore), and Stéphane Bressan (National University of Singapore, Singapore)</i>	
A Review of Data-Centric Artificial Intelligence (DCAI) and its Impact on Manufacturing Industry: Challenges, Limitations, and Future Directions	44
<i>Michael Nieberl (BMW AG, Germany), Alexander Zeiser (BMW AG, Germany), and Holger Timinger (University of Applied Sciences Landshut, Germany)</i>	
A Semi-Supervised Model for Automated Classification of AI-Related Job Tasks Using Bloom's Taxonomy	52
<i>Christophe Mbounang Fongang (Ruhr West University of Applied Sciences, Germany), Michael Vogelsang (Ruhr West University of Applied Sciences, Germany), Timm Eichenberg (University of Applied Sciences Weserbergland, Germany), Britta Rüschoff (FOM University of Applied Sciences for Economics and Management, Germany), and Anne Stockem Novo (Ruhr West University of Applied Sciences, Germany)</i>	
A Spatiotemporal Excitation Classifier Head for Action Recognition Applications	59
<i>Dinh Nguyen (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Siying Liu (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Vicky Sintunata (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Yue Wang (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Jack Ho (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), ZhaoYong Lim (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Ryan Lee (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), and Karianto Leman (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Republic of Singapore)</i>	
A Study of the Generalisability of CNNs for Disease Prediction	63
<i>Thashil Naidoo (University of Pretoria, South Africa) and Nelishia Pillay (University of Pretoria, South Africa)</i>	
A Unified Approach for Binary-Class and Multi-Class Data Augmented Generation	69
<i>Frederic Rizk (University of Louisiana at Lafayette, U.S.A.), Rodrigue Rizk (University of South Dakota, U.S.A.), Dominick Rizk (The Catholic University of America, U.S.A.), Patrick Rizk (University of Quebec at Trois-Rivières, Canada), and Chee-Hung Henry Chu (University of Louisiana at Lafayette, U.S.A.)</i>	
Abstracted Trajectory Visualization for Explainability in Reinforcement Learning	75
<i>Yoshiki Takagi (University of Hawaii at Manoa, USA), Roderick Tabalba (University of Hawaii at Manoa, USA), Nurit Kirshenbaum (University of Hawaii at Manoa, USA), and Jason Leigh (University of Hawaii at Manoa, USA)</i>	

Accurate and Explainable Cataract Detection Using Eye Images Taken by Hand-held Slit-lamp Cameras	83
<i>Daniel Kai Xiang Fung (Nanyang Technological University (NTU), Singapore), Di Wang (Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderl (NTU), Singapore), Hao Wang (Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderl (NTU), Singapore), Yongwei Wang (Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderl (NTU), Singapore), Pengcheng Wu (Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderl (NTU), Singapore), Yan Yee Hah (Khoo Teck Puat Hospital, Singapore), Chee Chew Yip (Khoo Teck Puat Hospital, Singapore), Wee Jin Heng (Tan Tock Seng Hospital, Singapore), Tock Han Lim (Tan Tock Seng Hospital, Singapore), Cyril Leung (Nanyang Technological University (NTU), Singapore), and Chunyan Miao (Nanyang Technological University (NTU), Singapore; Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderl (NTU), Singapore)</i>	
Active Semi-Supervised Learning Based on Global Uncertainty Variation with Noise Resistance	89
<i>Yufei Wen (The Hong Kong University of Science and Technology (Guangzhou), China)</i>	
ADAAUG: An Adaptive Data Augmentation Method for Change Detection	96
<i>Rui Huang (Civil Aviation University of China, China), Jieda Wei (Civil Aviation University of China, China), Sihua Gao (Civil Aviation University of China, China), Zongyu Guo (Civil Aviation University of China, China), Yan Xing (Civil Aviation University of China, China), Weifeng Xu (North China Electric Power University, China), and Qing Guo (Agency for Science, Technology and Research, Singapore)</i>	
Adaptive Graph Normalized Sign Algorithm	102
<i>Changran Peng (Tsinghua University; Institute of Data and Information), Yi Yan (Tsinghua University; Institute of Data and Information), and Ercan E. Kuruoglu (Tsinghua University; Institute of Data and Information)</i>	
Adaptive Home Energy Management: Human-Centric RL Approach for Diverse Situations	104
<i>Zachary Tchir (University of Alberta, Canada), Petr Musilek (University of Alberta, Canada), and Marek Z. Reformat (University of Alberta, Canada; University of Social Sciences, Łódź, Poland)</i>	
Adoption of Generative AI in Content Creation: A Case Study from the Advertising Industry .	111
<i>Dinh Thi Chinh Nguyet (Singapore University of Social Sciences)</i>	
Advancing Safety and Robustness: Perception-Planning System of an Autonomous Vehicle for Micromobility Last Mile Delivery	113
<i>Sai Datta (Nanyang Technological University, Singapore), Joseph De Guia (Nanyang Technological University, Singapore; Mapua University, Philippines), Madhavi Deveraj (Mapua University, Philippines), Jheanel Estrada (Nanyang Technological University, Singapore), Cheng Hun Oh (Nanyang Technological University, Singapore), Bradly Lomotan (Nanyang Technological University, Singapore), Gil Jr Opina (Nanyang Technological University, Singapore), Anshuman Tripathi (Nanyang Technological University, Singapore), and Zhigang Yu (Nanyang Technological University, Singapore)</i>	
Adversarial Latent Autoencoder with Self-Attention for Structural Image Synthesis	119
<i>Jiajie Fan (BMW Group, Germany), Laure Vuaille (Technical University of Munich, Germany), Thomas Bäck (Leiden University, The Netherlands), and Hao Wang (Leiden University, The Netherlands)</i>	

Adverse Weather Benchmark Dataset for LiDAR-Based 3D Object Recognition and Segmentation in Autonomous Driving	125
<i>Dominik Weikert (Otto von Guericke University, Germany), Christoph Steup (Otto von Guericke University, Germany), and Sanaz Mostaghim (Otto von Guericke University, Germany)</i>	
AI as a Tool for Fair Journalism: Case Studies from Malta	127
<i>Dylan Seychell (University of Malta, Malta), Gabriel Hili (University of Malta, Malta), Jonathan Attard (University of Malta, Malta), and Konstantinos Makantasis (University of Malta, Malta)</i>	
AI Hallucinations: A Misnomer Worth Clarifying	133
<i>Negar Maleki (University of South Florida), Balaji Padmanabhan (University of Maryland), and Kaushik Dutta (University of South Florida)</i>	
AI-Based Approach to Efficient Information Extraction for Supply Chain Contracts	139
<i>Hong Ping Yap (Infineon Technologies AP, Singapore), Wee Ling Ong (Infineon Technologies AP, Singapore), Jonathan Koh (Infineon Technologies AP, Singapore), Haoran Liu (National University of Singapore, Singapore), Tiancheng Yang (National University of Singapore, Singapore), and Zihao Chen (National University of Singapore, Singapore)</i>	
AI-Based Learning Assistants: Enhancing Math Learning for Migrant Students in German Schools	144
<i>Vivian Kretzschmar (Stuttgart Media University, Germany) and Jürgen Seitz (Stuttgart Media University, Germany)</i>	
Aircraft Engines Performances Estimation from Multi-Point and Multi-Time Operational Data via Neural Networks	150
<i>Dong Quan Vu (Safran Tech, France), Sebastien Razakarivony (Safran Tech, France), Solene Thepaut (Safran Tech, France), Guillaume Doquet (Safran Tech, France), Yosra Marnissi (Safran Tech, France), and Michel Nocture (Safran Aircraft Engine, France)</i>	
Aligning Crowd-Sourced Human Feedback for Code Generation with Bayesian Inference	158
<i>Man Fai Wong (City University of Hong Kong) and Chee Wei Tan (Nanyang Technological University)</i>	
An Effective Ensemble Deep Learning Framework for Blood-Brain Barrier Permeability Prediction	164
<i>Thanh-Hoang Nguyen-Vo (Victoria University of Wellington, New Zealand; Wellington Institute of Technology, New Zealand), Trang Do (Ministry of Business, Innovation and Employment, New Zealand), and Binh Nguyen (Victoria University of Wellington, New Zealand)</i>	
An Efficient TF-IDF Based Query by Example Spoken Term Detection	170
<i>Akanksha Singh (Indian Institute of Technology Kanpur, India; La Trobe University, Melbourne, Australia), Vipul Arora (Indian Institute of Technology Kanpur, India), and Yi-Ping Phoebe Chen (La Trobe University, Australia)</i>	
An End-to-end Learning Approach for Counterfactual Generation and Individual Treatment Effect Estimation	176
<i>Feilong Wu (Hong Kong Baptist University, China), Kejing Yin (Hong Kong Baptist University, China), and William Kwok-Wai Cheung (Hong Kong Baptist University, China)</i>	

An Ensembled Convolutional Recurrent Neural Network Approach for Automated Classroom Sound	
Classification	183
<i>Rashed Iqbal (University of Wollongong, Australia), Christian Ritz (University of Wollongong, Australia), Jack Yang (University of Wollongong, Australia), Sarah Howard (University of Wollongong, Australia), and Abigail Copiaco (University of Dubai, UAE)</i>	
An Evaluation of Reasoning Capabilities of Large Language Models in Financial Sentiment Analysis	189
<i>Kelvin Du (Nanyang Technological University, Singapore), Frank Xing (National University of Singapore, Singapore), Rui Mao (Nanyang Technological University, Singapore), and Erik Cambria (Nanyang Technological University, Singapore)</i>	
An Evolutionary Algorithm with Variable-Length Chromosome for Multi-Objective Minimalistic Attack	195
<i>Chengyu Zhou (Dalian University of Technology, China), Yaqing Hou (Dalian University of Technology, China), Wenqiang Ma (Dalian University of Technology, China), Hua Yu (Dalian University of Technology, China), and Hongwei Ge (Dalian University of Technology, China)</i>	
Anomaly Detection and Breakdown Diagnosis for Condition Monitoring of Marine Engines ...	200
<i>Nhu Khue Vuong (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), Sateesh Babu Giduthuri (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), Gen Liang Lim (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), Terrence Tan (PSA International (PSA), Singapore), and Savitha Ramasamy (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
Application of Adaptive Douglas-Peucker with Acceleration Algorithm in Ship Trajectory Compression	206
<i>Lichao Yang (Wuhan University of Technology, China), Jingxian Liu (Wuhan University of Technology, China), and Yukuan Wang (Wuhan University of Technology, China)</i>	
Applications of Artificial Intelligence in Oceanic Nuclear Contamination Management	210
<i>Mengting Chen (The Hong Kong Polytechnic University, China), Cong Qi (The Hong Kong Polytechnic University, China), and Xuan Wu (The Hong Kong Polytechnic University, China)</i>	
Archive-Based Cooperative Coevolution Genetic Programming for Workflow Scheduling	216
<i>Yuanzi Hong (Guangdong Polytechnic Normal University, China), Wei-Li Liu (Guangdong Polytechnic Normal University, China), Jinghui Zhong (South China University of Technology, China), Peng Liang (Guangdong Polytechnic Normal University, China), Jianhua Guo (Guangdong Polytechnic Normal University, China), and Chunying Li (Guangdong Polytechnic Normal University, China; Guangdong Provincial Key Laboratory of Intellectual Property & Big Data, China)</i>	
ARIMA Time Series Modelling for Energy Forecasting in Wireless Sensor Networks	220
<i>Ganeshkumar Pugalendhi (Anna University Chennai, India), Prasannavenkatesan Theerthagiri (GITAM University Bengaluru, India), and Usha Ruby A. (SRMIST Ramapuram, India)</i>	

Artificial Intelligence for Modeling Complex Treatment Decisions in Aortic Valve Intervention	226
<i>Jie Jun Wong (National Heart Centre Singapore, Singapore), Glades Tan (National Heart Centre Singapore, Singapore), Xinliu Zhong (National University of Singapore, Singapore), Kay Woon Ho (National Heart Centre Singapore, Singapore), Vincent Wei Jun Sim (National Heart Centre Singapore, Singapore), Si Yong Yeo (Lee Kong Chian School of Medicine, Singapore), and Angela S. Koh (National Heart Centre Singapore, Singapore)</i>	
Astro-Det: Resident Space Object Detection for Space Situational Awareness	228
<i>Yuhang Zhang (Nanyang Technological University), Rangya Zhang (Nanyang Technological University), Qianlei Jia (Nanyang Technological University), Jiaping Xiao (Nanyang Technological University), Lu Bai (Nanyang Technological University), and Mir Feroskhan (Nanyang Technological University)</i>	
Asymmetric Source-Free Unsupervised Domain Adaptation for Medical Image Diagnosis	234
<i>Yajie Zhang (The Hong Kong Polytechnic University, China), Zhi-An Huang (City University of Hong Kong (Dongguan), China; City University of Hong Kong, Shenzhen Research Institute, China), Jibin Wu (The Hong Kong Polytechnic University, China), and Kay Chen Tan (The Hong Kong Polytechnic University, China)</i>	
Attention-Based Deep Learning Models for Detecting Misinformation of Long-Term Effects of COVID-19	240
<i>Jian-An Chen (Institute of Biomedical Informatics, National Yang Ming Chiao Tung University, Taiwan), Che-Lun Hung (Institute of Biomedical Informatics, National Yang Ming Chiao Tung University, Taiwan), and Chun-Ying Wu (Institute of Biomedical Informatics, National Yang Ming Chiao Tung University, Taiwan)</i>	
Automatic Multiple Choice Question Evaluation Using Tesseract OCR and YOLOv8	246
<i>Saikat Mahmud (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Kawshik Biswas (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Api Alam (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Rifat Al Mamun Rudro (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Nusrat Jahan Anannya (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Israt Jahan Mouri (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), and Kamruddin Nur (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh)</i>	
Automatic Radar Waveform Design	253
<i>Victor Manuel Hidalgo (DTS SpA, National Aeronautical Company of Chile, Chile) and Christian Muñoz (Diego Portales University, Chile)</i>	
Autonomous Gain Tuning for Differential Drive Robots Targeting Control Using Soft Actor-Critic	255
<i>Chao-Chung Peng (Department of Aeronautics and Astronautics, National Cheng Kung University, Taiwan), Meng-Huan Chiang (Department of Aeronautics and Astronautics National, Cheng Kung University, Taiwan), and Yi-Ho Chen (Department of Aeronautics and Astronautics, National Cheng Kung University, Taiwan)</i>	

Bayesian Neural Network For Personalized Federated Learning Parameter Selection	261
<i>Mengen Luo (Tsinghua University, China) and Ercan E. Kuruoglu (Tsinghua University, China)</i>	
Benchmarking AutoGen with Different Large Language Models	263
<i>Rafael Barbarroxa (GECAD – Research Group on Intelligent Engineering and Computing for Advancement Innovation and Development, LASI – Intelligent Systems Associate Laboratory, Polytechnic of Porto, Portugal), Bruno Ribeiro (GECAD – Research Group on Intelligent Engineering and Computing for Advancement Innovation and Development, LASI – Intelligent Systems Associate Laboratory, Polytechnic of Porto, Portugal), Luis Gomes (GECAD – Research Group on Intelligent Engineering and Computing for Advancement Innovation and Development, LASI – Intelligent Systems Associate Laboratory, Polytechnic of Porto, Portugal), and Zita Vale (GECAD – Research Group on Intelligent Engineering and Computing for Advancement Innovation and Development, LASI – Intelligent Systems Associate Laboratory, Polytechnic of Porto, Portugal)</i>	
Benchmarking Shadow Removal for Facial Landmark Detection	265
<i>Lan Fu (University of South Carolina, USA), Qing Guo (IHPC and CFAR, Agency for Science, Technology and Research (A*STAR), Singapore), Felix Juefei-Xu (New York University, USA), Hongkai Yu (Cleveland State University, USA), Yang Liu (Nanyang Technological University, Singapore), Wei Feng (Tianjin University, China), and Song Wang (University of South Carolina, USA)</i>	
Big Data-Driven Booking Consolidation and Scheduling of Launching Service in Singapore Port	272
<i>Yun Hui Lin (Agency for Science, Technology and Research (A*STAR), Singapore), Ping Chong Chua (Agency for Science, Technology and Research (A*STAR), Singapore), Xiao Feng Yin (Agency for Science, Technology and Research (A*STAR), Singapore), Zizhe Wang (Agency for Science, Technology and Research (A*STAR), Singapore), Ning Li (Agency for Science, Technology and Research (A*STAR), Singapore), Zhe Xiao (Agency for Science, Technology and Research (A*STAR), Singapore), Xiuju Fu (Agency for Science, Technology and Research (A*STAR), Singapore), and Zheng Qin (Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
Blockchain-Based AI Agent and Autonomous World Infrastructure	278
<i>Eric Yu (Singapore University of Social Sciences), Yue Wang (Singapore University of Social Sciences), Jianzheng Shi (Singapore University of Social Sciences), and Xun Wang (Singapore University of Social Sciences)</i>	
Bounded Gaussian Process with Multiple Outputs and Ensemble Combination	284
<i>Jeremy Heng Meng Wong (Institute for Infocomm Research, A*STAR, Singapore), Huayun Zhang (Institute for Infocomm Research, A*STAR, Singapore), and Nancy F. Chen (Institute for Infocomm Research, A*STAR, Singapore)</i>	
Breaking the Silence: Whisper-Driven Emotion Recognition in AI Mental Support Models	290
<i>Xinghua Qu (Tianqiao and Chrissy Chen Institute, Singapore), Zhu Sun (CFAR, IHPC, A*STAR, Singapore), Shanshan Feng (CFAR, IHPC, A*STAR, Singapore), Caishun Chen (CFAR, IHPC, A*STAR, Singapore), and Tian Tian (University of California, United States)</i>	

Carbon Stock Estimation at Scale from Aerial and Satellite Imagery	292
<i>Alex To (University of Sydney, Australia), Hoang Quoc Viet Pham (University College Cork, Ireland), Quang H. Nguyen (Reliable Machine Learning Group, Vietnam), Joseph G. Davis (University of Sydney, Australia), Barry O’Sullivan (University College Cork, Ireland), Shan L Pan (University of New South Wales, Australia), and Hoang D. Nguyen (University College Cork, Ireland)</i>	
Category-Aware Test-Time Training Domain Adaptation	300
<i>Yangqin Feng (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Xinxing Xu (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Huazhu Fu (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Yan Wang (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Zizhou Wang (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Liangli Zhen (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Rick Siow Mong Goh (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), and Yong Liu (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
ChatGPT vs Bard: Which is a Better Writer?	307
<i>Ai Leng Ng (Singapore University of Social Sciences, Singapore) and Justina Ong (Singapore University of Social Sciences, Singapore)</i>	
CI-VAE: A Generative Deep Learning Model for Class-Specific Data Interpolation	313
<i>Mohsen Nabian (City of Hope, USA), Zahra Eftekhari (City of Hope, USA), and Chi Wah Wong (City of Hope, USA)</i>	
Clash of Titans on Imbalanced Data: TabNet vs XGBoost	320
<i>Róbert Kanász (Technical University of Košice, Slovakia), Peter Drotár (Technical University of Košice, Slovakia), Peter Gnip (Technical University of Košice, Slovakia), and Martin Zoričák (Technical University of Košice, Slovakia)</i>	
ColdU: User Cold-Start Recommendation with User-Specific Modulation	326
<i>Daxiang Dong (Baidu Inc., China), Haifeng Wang (Baidu Inc., China), Yaqing Wang (Baidu Inc., China), Shiguang Wu (Baidu Inc., China), and Jingbo Zhou (Baidu Inc., China)</i>	
Comparative Analysis of Hate Speech Detection: Traditional vs. Deep Learning Approaches ...	332
<i>Haibo Pen (Tianjin University, China), Nicole Teo (Singapore Management University, Singapore), and Zhaoxia Wang (Singapore Management University, Singapore)</i>	
Comparison of Metaheuristic Algorithms for Photovoltaic Systems Allocation in a Power Distribution Feeder	338
<i>José Almeida (Polytechnic of Porto, Portugal), Brian Jaramillo-Leon (São Paulo State University, Brazil), Jônatas B. Leite (São Paulo State University, Brazil), João Soares (Polytechnic of Porto, Portugal), Zita Vale (GECAD, Portugal), and Sergio Zambrano-Asanza (São Paulo State University, Ecuador)</i>	

Compressed Bayesian Federated Learning for Reliable Passive Radio Sensing in Industrial IoT	344
<i>Luca Barbieri (Politecnico di Milano, Italy; Consiglio Nazionale delle Ricerche, Italy), Stefano Savazzi (Consiglio Nazionale delle Ricerche, Italy), and Monica Nicoli (Politecnico di Milano, Italy)</i>	
Computationally and Memory-Efficient Robust Predictive Analytics Using Big Data	350
<i>Daniel Menges (Norwegian University of Science and Technology, Norway) and Adil Rasheed (Norwegian University of Science and Technology, Norway)</i>	
Confidence Estimation in Analyzing Intravascular Optical Coherence Tomography Images with Deep Neural Networks	358
<i>Lennard Korte (Nanyang Technological University, Singapore), Li Rong Wang (Nanyang Technological University, Singapore), and Xiuyi Fan (Nanyang Technological University, Singapore)</i>	
Confidential and Protected Disease Classifier Using Fully Homomorphic Encryption	365
<i>Aditya Malik (University at Buffalo, The State University of New York, USA), Nalini Ratha (University at Buffalo, The State University of New York, USA), Bharat Yalavarthi (University at Buffalo, The State University of New York, USA), Tilak Sharma (University at Buffalo, The State University of New York, USA), Arjun Kaushik (University at Buffalo, The State University of New York, USA), and Charanjit Jutla (IBM Research, USA)</i>	
Context-Based Semantic Caching for LLM Applications	371
<i>Ramaswami Mohandoss (Infosys Ltd, India)</i>	
Continually Learning Planning Agent for Large Environments Guided by LLMs	377
<i>Swarna Kamal Paul (Tata Consultancy Services, India)</i>	
Contrastive Information Maximization Clustering for Self-Supervised Speaker Recognition	383
<i>Abderrahim Fathan (Computer Research Institute of Montreal (CRIM), Canada) and Jahangir Alam (Computer Research Institute of Montreal (CRIM), Canada)</i>	
Coronary Artery Disease Classification Using One-Dimensional Convolutional Neural Network ...	389
<i>Atitaya Phoemsuk (University of Essex, United Kingdom) and Vahid Abolghasemi (University of Essex, United Kingdom)</i>	

Cost-Sensitive Distribution Alignment for Improving Automated Medical Diagnosis Using Retinal Fundus Photography	395
<i>Yangqin Feng (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Xinxing Xu (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Zizhou Wang (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Yan Wang (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Huazhu Fu (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Shaohua Li (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Liangli Zhen (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Tien-En Tan (Singapore Eye Research Institute, Singapore; Singapore National Eye Centre, Singapore; Duke-National University of Singapore Medical School, Singapore), Mukharram M. Bikbov (Ufa Eye Research Institute, Russia), Jost B. Jonas (Heidelberg University, Germany), Chee Wai Wong (Singapore Eye Research Institute, Singapore; Singapore National Eye Centre, Singapore; Duke-National University of Singapore Medical School, Singapore), Ching-Yu Cheng (Singapore Eye Research Institute, Singapore; Singapore National Eye Centre, Singapore; Duke-National University of Singapore Medical School, Singapore), Daniel Shu Wei Ting (Singapore Eye Research Institute, Singapore; Singapore National Eye Centre, Singapore; Duke-National University of Singapore Medical School, Singapore), Rick Siow Mong Goh (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), and Yong Liu (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore)</i>	
CTrPile: A Computer Vision and Transformer Approach for Pile Capacity Estimation from Dynamic Pile Load Test	402
<i>Sompote Youwai (King Mongkut's University of Technology Thonburi, Thailand) and Parchya Makam (King Mongkut's University of Technology Thonburi, Thailand)</i>	
Cultivating Navigational Autonomy in the Visually Impaired: A Novel Approach with VirtualEYE	408
<i>Aishwarya Singh (Nanyang Technological University, Singapore) and Smitha K G (Nanyang Technological University, Singapore)</i>	
Data-Centric AI Practice in Maritime: Securing Trusted Data Quality via a Computer Vision-Based Framework	414
<i>Ke Wang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Qi Hao Tristan Ong (School of Computing, Singapore Polytechnic, Republic of Singapore), Xiaocai Zhang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Xiuju Fu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), and Zheng Qin (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore)</i>	

Data-Driven Reinforcement Learning for Optimal Motor Control in Washing Machines	418
<i>Chanseok Kang (LG Electronics, Korea), Guntae Bae (LG Electronics, Korea), Daesung Kim (LG Electronics, Korea), Kyoungwoo Lee (LG Electronics, Korea), Dohyeon Son (LG Electronics, Korea), Chul Lee (LG Electronics, Korea), Jaeho Lee (LG Electronics, Korea), Jinwoo Lee (LG Electronics, Korea), and Jae Woong Yun (LG Electronics, Korea)</i>	
Decoding Cyberbullying on Social Media: A Machine Learning Exploration	425
<i>Aisha Saeid (University of Surrey, United Kingdom), Diptesh Kanojia (University of Surrey, United Kingdom), and Ferrante Neri (University of Surrey, United Kingdom)</i>	
Deep Learning Based Layout Recognition Approach for HMI Software Validation	429
<i>Ashton Xue Qun Pang (AI Singapore, Singapore), Jiaying Jansen Lin (AI Singapore, Singapore), Chin Hee Ong (AI Singapore, Singapore), Yongquan Chen (AI Singapore, Singapore), Ga Xiang Chong (Continental Automotive Singapore Pte Ltd, Singapore), Siti Nuruljannah Baharudin (AI Singapore, Singapore), Yon Shin Teo (Continental Automotive Singapore Pte Ltd, Singapore), and Kevin Seng Loong Oh (AI Singapore, Singapore)</i>	
Deep Learning for Tumor Localization with Depth Estimation: A Minimally Invasive Robotics-Assisted Approach	438
<i>Ali Talasaz (Florida Atlantic University, USA)</i>	
Differentiable Hash Encoding for Physics-Informed Neural Networks	444
<i>Ge Jin (Beijing Institute of Technology (BIT), China), Deyou Wang (Beijing Institute of Technology (BIT), China), Jian Cheng Wong (Nanyang Technological University (NTU), Singapore; Agency for Science, Technology and Research (A*STAR), Singapore), and Shipeng Li (Beijing Institute of Technology (BIT), China)</i>	
DIRA: Dynamic Incremental Regularised Adaptation	448
<i>Abanoub Ghobrial (University of Bristol, UK), Xuan Zheng (University of Bristol, UK), Darryl Hond (RTI, Thales UK, UK), Hamid Asgari (RTI, Thales UK, UK), and Kerstin Eder (University of Bristol, UK)</i>	
Diversified Sequential Recommendation via Evolutionary Multi-Objective Transfer Optimization	456
<i>Wei Zhou (Shenzhen University, China), Xiaolong Luo (Shenzhen University, China), Hongyue Bao (Shenzhen University, China), and Zexuan Zhu (Shenzhen University, China)</i>	
Does Metacognitive Prompting Improve Causal Inference in Large Language Models?	458
<i>Ryusei Ohtani (Nagoya Institute of Technology), Yuko Sakurai (Nagoya Institute of Technology), and Satoshi Oyama (Nagoya City University/RIKEN AIP)</i>	
Effective Generative AI Implementation in Developing Country Universities	460
<i>Claudia Camacho-Zuñiga (Tecnologico de Monterrey, México)</i>	
Efficient Offloading in UAV-MEC IoT Networks: Leveraging Digital Twins and Energy Harvesting	464
<i>Mehak Basharat (Toronto Metropolitan University, Canada), Muhammad Naeem (COMSATS University Islamabad, Pakistan), Asad M. Khattak (Zayed University, U.A.E.), and Alagan Anpalagan (Toronto Metropolitan University, Canada)</i>	

Efficient Wildfire Detection Framework Based on Artificial Intelligence Using Convolutional Neural Network and Multi-Color Filtering	470
<i>Rabbani Nur Kumoro (Universitas Gadjah Mada, Indonesia), Louis Widi Anandaputra (Universitas Gadjah Mada, Indonesia), Richardus Ferdian Dita Nugraha (Universitas Gadjah Mada, Indonesia), and Wahyono Wahyono (Universitas Gadjah Mada, Indonesia)</i>	
Encouraging Trust in AI-Powered Teaching Tools: Ranking Design Principles	476
<i>Lee Peney (The Hague University of Applied Sciences, The Netherlands), Raoul Dernee (The Hague University of Applied Sciences, The Netherlands), and Hani Alers (The Hague University of Applied Sciences, The Netherlands)</i>	
Enhancing Biomedical Multi-Modal Representation Learning with Multi-Scale Pre-Training and Perturbed Report Discrimination	480
<i>Xinliu Zhong (National University of Singapore, Singapore), Kayhan Batmanghelich (Boston University, USA), and Li Sun (Boston University, USA)</i>	
Enhancing Early Stunting Detection: A Novel Approach Using Artificial Intelligence with an Integrated SMOTE Algorithm and Ensemble Learning Model	486
<i>A.A.G. Yogi Pramana (Gadjah Mada University, Indonesia), Muhammad Fazil Maulana (Gadjah Mada University, Indonesia), Melvin Cahyadi Tirtayasa (Gadjah Mada University, Indonesia), and Dyah Aruming Tyas (Gadjah Mada University, Indonesia)</i>	
Enhancing EEG-Based Emotion Recognition Using Semi-Supervised Co-Training Ensemble Learning	494
<i>Rachel Hui Min Yeo (National University of Singapore, Singapore) and Aung Aung Phyto Wai (Nanyang Technological University, Singapore)</i>	
Enhancing Human-Computer Interaction Through AI: A Study on ChatGPT in Educational Environments	500
<i>Dhruval Kenal Kothari (Nanyang Technological University, Singapore) and Owen Noel Newton Fernando (Nanyang Technological University, Singapore)</i>	
Enhancing Ischemic Brain Stroke Detection on CT Images: A Investigation of Transfer Learning Techniques of DenseNet-201 for Neuroimaging Analysis	504
<i>Chathura D. Kulathilake (Tokyo Metropolitan University, Japan), Jeevani Udupihille (University of Peradeniya, Sri Lanka), and Atsushi Senoo (Tokyo Metropolitan University, Japan)</i>	
Enhancing Out-of-Distribution Detection with Multitesting-Based Layer-wise Feature Fusion .	510
<i>Jiawei Li (Beijing Normal University, China), Sitong Li (Beijing Normal University, China), Shanshan Wang (Beijing Normal University, China), Yicheng Zeng (The Chinese University of Hong Kong (Shenzhen), China), Falong Tan (Hunan University, China), and Chuanlong Xie (Beijing Normal University, China)</i>	
Enhancing Privacy and Security of Autonomous UAV Navigation	518
<i>Vatsal Aggarwal (University at Buffalo, USA), Arjun Ramesh Kaushik (University at Buffalo, USA), Charanjit Jutla (IBM Research, USA), and Nalini Ratha (University at Buffalo, USA)</i>	
Entropy-Weighted Simulated Annealing Optimisation of Human-Simulated Multi-mode PD-PI Control for Biped Robots	524
<i>Xingyang Liu (Southwest Jiaotong University, China), Ferrante Neri (University of Surrey, UK), Daniel Cyrus (University of Surrey, UK), Haina Rong (Southwest Jiaotong University, China), and Gexiang Zhang (Chengdu University of Information Technology, China)</i>	

Ethical Practices for Collecting Ground-Truth Food Datasets: A Systematic Review	530
<i>Grace Ataguba (Dalhousie University, Canada), Md Riyadh (Carleton University, Canada), Samuel Ariyo Okaiyeto (China Agricultural University, China), James Daniel (Federal University, Nigeria), Hong-Wei Xiao (China Agricultural University, China), and Rita Orji (Dalhousie University, Canada)</i>	
EVA-ASCA: Enhancing Voice Anti-Spoofing Through Attention-Based Similarity Weights and Contrastive Negative Attractors	537
<i>Nghi Tran (National Central University, ROC), Bima Prihasto (National Central University, ROC), Phuong Thi Le (National Central University, ROC), Thao Tran (National Central University, ROC), Chun-Shien Lu (Academia Sinica, ROC), and Jia-Ching Wang (National Central University)</i>	
Evaluating Temporal Fidelity in Synthetic Time-Series Electronic Health Records	541
<i>Emmanuella Budu (Halmstad University, Swenden), Amira Soliman (Halmstad University, Swenden), Thorsteinn Rögnvaldsson (Halmstad University, Swenden), and Farzaneh Etminani (Halmstad University, Swenden)</i>	
Expert-Agnostic Medical Image Segmentation	549
<i>Binyan Hu (Swinburne University of Technology, Australia) and A. K. Qin (Swinburne University of Technology, Australia)</i>	
Explainable Artificial Intelligence for Deep Synthetic Data Generation Models	555
<i>Luis Valina (University of Trás-os-Montes and Alto Douro, Portugal), Brígida Teixeira (LASI, GECAD, Polytechnic of Porto, Portugal), Arsénio Reis (University of Trás-os-Montes and Alto Douro, Portugal), Zita Vale (LASI, GECAD, Polytechnic of Porto, Portugal), and Tiago Pinto (University of Trás-os-Montes and Alto Douro, Portugal)</i>	
Exploring Viability of Test-Time Training: Application to 3D Segmentation in Multiple Sclerosis	557
<i>Benoît Gérin (ICTEAM, UCLouvain, Belgium), Maxime Zanella (ICTEAM, UCLouvain, Belgium; ILIA, UMONS, Belgium), Maxence Wynen (ICTEAM, UCLouvain, Belgium; NIL, UCLouvain, Belgium), Saïd Mahmoudi (ILIA, UMONS, Belgium), Benoît Macq (ICTEAM, UCLouvain, Belgium), and Christophe De Vleeschouwer (ICTEAM, UCLouvain, Belgium)</i>	
Fairness-Aware Federated Minimax Optimization with Convergence Guarantee	563
<i>Gerry Windiarso Mohamad Dunda (The Hong Kong University of Science and Technology, Hong Kong) and Shenghui Song (The Hong Kong University of Science and Technology, Hong Kong)</i>	
Fast Convergence PINNs Using Pseudo-Density Embedding: A Study on Solid Mechanics	569
<i>Melvin Wong (Nanyang Technological University, Singapore), Jiao Liu (Nanyang Technological University, Singapore), Ge Jin (Beijing Institute of Technology, China), Kumpeng Li (Nanyang Technological University, Singapore), and Doan Ngoc Chi Nam (Singapore Institute of Manufacturing Technology, A*STAR, Singapore)</i>	
Fast Vision Transformer via Additive Attention	573
<i>Yang Wen (Shenzhen University, China), Samuel Chen (Xidian University, China), and Abhishek Krishna Shrestha (Xidian University, China)</i>	
Fast-Converging Decentralized ADMM for Consensus Optimization	575
<i>Jeannie He (KTH Royal Institute of Technology, Sweden), Ming Xiao (KTH Royal Institute of Technology, Sweden), and Mikael Skoglund (KTH Royal Institute of Technology, Sweden)</i>	

Fed-SHARC: Resilient Decentralized Federated Learning Based on Reward Driven Clustering	581
<i>Renuga Kanagavelu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Chris George Anil (Vellore Institute of Technology, India), Yuan Wang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Huazhu Fu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Qingsong Wei (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Yong Liu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), and Rick Siow Mong Goh (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
Fine-Grained Partial Label Learning	587
<i>Cheng Chen (University of Technology1, Australia; CFAR, Agency for Science, Technology and Research, Singapore; IHPC, Agency for Science, Technology and Research, Singapore), Yueming Lyu (CFAR, Agency for Science, Technology and Research, Singapore; IHPC, Agency for Science, Technology and Research, Singapore), Xingrui Yu (CFAR, Agency for Science, Technology and Research, Singapore; IHPC, Agency for Science, Technology and Research, Singapore), Jing Li (CFAR, Agency for Science, Technology and Research, Singapore; IHPC, Agency for Science, Technology and Research, Singapore), and Ivor W Tsang (CFAR, Agency for Science, Technology and Research, Singapore; IHPC, Agency for Science, Technology and Research, Singapore; Nanyang Technological University, Singapore)</i>	
Fine-Grained Visual Classification Using Self Assessment Classifier	597
<i>Tuong Do (AIOZ, Singapore; University of Liverpool, UK), Huy Tran (AIOZ, Singapore), Erman Tjiputra (AIOZ, Singapore), Quang Tran (AIOZ, Singapore), and Anh Nguyen (University of Liverpool, UK)</i>	
Forecasting Infectious and Parasitic Disease Emergency Department Attendances using High-Dimensional Time Series Data	603
<i>Peihong Guo (Nanyang Technological University, Singapore), Pranav Tewari (Nanyang Technological University, Singapore), Esther Li Wen Choo (Nanyang Technological University, Singapore), Kelvin Bryan Tan (Ministry of Health, Singapore), John Abisheganaden (Tan Tock Seng Hospital, Singapore), and Borame Dickens (National University of Singapore, Singapore)</i>	
Gated Self-Supervised Learning for Improving Supervised Learning	611
<i>Erland Hilman Fuadi (Brawijaya University, Indonesia), Aristo Renaldo Ruslim (Brawijaya University, Indonesia), Putu Wahyu Kusuma Wardhana (Brawijaya University, Indonesia), and Novanto Yudistira (Brawijaya University, Indonesia)</i>	
Gaussian Process-Enhanced Impedance Iterative Learning for Robot Interaction Control	616
<i>Yongping Pan (Sun Yat-sen University, China), Wei Li (Sun Yat-sen University, China), and Tian Shi (Sun Yat-sen University, China)</i>	
Gene Targeting Particle Swarm Optimization for Large-Scale Optimization Problem	620
<i>Zhi-Fan Tang (South China University of Technology, China), Liu-Yue Luo (South China University of Technology, China), Xin-Xin Xu (Ocean University of China, China), Jian-Yu Li (Nankai University, China), Jing Xu (Nankai University, China), Jing-Hui Zhong (South China University of Technology, China), Jun Zhang (Nankai University, China), and Zhi-Hui Zhan (Nankai University, China)</i>	

Generative Active Learning with Variational Autoencoder for Radiology Data Generation in Veterinary Medicine	626
<i>In-Gyu Lee (Department of Computer Science, Chungbuk National University, Republic of Korea), Jun-Young Oh (Department of Computer Science, Chungbuk National University, Republic of Korea), Hee-Jung Yu (Department of Veterinary Medical Imaging, Konkuk University, Republic of Korea), Jae-Hwan Kim (Department of Veterinary Medical Imaging, Konkuk University, Republic of Korea), Ki-Dong Eom (Department of Veterinary Medical Imaging, Konkuk University, Republic of Korea), and Ji-Hoon Jeong (Department of Computer Science, Chungbuk National University, Republic of Korea)</i>	
Generative AI-Based Cognitive Robot for Exam Candidates' Knowledge Self-Assessment	632
<i>Intissar Haddiya (University Mohamed Premier, Morocco) and Andrea Pitrone (Loop AI Group LLC, United States)</i>	
GlobeMetrics: A Healthcare Framework for Video Based Saccade Characterization	638
<i>Debanga Raj Neog (Indian Institute of Technology Guwahati, India), Pharvesh Salman Choudhary (Indian Institute of Technology Guwahati, India), and Mayurdeep Pathak (Indian Institute of Science, India)</i>	
Gradient Recalibration for Improved Visibility of Tail Classes in Supervised Contrastive Learning	644
<i>Genze Zhan (Beijing institute of technology, China), Xin Li (Beijing Institute of Technology, China), Yong Heng (Beijing Institute of Electronic System Engineering, China), Yan Zhang (Beijing Institute of Technology, China), Jiaojiao Wang (Institute of Automation Chinese Academy of Sciences, China), Peiyao Zhao (Beijing Institute of Technology, China), Meitao Mu (Beijing Institute of Technology, China), Xueying Zhu (Beijing Institute of Technology, China), and Mingzhong Wang (The University of the Sunshine Coast, Australia)</i>	
Graph Learning Based Financial Market Crash Identification and Prediction	650
<i>Dayu Qin (Tsinghua University, China) and Ercan E. Kuruoglu (Tsinghua University, China)</i>	
Group Correction-Based Local Disturbance Particle Swarm Optimization Algorithm for Solving Continuous Distributed Constraint Optimization Problems	652
<i>Meifeng Shi (Chongqing University of Technology, China; Kyushu University, Japan), Haitao Xin (Chongqing University of Technology, China), and Makoto Yokoo (Kyushu University, Japan)</i>	
Hand Function Assessment Using Computer Vision for Hand Rehabilitation	659
<i>Kamal Kamal (Indian Institute of Technology Guwahati, India), Debanga Raj Neog (Indian Institute of Technology Guwahati, India), H Pallab Jyoti Dutta (Indian Institute of Technology Guwahati, India), and M. K. Bhuyan (Indian Institute of Technology Guwahati, India)</i>	
Harnessing Deep Learning and Satellite Imagery for Post-Buyout Land Cover Mapping	665
<i>Hakan T. Otal (University at Albany SUNY, NY), Elyse Zavar (University of North Texas), Sherri B. Binder (BrokoppBinder Research & Consulting, PA), Alex Greer (University at Albany SUNY, NY), and M. Abdullah Canbaz (University at Albany SUNY, NY)</i>	
HFNeRF: Learning Human Biomechanic Features with Neural Radiance Fields	672
<i>Arnab Dey (I3S-CNRS/Université Côte d'Azur), Di Yang (Inria Center at Université Côte d'Azur), Antitza Dantcheva (Inria Center at Université Côte d'Azur), and Jean Martinet (I3S-CNRS/Université Côte d'Azur)</i>	

Hierarchical Optimization for Operationally-Constrained Resource Planning	674
<i>Shengkai Chen (Institute for Infocomm Research (I²R), (A*STAR), Singapore), Yu Wang (Institute for Infocomm Research (I²R), (A*STAR), Singapore), Savitha Ramasamy (Institute for Infocomm Research (I²R), (A*STAR), Singapore), and Cheryl Sze Yin Wong (Institute for Infocomm Research (I²R), (A*STAR), Singapore)</i>	
Human-Generative AI Collaborative Problem Solving Who Leads and How Students Perceive the Interactions	680
<i>Gaoxia Zhu (Nanyang Technological University, Singapore), Vidya Sudarshan (Nanyang Technological University, Singapore), Jason Fok Kow (Nanyang Technological University, Singapore), and Yew Soon Ong (Nanyang Technological University, Singapore)</i>	
HyMark: Application of Hybrid AI for Markdown Syntax Generation	687
<i>Khushnood Adil Rafique (University of Kaiserslautern-Landau (RPTU), Germany), Nabeel Khaliq (University of Kaiserslautern-Landau (RPTU), Germany), and Christoph Grimm (University of Kaiserslautern-Landau (RPTU), Germany)</i>	
Imitating Human Joystick Control Ability Using Style and Content Disentanglement	695
<i>Mingyuan Lei (RRIS, NTU, Singapore), Neha Priyadarshini Garg (RRIS, NTU, Singapore), Meenakshi Gupta (RRIS, NTU, Singapore), and Tat-Jen Cham (SCSE, NTU, Singapore)</i>	
Improving 3D Occupancy Prediction Through Class-Balancing Loss and Multi-Scale Representation	699
<i>Huizhou Chen (Institute for Infocomm Research (I²R), A*STAR, Singapore; National University of Singapore (NUS), Singapore; Desay SV Automotive Singapore Pte. Ltd., Singapore), Jiangyi Wang (Institute for Infocomm Research (I²R), A*STAR, Singapore; Singapore University of Technology and Design (SUTD), Singapore), Yuxin Li (Desay SV Automotive Singapore Pte. Ltd., Singapore; Nanyang Technological University (NTU), Singapore), Na Zhao (Singapore University of Technology and Design (SUTD), Singapore), Jun Cheng (Institute for Infocomm Research (I²R), A*STAR, Singapore), and Xulei Yang (Institute for Infocomm Research (I²R), A*STAR, Singapore)</i>	
Incremental Random Forest for Unsupervised Learning	704
<i>Li-Chiao Wang (National Tsing Hua University, Taiwan), Wei Liu (University of Technology Sydney, Australia), and Chung-Shou Liao (National Tsing Hua University, Taiwan)</i>	
Informed Machine Learning for Optimizing Melt Spinning Processes	706
<i>Viny Saajan Victor (Fraunhofer ITWM, Germany), Manuel Etmüller (Fraunhofer ITWM, Germany), Andre Schmeißer (Fraunhofer ITWM, Germany), Heike Leitte (Rhineland-Palatinate Technical University, Germany), and Simone Gramsch (Frankfurt University of Applied Sciences, Germany)</i>	
Integrating Local Learning to Improve Deep-Reinforcement-Learning-Based Pairs Trading Strategies	714
<i>Wei-Che Chang (National Yang Ming Chiao Tung University, Taiwan), Tian-Shyr Dai (National Yang Ming Chiao Tung University, Taiwan), Ying-Ping Chen (National Yang Ming Chiao Tung University, Taiwan), Chin-Yi Hsieh (National Yang Ming Chiao Tung University, Taiwan), Yu-Wei Chang (National Yang Ming Chiao Tung University, Taiwan), and Yu-Han Huang (National Yang Ming Chiao Tung University, Taiwan)</i>	

Integrating Time Series Forecasting, NLP, and Financial Analysis for Optimal Investment Strategy: A Case Study on Adani Ports	720
<i>Rahul Rao (PES University, India) and Jyothi R (PES University, India)</i>	
Interact360: Interactive Identity-Driven Text to 360° Panorama Generation	728
<i>Zeyu Cai (The Hong Kong University of Science and Technology (Guangzhou)), Zhelong Huang (University of Science and Technology of China), Xu Zheng (The Hong Kong University of Science and Technology (Guangzhou)), Yexin Liu (The Hong Kong University of Science and Technology (Guangzhou)), Chao Liu (The Hong Kong University of Science and Technology (Guangzhou)), Zeyu Wang (The Hong Kong University of Science and Technology (Guangzhou); Hong Kong University of Science and Technology), and Lin Wang (The Hong Kong University of Science and Technology (Guangzhou); Hong Kong University of Science and Technology)</i>	
Inverse Multiobjective Optimization by Generative Model Prompting	737
<i>Jiao Liu (Nanyang University of Technology, Singapore), Abhishek Gupta (Indian Institute of Technology, India), Yew Soon Ong (College of Computing & Data Science, Nanyang Technological University, Singapore), and Puay Siew Tan (Singapore Institute of Manufacturing Technology, A*STAR, Singapore)</i>	
Inverse Reinforcement Learning for Legibility Automation in Intelligent Agents	741
<i>Buxin Zeng (Northumbria University, UK), Yifeng Zeng (Northumbria University, UK), and Yinghui Pan (Shenzhen University, China)</i>	
Is Complexity Required for Neural Network Pruning? A Case Study on Global Magnitude Pruning	747
<i>Manas Gupta (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), Efe Camci (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), Vishandi Rudy Keneta (National University of Singapore (NUS), Singapore), Abhishek Vaidyanathan (Nanyang Technological University (NTU), Singapore), Ritwik Kanodia (Nanyang Technological University (NTU), Singapore), Ashish James (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), Chuan Sheng Foo (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore; Centre for Frontier AI Research (CFAR), Agency for Science, Technology and Research (A*STAR), Singapore), Min Wu (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore), and Jie Lin (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
It Takes Two to Trust: Mediating Human-AI Trust for Resilience and Reliability	755
<i>Juliette Zerick (Indiana University, United States), Zachary Kaufman (Indiana University, United States), Jonathan Ott (Indiana University, United States), Janki Kuber (Indiana University, United States), Ember Chow (University of Washington, United States), Shyama Shah (Indiana University, United States), and Gregory Lewis (Indiana University, United States)</i>	
JEN-1: Text-Guided Universal Music Generation with Omnidirectional Diffusion Models	762
<i>Peike Patrick Li (Futureverse AI Research), Boyu Chen (Futureverse AI Research), Yao Yao (Futureverse AI Research), Yikai Wang (Futureverse AI Research), Allen Wang (Futureverse AI Research), and Alex Wang (Futureverse AI Research)</i>	

Knowledge-Based Reactive Planning and Re-Planning – A Case-Study Approach	770
<i>Ramzi Djemai (London Metropolitan University, UK), Vassil Vassilev (London Metropolitan University, UK), Karim Ouazzane (London Metropolitan University, UK), and Maitreyee Dey (London Metropolitan University, UK)</i>	
Landscape Analysis Based vs. Domain-Specific Optimization for Engineering Design Applications: A Clear Case	776
<i>Roy de Winter (LIACS, Leiden University, The Netherlands), Fu Xing Long (BMW Group, Germany), Andre Thomaser (BMW Group, Germany), Thomas H.W. Bäck (LIACS, Leiden University, The Netherlands), Niki van Stein (LIACS, Leiden University, The Netherlands), and Anna V. Kononova (LIACS, Leiden University, The Netherlands)</i>	
Large Language Model (LLM) as a System of Multiple Expert Agents: An Approach to Solve the Abstraction and Reasoning Corpus (ARC) Challenge	782
<i>Chong Min John Tan (National University of Singapore, Singapore) and Mehul Motani (National University of Singapore, Singapore)</i>	
Large Language Model-Assisted Clustering and Concept Identification of Engineering Design Data	788
<i>Felix Lanfermann (Honda Research Institute Europe, Germany), Thiago Rios (Honda Research Institute Europe, Germany), and Stefan Menzel (Honda Research Institute Europe, Germany)</i>	
Large Language Model-Assisted Surrogate Modelling for Engineering Optimization	796
<i>Thiago Rios (Honda Research Institute Europe, Germany), Felix Lanfermann (Honda Research Institute Europe, Germany), and Stefan Menzel (Honda Research Institute Europe, Germany)</i>	
Large Language Models as Synthetic Electronic Health Record Data Generators	804
<i>Madhurima Vardhan (Argonne Leadership Computing Facility, Argonne National Laboratory, USA), Deepak Nathani (University of California, USA), Swarnima Vardhan (Yale New Haven Health System, USA), Abhinav Aggarwal (Yale New Haven Health System, USA), and Filippo Simini (Argonne Leadership Computing Facility, Argonne National Laboratory, USA)</i>	
Learning Task-Specific Initialization for Effective Federated Continual Fine-Tuning of Foundation Model Adapters	811
<i>Danni Peng (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Yuan Wang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Huazhu Fu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Qingsong Wei (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Yong Liu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), and Rick Siow Mong Goh (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
Learning to Predict Short-Term Volatility with Order Flow Image Representation	817
<i>Artem Lensky (University of New South Wales, Australia) and Mingyu Hao (Australian National University, Australia)</i>	

Less is More: Understanding Word-Level Textual Adversarial Attack via n-gram Frequency Descend	823
<i>Ning Lu (Department of Computer Science and Engineering, Southern University of Science and Technology; Hong Kong University of Science and Technology), Shengcai Liu (Centre for Frontier AI Research, Agency for Science, Technology and Research; Department of Computer Science and Engineering, Southern University of Science and Technology), Zhirui Zhang (Tencent AI Lab), Qi Wang (Department of Computer Science and Engineering, Southern University of Science and Technology), Haifeng Liu (OPPO Mobile Telecommunications Corp.), and Ke Tang (Department of Computer Science and Engineering, Southern University of Science and Technology)</i>	
License Plate Recognition in Low Quality Image by Using Latent Diffusion YOLOv7	831
<i>Yu-Hsi Chen (Institute of Information Science, Academia Sinica, Taiwan), Cheng-Jung Chuang (Institute of Information Science, Academia Sinica, Taiwan), Chien-Yao Wang (Institute of Information Science, Academia Sinica, Taiwan), Jen-Chun Lin (Institute of Information Science, Academia Sinica, Taiwan), and Hong-Yuan Mark Liao (Institute of Information Science, Academia Sinica, Taiwan)</i>	
Lightweight Relational Embedding in Task-Interpolated Few-Shot Networks for Enhanced Gastrointestinal Disease Classification	839
<i>Xinliu Zhong (National University of Singapore, Singapore), Leo Hwa Liang (National University of Singapore, Singapore), Angela S. Koh (National Heart Centre Singapore, Singapore), and Yeo Si Yong (Nanyang Technological University, Singapore)</i>	
Llama-TCR: Generate De Novo TCR with Large Language Model	845
<i>Jun Zhou (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), Zhenzhou Wu (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), Mengren Man (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), Yonghui Wu (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), Linh Le Dinh (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), Manna Dai (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), Yong Liu (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore), and Rick Goh (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore)</i>	
LLM-Assisted Crisis Management: Building Advanced LLM Platforms for Effective Emergency Response and Public Collaboration	851
<i>Hakan T. Otal (University at Albany SUNY, United States), Eric Stern (University at Albany SUNY, United States), and M. Abdullah Canbaz (University at Albany SUNY, United States)</i>	
Local and Global Guidance for Multi-Complementary Label Learning	860
<i>Cheng Chen (University of Technology, Australia; Centre for Frontier AI Research, A*STAR, Singapore; Institute of High Performance Computing, A*STAR3, Singapore) and Ivor W Tsang (Centre for Frontier AI Research, A*STAR, Singapore; Institute of High Performance Computing, A*STAR3, Singapore; Nanyang Technological University, Singapore)</i>	

Local Optima Networks for Reinforcement Learning - A Case Study: Coupled Inverted Pendulum Task	865
<i>Ferrante Neri (University of Surrey, UK), Alexander Turner (University of Nottingham, UK), and Yuyang Zhou (University of Nottingham Ningbo China, China)</i>	
Low Variance Off-Policy Evaluation with State-Based Importance Sampling	871
<i>David Mark Bossens (Agency for Science, Technology and Research, Singapore) and Philip S. Thomas (University of Massachusetts, United States)</i>	
LTE User Behavior Prediction Via LSTM	884
<i>Mehrdad Tanha (MTN Irancell, Iran) and Muhammad Adeel (MTN Irancell, Iran)</i>	
Machine and Deep Learning Based Clinical Decision Making for Coronary Artery Disease and Chatbot Tool	890
<i>Wei Jun Vincent Sim (National Heart Centre Singapore, Singapore), Glades Tan (National Heart Centre Singapore, Singapore), Xinliu Zhong (National University of Singapore, Singapore), Terrance Sj Chua (National Heart Centre Singapore, Singapore), Jie Jun Wong (National Heart Centre Singapore, Singapore), Si Yong Yeo (Lee Kong Chian School of Medicine, Singapore), and Angela S. Koh (National Heart Centre Singapore, Singapore)</i>	
Machine Learning-Based Radiomic Features for Glioblastoma Overall Survival Prediction	894
<i>Ankit Das (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), Kee Yen Cheng (Temasek Polytechnic, Singapore), Yong Liu (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), Rick Siow Mong Goh (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), and Feng Yang (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore)</i>	
Maritime-Context Text Identification for Connecting Artificial Intelligence (AI) Models	899
<i>Xiaocai Zhang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Hur Lim (School of Computing, Singapore Polytechnic, Republic of Singapore), Xiuju Fu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Ke Wang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), Zhe Xiao (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore), and Zheng Qin (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Republic of Singapore)</i>	
MeLoDicA AI- Machine Learning Based Detection of Asthma via Vocal Audio Analysis	905
<i>Zhi Qing Looi (Singapore Polytechnic, Singapore), Zi Heng Ng (Singapore Polytechnic, Singapore), Ren Xiang Yak (Singapore Polytechnic, Singapore), Oren Rosen (Technion – Israel Institute of Technology, Israel), and Arun Kumar (Singapore Polytechnic, Singapore)</i>	
Mining Contrastive Loss for Kinship Verification	911
<i>Boxuan Hu (Beihang University, China), Yunhao Xu (Beihang University, China), and Junlin Hu (Beihang University, China)</i>	

Mitigating Nonlinear Algorithmic Bias in Binary Classification	913
<i>Wendy Wan Yee Hui (Singapore Institute of Technology, Singapore) and Wai Kwong Lau (University of Western Australia, Australia)</i>	
Model Based Reinforcement Learning Pre-Trained with Various State Data	918
<i>Masaaki Ono (SOKENDAI, National Institute of Informatics, Japan) and Ryutaro Ichise (Tokyo Institute of Technology, National Institute of Informatics, Japan)</i>	
Modeling Variational Anchoring Effect for Recommender Systems	926
<i>Yudi Xiao (Dalian University of Technology, China), Yingyi Zhang (Dalian University of Technology, China), and Xianneng Li (Dalian University of Technology, China)</i>	
Multi-Objective Optimization for Flexible Building Space Usage	932
<i>Huanbo Lyu (University of Birmingham, UK), Daniel Herring (University of Birmingham, UK), Lingfeng Wang (University of Birmingham, UK), Jelena Ninic (University of Birmingham, UK), James Andrews (University of Birmingham, UK), Miqing Li (University of Birmingham, UK), Michal Kocvara (University of Birmingham, UK), Fabian Spill (University of Birmingham, UK), and Shuo Wang (University of Birmingham, UK)</i>	
Multi-Order Loss Functions for Accelerating Unsteady Flow Simulations with Physics-Based AI	940
<i>Wei Xian Lim (Nanyang Technological University, Singapore), Naheed Anjum Arafa (Nanyang Technological University, Singapore), Wai Lee Chan (Nanyang Technological University, Singapore), and Wai-Kin Adams Kong (Nanyang Technological University, Singapore)</i>	
Multimodal Fusion for Effective Recommendations on a User-Anonymous Price Comparison Platform	947
<i>Merve Gül Kantarci (iLab, Turkey) and Mehmet Gönen (Koç University, Turkey)</i>	
Multimodal Fusion of EEG and Eye Data for Attention Classification Using Machine Learning	953
<i>Debanga Raj Neog (Indian Institute of Technology Guwahati, India) and Indrani Paul Roy (North-Eastern Hill University, India)</i>	
MYCloth: Towards Intelligent and Interactive Online T-Shirt Customization Based on User's Preference	955
<i>Yexin Liu (AI Thrust, HKUST(GZ)) and Lin Wang (AII/CMA Thrust, HKUST(GZ), HKUST)</i>	
MyHistory: Automatic Photo Album Creation	963
<i>Yifei Oo (Nanyang Technological University, Singapore), Owen Noel Newton Fernando (Nanyang Technological University, Singapore), and Deepu Rajan (Nanyang Technological University, Singapore)</i>	
MyriadAL: Active Few Shot Learning for Histopathology	969
<i>Nico Schiavone (University of Alberta, Canada), Jingyi Wang (University of Alberta, Canada), Shuangzhi Li (University of Alberta, Canada), Roger Zemp (University of Alberta, Canada), and Xingyu Li (University of Alberta, Canada)</i>	
Natural Language Processing to Estimate RECIST Response in Cancer Patients	977
<i>Sara Contu (Epidemiology & Biostatistics Department, Centre Antoine Lacassagne, Nice, France), Renaud Schiappa (Epidemiology & Biostatistics Department, Centre Antoine Lacassagne, Nice, France), and Emmanuel Chamorey (Epidemiology & Biostatistics Department, Centre Antoine Lacassagne, Nice, France)</i>	

Navigating the EU AI Act - A Methodological Approach to Compliance for Safety-Critical Products	979
<i>Jessica Kelly (Fraunhofer IKS, Germany), Shanza Ali Zafar (Fraunhofer IKS, Germany), Lena Heidemann (Fraunhofer IKS, Germany), João-Vitor Zacchi (Fraunhofer IKS, Germany), Delfina Espinoza (Fraunhofer IKS, Germany), and N�ria Mata (Fraunhofer IKS, Germany)</i>	
Navigating the Waters of Object Detection: Evaluating the Robustness of Real-time Object Detection Models for Autonomous Surface Vehicles	985
<i>Yunjia Wang (KU Leuven, Belgium), Kaizheng Wang (KU Leuven, Belgium), Zihao Zhang (Columbia University, USA), Jeroen Boydens (KU Leuven, Belgium), Davy Pissoot (KU Leuven, Belgium), and Mathias Verbeke (KU Leuven, Belgium)</i>	
Neuroevolving Monotonic PINNs for Particle Breakage Analysis	993
<i>Abhishek Gupta (Indian Institute of Technology Goa, India) and Barada Kanta Mishra (Indian Institute of Technology Goa, India)</i>	
NL2IBE – Ontology-Controlled Transformation of Natural Language into Formalized Engineering Artefacts	997
<i>Nicolai Schoch (Corporate Research (DECRC), ABB AG, Germany) and Mario Hoernicke (Corporate Research (DECRC), ABB AG, Germany)</i>	
On Efficient Object-Detection NAS for ADAS on Edge Devices	1005
<i>Diksha Gupta (IBM Research, Singapore), Rhui Dih Lee (IBM Research, Singapore), and Laura Wynter (IBM Research, Singapore)</i>	
On the Generation and Assessment of Synthetic Waste Images	1011
<i>Nick Tsagarakis (Foundation for Research and Technology, Greece) and Michail Maniadakis (Foundation for Research and Technology, Greece)</i>	
On the Impact of Data Heterogeneity in Federated Learning Environments with Application to Healthcare Networks	1017
<i>Usevalad Milasheuski (Politecnico di Milano, Italy; Consiglio Nazionale delle Ricerche, Italy), Luca Barbieri (Politecnico di Milano, Italy), Bernardo Camajori Tedeschini (Politecnico di Milano, Italy), Monica Nicoli (Politecnico di Milano, Italy), and Stefano Savazzi (Consiglio Nazionale delle Ricerche, Italy)</i>	
On the Influence of Metric Learning Loss Functions for Robust Self-Supervised Speaker Verification to Label Noise	1024
<i>Abderrahim Fathan (Computer Research Institute of Montreal (CRIM), Canada), Xiaolin Zhu (Computer Research Institute of Montreal (CRIM), Canada), and Jahangir Alam (Computer Research Institute of Montreal (CRIM), Canada)</i>	
On the Road to Clarity: Exploring Explainable AI for World Models in a Driver Assistance System	1032
<i>Mohamed Roshdi (University of L�beck, Germany), Julian Petzold (University of L�beck, Germany), Mostafa Wahby (University of L�beck, Germany), Hussein Ebrahim (University of L�beck, Germany), Mladen Berekovic (University of L�beck, Germany), and Heiko Hamann (University of Konstanz, Germany)</i>	
Open-World Learning Under Dataset Shift	1040
<i>Ponhvoan Srey (Nanyang Technological University), Yuhui Zhang (Tokyo Institute of Technology), and Takafumi Kanamori (Tokyo Institute of Technology/RIKEN)</i>	

Optimized Vision Transformer Training Using GPU and Multi-Threading	1043
<i>Jonathan Ledet (University of Louisiana at Lafayette, USA), Ashok Kumar (University of Louisiana at Lafayette, USA), Dominick Rizk (Catholic University of America, USA), Rodrigue Rizk (University of South Dakota, USA), and Kc Santosh (University of South Dakota, USA)</i>	
Optimizing Demand Forecasting: A Framework With Bayesian Optimization Embedded Reinforcement Learning for Combined Algorithm Selection and Hyperparameter Optimization	1045
<i>Zizhe Wang (Agency for Science, Technology and Research, Singapore), Xiaofeng Yin (Agency for Science, Technology and Research, Singapore), Yun Hui Lin (Agency for Science, Technology and Research, Singapore), Ping Chong Chua (Agency for Science, Technology and Research, Singapore), Ning Li (Agency for Science, Technology and Research, Singapore), and Xiuju Fu (Agency for Science, Technology and Research, Singapore)</i>	
Optimizing Indoor Farming: Deep Learning for Predicting Plant Growth Under LED Light Treatments	1051
<i>Tanvi Verma (Agency for Science, Technology and Research, Singapore), Norman Teo Zhi Wei (National University of Singapore, Singapore), Fei Gao (Agency for Science, Technology and Research, Singapore), Hao Yu (National University of Singapore, Singapore), and Ricardo Shirota Filho (Agency for Science, Technology and Research, Singapore)</i>	
Optimizing Supply Chain Risk Management: An Integrated Framework Leveraging Large Language Models	1057
<i>Ming Zhao (UNSW Canberra, Australia), Omar Hussain (UNSW Canberra, Australia), Yu Zhang (UNSW Canberra, Australia), and Morteza Saberi (University of Technology Sydney, Australia)</i>	
PANO-ECHO: PANOramic Depth Prediction Enhancement with ECHO Features	1063
<i>Xiaohu Liu (Shanghai Jiao Tong University, China), Amandine Brunetto (MINES Paris, PSL University, France), Sascha Hornauer (MINES Paris, PSL University, France), Fabien Moutarde (MINES Paris, PSL University, France), and Jialiang Lu (Shanghai Jiao Tong University, China)</i>	
Path-Based Link Prediction on Hyper-Relational Knowledge Graph	1071
<i>Shuzhi Liu (Tsinghua University, China), Shimin Di (Hong Kong University of Science and Technology, China), Jianwen Peng (Tsinghua University, China), and Quanming Yao (Tsinghua University, China)</i>	
PepPFN: Protein-Peptide Binding Residues Prediction via Pre-Trained Module-Based Fourier Network	1075
<i>Xue Li (China University of Petroleum (East China), China; Centre for Computational Biology, Duke-NUS Medical School, Singapore), Ben Cao (Dalian University of Technology, China), Hongzhen Ding (China University of Petroleum (East China), China), Na Kang (Chinese PLA General Hospital, China), and Tao Song (China University of Petroleum (East China), China)</i>	
Performance Analysis of Llama 2 Among Other LLMs	1081
<i>Zhenda Hu (Shanghai University of Finance and Economics, China), Donghao Huang (Singapore Management University, Singapore; Research and Development, Singapore), and Zhaoxia Wang (Singapore Management University, Singapore)</i>	

Phased Continuous Exploration Method for Cooperative Multi-Agent Reinforcement Learning	1086
<i>Jie Kang (Dalian University of Technology, China), Yaqing Hou (Dalian University of Technology, China), Yifeng Zeng (Northumbria University, UK), Yongchao Chen (The Institute of Effectiveness Evaluation of Flying Vehicle, China), Xiangrong Tong (Yantai University, China), Xin Xu (Wuhan University of Science and Technology, China), and Qiang Zhang (Dalian University of Technology, China)</i>	
PLNet: Light Recipe Design for Indoor Farming Through Generative Deep Learning	1092
<i>Tanvi Verma (Agency for Science, Technology and Research, Singapore) and Ricardo Shirota Filho (Agency for Science, Technology and Research, Singapore)</i>	
Predicting Mild Cognitive Impairment Through Ambient Sensing and Artificial Intelligence .	1098
<i>Ah-Hwee Tan (Singapore Management University, Singapore), Weng-Yan Ying (Singapore Management University, Singapore), Budhitama Subagdja (Singapore Management University, Singapore), Anni Huang (Singapore Management University, Singapore), Shanthoshigaa D (Singapore Management University, Singapore), Tony Chin-Ian Tay (Sengkang General Hospital and Singhealth Duke NUS Academic Medical Centre, Singapore), and Iris Rawtaer (Sengkang General Hospital and Singhealth Duke NUS Academic Medical Centre, Singapore)</i>	
Prediction of Students' Academic Progression Using Machine Learning	1105
<i>Lien Nguyen (Sydney Institute of Higher Education, Australia), Anh Nguyen (Hanoi University of Science and Technology, Vietnam), Jack Jia (Sydney Institute of Higher Education, Australia), Steve Ling (University of Technology Sydney, Australia), and Nigel Finch (Sydney Institute of Higher Education, Australia)</i>	
Prediction of Successful Memory Formation During Audiovisual Advertising Using EEG Signals...	1111
<i>Vangelis P. Oikonomou (Centre for Research and Technology Hellas, CERTH-ITI, Greece), Kostas Georgiadis (Centre for Research and Technology Hellas, CERTH-ITI, Greece), Fotis P. Kalaganis (Centre for Research and Technology Hellas, CERTH-ITI, Greece), Spiros Nikolopoulos (Centre for Research and Technology Hellas, CERTH-ITI, Greece), and Ioannis Kompatsiaris (Centre for Research and Technology Hellas, CERTH-ITI, Greece)</i>	
Prediction of Transmission Rates of Dengue in National Capital Territory Delhi Using Machine Learning Models	1117
<i>Sanjay Kumar Ghosh (Indian Institute of Technology Roorkee, India), Siddhartha Khare (Indian Institute of Technology Roorkee, India), and Vipasha Sharma (Indian Institute of Technology Roorkee, India)</i>	
Prediction of Treatment Outcome to Transcranial Direct Current Stimulation in Major Depression Based on Deep Learning of EEG Data	1123
<i>Jijomon Chettuthara Moncy (University of East London, United Kingdom), Yong Fan (University of Pennsylvania, United States of America), and Cynthia H.Y. Fu (University of East London, United Kingdom & Centre for Affective Disorders, King's College London)</i>	
Privacy Preserving Layer Partitioning for Deep Neural Network Models	1129
<i>Kishore Rajasekar (ST Engineering, Singapore), Randolph Loh (ST Engineering, Singapore), Kar Wai Fok (ST Engineering, Singapore), and Vrizlynn L. L. Thing (ST Engineering, Singapore)</i>	

Privacy-Preserving Federated Learning for Industrial Defect Detection Systems via Differential Privacy and Image Obfuscation	1136
<i>Chia-Yu Lin (National Central University, Taiwan), Yu-Chen Yeh (National Central University, Taiwan), and Makena Lu (Yuan Ze University, Taiwan)</i>	
Privacy-Preserving Heterogeneous Federated Learning for Sensitive Healthcare Data	1142
<i>Yukai Xu (Kyushu University), Jingfeng Zhang (University of Auckland), and Yujie Gu (Kyushu University)</i>	
Privacy-Preserving Intrusion Detection Using Convolutional Neural Networks	1148
<i>Martin Kodyš (ST Engineering, Singapore), Zhongmin Dai (ST Engineering, Singapore), and Vrizlynn L. L. Thing (ST Engineering, Singapore)</i>	
Providing Real-World Benchmarks for Super-Resolving Fluorescence Microscope Imagery Using Generative Adversarial Networks	1154
<i>J. Cooper (San José State University, USA), T. B. Issa (San José State University, USA), C. Vinegoni (Harvard University, USA), and R. Weissleder (Harvard University, USA)</i>	
Query-Selected Global Attention for Text Guided Image Style Transfer Using Diffusion Model.....	1162
<i>Jungmin Hwang (University of Ottawa, Canada) and Wonsook Lee (University of Ottawa, Canada)</i>	
Rapid Classification of Aerosol Particle Mass Spectra Using Data Augmentation and Deep Learning	1167
<i>Guanzhong Wang (University of the Bundeswehr Munich, Germany), Heinrich Ruser (University of the Bundeswehr Munich, Germany), Julian Schade (University of the Bundeswehr Munich, Germany), Johannes Passig (University of Rostock, Germany), Ralf Zimmermann (University of Rostock, Germany), Günther Dollinger (University of the Bundeswehr Munich, Germany), and Thomas Adam (University of the Bundeswehr Munich, Germany)</i>	
Real-time Scheduling Optimization with Deep Learning-Powered Demand Forecasting in Water Transportation	1173
<i>Wang Yukuan (Wuhan University of Technology, China), Liu Jingxian (Wuhan University of Technology, China), Zhang Jiayi (Wuhan University of Technology, China), Yu Hongchu (Wuhan University of Technology, China), and Di Zhongjie (Wuhan University of Technology, China)</i>	
Real-World License Plate Image Super-Resolution via Domain-Specific Degradation Modeling	1175
<i>Xin Luo (East China Normal University, China), Yihao Huang (Nanyang Technological University, Singapore), and Weika Miao (East China Normal University, China)</i>	
Reconceptualizing AI Literacy: The Importance of Metacognitive Thinking in an Artificial Intelligence (AI)-Enabled Workforce	1181
<i>Sidra Sidra (CSIRO, Australia) and Claire Mason (CSIRO, Australia)</i>	

ReCycle: Fast and Efficient Long Time Series Forecasting with Residual Cyclic Transformers..	1187
<i>Aroid Weyrauch (Karlsruhe Institute of Technology (KIT), Germany), Thomas Steens (German Aerospace Center (DLR), Germany), Oskar Taubert (Karlsruhe Institute of Technology (KIT), Germany), Benedikt Hanke (German Aerospace Center (DLR), Germany), Aslan Eqbal (INENSUS GmbH, Germany), Ewa Götz (Siemens AG, Germany), Achim Streit (Karlsruhe Institute of Technology (KIT), Germany), Markus Götz (Karlsruhe Institute of Technology (KIT), Germany), and Charlotte Debus (Karlsruhe Institute of Technology (KIT), Germany)</i>	
Reinforcement Learning for Strategic Airport Slot Scheduling: Analysis of State Observations and Reward Designs	1195
<i>Anh Nguyen-Duy (Nanyang Technological University, Singapore), Duc-Thinh Pham (Nanyang Technological University, Singapore), Jian-Yi Lye (Singapore Management University, Singapore), and Duong Ta (Singapore Management University, Singapore)</i>	
Representation Learning and Knowledge Distillation for Lightweight Domain Adaptation	1202
<i>Sayed Rafay Bin Shah (South Westphalia University of Applied Sciences, Germany), Shreyas Subhash Putty (South Westphalia University of Applied Sciences, Germany), and Andreas Schwung (South Westphalia University of Applied Sciences, Germany)</i>	
Resolving Ethics Trade-offs in Implementing Responsible AI	1208
<i>Conrad Sanderson (CSIRO, Australia; Griffith University, Australia), Emma Schleiger (CSIRO, Australia), David Douglas (CSIRO, Australia), Petra Kuhnert (CSIRO, Australia), and Qinghua Lu (CSIRO, Australia)</i>	
Restoration of Material Pore Structure Image Using Transformer Architecture	1214
<i>Jianwei Pan (Wuhan University of Science and Technology, PR China), Yi Yin (Wuhan University of Science and Technology, PR China), Yuanbing Li (Wuhan University of Science and Technology, PR China), Shujing Li (Wuhan University of Science and Technology, PR China), Wei Wang (Wuhan University of Science and Technology, PR China), Zhen Cai (Wuhan University of Science and Technology, PR China), and Xin Xu (Wuhan University of Science and Technology, PR China)</i>	
Retrieval Augmented MedLM	1220
<i>Sharmila Devi (Google Cloud Consulting (GCC), Google), Gopala Dhar (Google Cloud Consulting (GCC), Google), Chaitanya Bharadwaj (Head of Clinical AI, Apollo247), and Abdussamad M (Technical Lead, Apollo247)</i>	
Robust FOD Detection Using Frame Sequence-Based DETection TRansformer (DETR)	1222
<i>Xi Qin (Ohio University, USA), Siriu Song (Ohio University, USA), Jackson Brengman (Ohio University, USA), Chris Bartone (Ohio University, USA), and Jundong Liu (Ohio University, USA)</i>	
Robust Lagrangian and Adversarial Policy Gradient for Robust Constrained Markov Decision Processes	1227
<i>David Mark Bossens (Agency for Science, Technology and Research, Singapore)</i>	
Roles of Standardised Criteria in Assessing Societal Impact of AI	1240
<i>Vanja Skoric (University of Amsterdam, Netherlands), Ghebreab Sennay (University of Amsterdam, Netherlands), and Sileno Giovanni (University of Amsterdam, Netherlands)</i>	
Route Planning Through Genetic Algorithm for Multi-Axis Motion Control	1246
<i>Ting-Ching Lee (National Tsing Hua University, Taiwan), Jia-He Tee (National Tsing Hua University, Taiwan), and Chuan-Kang Ting (National Tsing Hua University, Taiwan)</i>	

Safe Multi-Agent Reinforcement Learning via Dynamic Shielding	1254
<i>Yunbo Qiu (Tsinghua University, China), Yue Jin (University of Warwick, China), Lebin Yu (Tsinghua University, China), Jian Wang (Tsinghua University, China), and Xudong Zhang (Tsinghua University, China)</i>	
Scaffolding Language Learning via Multi-Modal Tutoring Systems with Pedagogical Instructions	1258
<i>Zhengyuan Liu (Institute for Infocomm Research (I²R), A*STAR, Singapore), Stella Xin Yin (Nanyang Technological University, Singapore), Carolyn Lee (Stanford University), and Nancy F. Chen (Institute for Infocomm Research (I²R), A*STAR, Singapore)</i>	
Scanning Electron Microscope Image Segmentation with Foundation AI Vision Model for Nanoparticles in Autonomous Materials Explorations	1266
<i>Timothy Gaines (University of Missouri, USA), Camden Boyle (University of Missouri, USA), James Keller (University of Missouri, USA), Matthew Maschmann (University of Missouri, USA), Stanton Price (Engineer Research and Development Center, USA), and Grant Scott (University of Missouri, USA)</i>	
SegMAE-Net: A Hybrid Method Using Masked Autoencoders for Consistent 3D Medical Image Segmentation	1272
<i>Zheng Kai Liaw (National University of Singapore, Singapore), Ankit Das (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), Shaista Hussain (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), Feng Yang (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), Yong Liu (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore), and Rick Siow Mong Goh (Institute of High Performance Computing, Agency for Science, Technology and Research, Republic of Singapore)</i>	
Self-Supervised Modular Architecture for Multi-Sensor Anomaly Detection and Localization	1278
<i>Mohammed Ayalew Belay (Norwegian University of Science and Technology, Norway), Adil Rasheed (Norwegian University of Science and Technology, Norway), and Pierluigi Salvo Rossi (SINTEF Energy Research, Norway)</i>	
Semantic Textual Similarity Analysis of Clinical Text in the Era of LLM	1284
<i>Yeli Feng (Amplify Health Asia, Singapore)</i>	
Sensor-Drift-Aware Time-Series Anomaly Detection for Climate Stations	1290
<i>Bryce Chen (National Institute of Water and Atmospheric Research, Wellington), Victoria Huang (National Institute of Water and Atmospheric Research, Wellington), and Chen Wang (National Institute of Water and Atmospheric Research, Wellington)</i>	
Sequential Transfer via Clustering-Based Similarity Measurement for Faster Trajectory Optimization	1296
<i>Wu Lin (The Hong Kong Polytechnic University, China), Qiuzhen Lin (Shenzhen University, Shenzhen, China), Xiaoming Xue (City University of Hong Kong, China), and Kay Chen Tan (The Hong Kong Polytechnic University, China)</i>	
Ship Trajectory Prediction Using AIS Data with TransFormer-Based AI	1302
<i>Koya Takahashi (Kanagawa Institute of Technology, Japan), Kaito Zama (Kanagawa Institute of Technology, Japan), and Noriko F. Hiroi (Kanagawa Institute of Technology, Japan; Keio University School of Medicine, Japan)</i>	

SHSML: A Stochastic Approach to Hierarchically Structured Meta-Learning for Improved Inference and Confidence	1306
<i>Zhuoran Li (Chongqing University, China), Xuefeng Chen (Chongqing University, China), Liang Feng (Chongqing University, China), Zhou Wu (Chongqing University, China), and Xin Xu (Wuhan University of Science and Technology, China)</i>	
Soft Constraint in Local Structure Approximation-PINN	1312
<i>Jian Cheng Wong (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore; Nanyang Technological University (NTU), Singapore), Pao-Hsiung Chiu (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore), Chinchun Ooi (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore; Center for Frontier AI Research, Agency for Science, Technology and Research (A*STAR), Singapore), and My Ha Dao (Institute of High Performance Computing, Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
SPADENet: Skill-Based Player Action Decision and Evaluation for Card Games Using Deep Neural Networks (Online Rummy as Case Study)	1316
<i>Divyansh Jain (Data Science Group, Gameskraft, India) and Anurag Garg (Data Science Group, Gameskraft, India)</i>	
SPD Hashing Network for Fast Image Set Classification and Retrieval	1324
<i>Xiaxin Wang (Nanjing University of Science and Technology, China), Lixuan Zong (The Hong Kong Polytechnic University, Hong Kong SAR), and Xiaobo Shen (National Natural Science Foundation of China, Natural Science Foundation of Jiangsu, China)</i>	
Split Learning of Multi-Modal Medical Image Classification	1326
<i>Bishwamitra Ghosh (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore; Max Planck Institute for Software Systems, Germany), Yuan Wang (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Huazhu Fu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Qingsong Wei (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Yong Liu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), and Rick Siow Mong Goh (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
SSR : SAM is a Strong Regularizer for Domain Adaptive Semantic Segmentation	1332
<i>Yanqi Ge (Shenzhen Institute of Advanced Study, University of Electronic Science and Technology of China), Ye Huang (Shenzhen Institute of Advanced Study, University of Electronic Science and Technology of China), Wen Li (Shenzhen Institute of Advanced Study, University of Electronic Science and Technology of China), and Lixin Duan (Shenzhen Institute of Advanced Study, University of Electronic Science and Technology of China)</i>	
SSSwIn: Sequential Spectral Swin Transformer for Solar Panel Mapping in Satellite Imagery ..	1334
<i>Zhiyuan Yang (Northeastern University, Canada) and Ryan Rad (Northeastern University, Canada)</i>	

Stable Probabilistic Graphical Models for Systemic Risk Estimation	1340
<i>Taurai Muvunza (Tsinghua University), Yang Li (Tsinghua University), and Ercan Engin Kuruoglu (Tsinghua University)</i>	
Stage-Aware Brain Graph Learning for Alzheimer's Disease	1346
<i>Ciyuan Peng (Federation University Australia, Australia), Mujie Liu (Federation University Australia), Chenxuan Meng (Zhejiang Gongshang University, China), Sha Xue (Southern Medical University, China), Kathleen Keogh (Federation University Australia), and Feng Xia (RMIT University, Australia)</i>	
Stay Tuned! Analysing Hyperparameters of a Wide-Kernel Architecture for Industrial Faults	1350
<i>Dan Hudson (Osnabrück University, Germany), Jurgen van den Hoogen (Osnabrück University, Germany), Stefan Bloemheuvel (Jheronimus Academy of Data Science (JADS), Netherlands), and Martin Atzmueller (Osnabrück University, Germany)</i>	
Study on Stochastic Gradient Descent Without Explicit Error Backpropagation with Momentum ...	1357
<i>Shahrzad Mahboubi (Shonan Institute of Technology, Japan) and Hiroshi Ninomiya (Shonan Institute of Technology, Japan)</i>	
Supervised Virtual-to-Real Domain Adaptation for Object Detection Task Using YOLO	1359
<i>Akbar Satya Nugraha (Brawijaya University, Indonesia), Novanto Yudistira (Brawijaya University, Indonesia), and Bayu Rahayudi (Brawijaya University, Indonesia)</i>	
Surpassing Human Counterparts: A Breakthrough Achievement of Large Language Models in Professional Tax Qualification Examinations in China	1365
<i>Lifeng Xu (360 AIResearch, China), Chuanrui Hu (360 AIResearch, China), Hua Zhang (360 AIResearch, China), Jiahui Zhai (360 AIResearch, China), Wei Tang (ZSTAX, China), Yuchen Li (ZSTAX, China), Zhao Peng (ZSYAX, China), Qiuwu Chen (AIGCode, China), Shiyu Sun (ZSTAX, China), Ao Ji (360 AIResearch, China), Yin Sun (AIGCode, China), Zimou Liu (AIGCode, China), Su Wen (AIGCode, China), and Liao Bin (AIGCode, China)</i>	
Sustainable Machine Learning: Evaluating the Environmental Cost of AutoML Algorithms in AI Development	1371
<i>Marc Schmitt (University of Oxford, UK)</i>	
Symbolic Regression for Discovery of Medical Equations: A Case Study on Glomerular Filtration Rate Estimation Equations	1373
<i>Kei Sen Fong (Department of Electrical and Computer Engineering) and Mehul Motani (Institute of Data Science; N.1 Institute for Health; Institute for Digital Medicine (WisDM), National University of Singapore)</i>	
Talking Face Generation via Face Mesh - Controllability Without Reference Videos	1380
<i>Ali Koksai (Agency for Science, Technology and Research (A*STAR), Singapore), Qianli Xu (Agency for Science, Technology and Research (A*STAR), Singapore), and Joo Hwee Lim (Agency for Science, Technology and Research (A*STAR), Singapore)</i>	

TelLungNet - Enabling Telemedicine Utilizing an Improved U-Net Lung Image Segmentation	1387
<i>Rifat Al Mamun Rudro (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Api Alam (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Shafin Talukder (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Tanvir Ahmed (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), Nayma Islam (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh), and Kamruddin Nur (Department of Computer Science, American International University-Bangladesh (AIUB), Bangladesh)</i>	
Textile Surface Defects Analysis with Explainable AI	1394
<i>Ren Jun Soon (National University of Singapore, Singapore) and Chee Kong Chui (National University of Singapore, Singapore)</i>	
The Detection of Vibration Dampers Based on Optimized RetinaNet	1399
<i>Mingsheng Ma (Beijing University of Civil Engineering and Architecture, China), De Zhang (Beijing University of Civil Engineering and Architecture, China), and Feng Liu (Nanjing University of Posts and Telecommunications, China)</i>	
The Impact of Perceived Robotic Intelligence on Trust and Attitude	1404
<i>Amy Wong (Singapore University of Social Sciences, Singapore) and Jimmy Wong (Singapore University of Social Sciences, Singapore)</i>	
The Impact of the Artificial Intelligence (AI) Art Generator in Pre-Service Art Teacher Training	1406
<i>Yan Zhou (Zhejiang Normal University, China)</i>	
The Proposal of an AI Policy Maturity Model	1408
<i>Helena Costa (Center for Innovation, Technology and Policy Research (IN+), Portugal) and Joana Mendonça (Center for Innovation, Technology and Policy Research (IN+), Instituto Superior Técnico, Universidade de Lisboa, Portugal)</i>	
Towards a More Robust and Accurate OCR Model with Adversarial Techniques in HMI Testing Scenarios	1414
<i>Yupeng Cheng (Nanyang Technological University, Singapore), Zi Pong Lim (Continental Corporation, Singapore), Sarthak Ketanbhai Modi (Nanyang Technological University, Singapore), Yon Shin Teo (Continental Corporation, Singapore), Yushi Cao (Nanyang Technological University, Singapore), and Shang-Wei Lin (Nanyang Technological University, Singapore)</i>	
Towards Adversarially Robust Data-Efficient Learning with Generated Data	1422
<i>Junhao Dong (Nanyang Technological University, Singapore), Melvin Wong (Nanyang Technological University, Singapore), Sihan Xia (Nanyang Technological University, Singapore), and Joel Wei En Tay (Singapore Institute of Manufacturing Technology (SIMTech), A*STAR, Singapore)</i>	
Towards Efficient Rail Transportation: Bayesian Network Modeling for Predicting Passenger Train Delays Using Secondary Train Information	1425
<i>Maarten Vangeneugden (University of Antwerp - Imec, Belgium), Ngoc Quang Luong (University of Antwerp - Imec, Belgium), and Siegfried Mercelis (University of Antwerp - Imec, Belgium)</i>	

Towards End-to-End Prompt-Vision-Physics Neural Network for Fast Design Discovery	1432
<i>Qingshan Xu (Nanyang Technological University, Singapore), Jiao Liu (Nanyang Technological University, Singapore), Melvin Wong (Nanyang Technological University, Singapore), Ge Jin (Beijing Institute of Technology, China), Ryan Lau (Nanyang Technological University, Singapore), Yew-Soon Ong (Nanyang Technological University, Singapore; Centre for Frontier AI Research, Agency for Science, Technology and Research, Singapore), Stefan Menzel (Honda Research Institute Europe, Germany), Thiago Rios (Honda Research Institute Europe, Germany), Joo-Hwee Lim (Institute for Infocomm Research (I2R), Agency for Science, Technology and Research, Singapore), and Chin Chun Ooi (Centre for Frontier AI Research, Agency for Science, Technology and Research, Singapore)</i>	
Towards FAIR Workflows for Federated Experimental Sciences	1436
<i>Gayathri Saranathan (Hewlett Packed Enterprise, Singapore), Foltin Martin (Hewlett Packard Enterprise, USA), Aalap Tripathy (Hewlett Packard Enterprise, USA), Anmmary Justine (Hewlett Packard Enterprise, USA), Maxim Ziatdinov (Pacific Northwest National Lab, USA), Ayana Ghosh (Oak Ridge National Laboratory, USA), Kevin Roccapriore (Oak Ridge National Laboratory, USA), Suparna Bhattacharya (Hewlett Packard Enterprise, India), and Paolo Faraboschi (Hewlett Packard Enterprise, USA)</i>	
Towards Fault-Tolerant Quadruped Locomotion with Reinforcement Learning	1438
<i>Dikai Liu (NVIDIA AI Technology Centre (NVAITC)), Jianxiong Yin (NVIDIA AI Technology Centre (NVAITC)), and Simon See (NVIDIA AI Technology Centre (NVAITC); Coventry University and Mahindra University)</i>	
Towards Lightweight Underwater Depth Estimation	1442
<i>Keyu Zhou (Southern University of Science and Technology, China), Jin Chen (Southern University of Science and Technology, China), Shuangchun Gui (Southern University of Science and Technology, China), and Zhenkun Wang (Southern University of Science and Technology, China)</i>	
Towards Next-Generation Federated Learning: A Case Study on Privacy Attacks in Artificial Intelligence Systems	1446
<i>Ekta Sharma (University of Southern Queensland, Australia), Ravinesh C. Deo (University of Southern Queensland, Australia), Christopher P. Davey (University of Southern Queensland, Australia), Brad D. Carter (University of Southern Queensland, Australia), and Sancho Salcedo-Sanz (Universidad de Alcalá, Spain)</i>	
Transformer-Based Reinforcement Learning Model for Optimized Quantitative Trading	1454
<i>Aniket Kumar (University of South Dakota, USA), Rodrigue Rizk (University of South Dakota, USA), and Kc Santosh (University of South Dakota, USA)</i>	
Transforming GPP Estimation in Terrestrial Ecosystems Using Remote Sensing and Transformers	1456
<i>Yanting Zheng (Northeastern University, Canada) and Ryan Rad (Northeastern University, Canada)</i>	

TTCR: Accurate TCR-Epitope Binding Affinity Prediction Using Transformers 1462

Manna Dai (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Yonghui Wu (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Jun Zhou (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Zhenzhou Wu (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Mengren Man (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Linh Le Dinh (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Joyjit Chatteraj (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Feng Yang (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Dao My Ha (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), Yong Liu (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore), and Rick Siow Mong Goh (Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore)

Unsupervised Latent Regression Through Information Maximization - Contrastive Regularized GAN 1468

*Vicky Sintunata (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), Siying Liu (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), Dinh Nguyen Van (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), Zhao Yong Lim (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), Ryan Lee Zhikuan (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), Yue Wang (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), Jack Ho Jun Feng (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore), and Karianto Leman (Agency for Science, Technology and Research (A*STAR), Institute of Infocomm Research (I²R), Singapore)*

Unveiling the Dynamics of Learning Behaviors in Learning K-12 Math: An Exploration of an ASSISTments Dataset 1474

*Jun Song Huang (National Institute of Education, Nanyang Technological University, Singapore), Arya Radhakrishnan (Independent Researcher, Singapore), Timothy Lee (National Institute of Education, Nanyang Technological University, Singapore), Min Lee (National Institute of Education, Nanyang Technological University, Singapore), Janice Lum (National Institute of Education, Nanyang Technological University, Singapore), Guimei Liu (Institute for Infocomm Research, A*STAR, Singapore), and Jung Jae Kim (Institute for Infocomm Research, A*STAR, Singapore)*

Unveiling the Potential of ChatGPT in Detecting Machine Unauditable Bugs in Smart Contracts: A Preliminary Evaluation and Categorization	1481
<i>Bo Gao (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Qingsong Wei (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), Yong Liu (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore), and Rick Siow Mong Goh (Institute of High Performance Computing (IHPC), Agency for Science, Technology and Research (A*STAR), Singapore)</i>	
Uplift Modeling Based on Graph Neural Network Combined with Causal Knowledge	1487
<i>Haowen Wang (Zhejiang Lab, China), Xinyan Ye (Imperial College London, UK), Yikang Wang (University College London, UK), Yangze Zhou (Zhejiang University, China), Zhiyi Zhang (Peking University, China), Longhan Zhang (Zhejiang Lab, China; Hong Kong University of Science and Technology (Guangzhou), China), Jing Jiang (Zhejiang Lab, China), and Yiteng Zhai (Zhejiang Lab, China; Nanyang Technological University, Singapore)</i>	
Using Generative AI to Drive Person Centric Networking	1493
<i>Steve Jones (Capgemini, Arizona)</i>	
UWM-Net: A Mixture Density Network Approach with Minimal Dataset Requirements for Underwater Image Enhancement	1497
<i>Jun Huang (Southern University of Science and Technology, China), Zongze Li (Southern University of Science and Technology, China), Ruihao Zheng (Southern University of Science and Technology, China), and Zhenkun Wang (Southern University of Science and Technology, China)</i>	
Virtual Co-Pilot: Multimodal Large Language Model-Enabled Quick-Access Procedures for Single Pilot Operations	1501
<i>Fan Li (The Hong Kong Polytechnic University), Shanshan Feng (Centre for Frontier AI Research, A*STAR), Yuqi Yan (The Hong Kong Polytechnic University), Ching-Hung Lee (Xi'an Jiaotong University, China), and Yew Soon Ong (Nanyang Technological University, Singapore)</i>	
VirtuGuard: Ethically Aligned Artificial Intelligence Framework for Cyberbullying Mitigation	1507
<i>Min Wang (University of Canberra, Australia; University of New South Wales, Australia), Christine Boshuijzen-van Burken (University of New South Wales, Australia), Nan Sun (University of New South Wales, Australia), Shabnam Kasra Kermanshahi (University of New South Wales, Australia), Yu Zhang (School of Business, University of New South Wales, Canberra, Australia), and Jiankun Hu (University of New South Wales, Australia)</i>	
Vision Control for Cable Binding Robot in Offshore and Marine Industry	1510
<i>Jing Zhong Tee (Sembcorp Marine Ltd, Singapore), Ye Zhen (National University of Singapore, Singapore), Chin Boon Chng (National University of Singapore, Singapore), and Chee Kong Chui (National University of Singapore, Singapore)</i>	
Visualize Music Using Generative Arts	1516
<i>Brian Man-Kit Ng (Purdue University, USA), Samantha Rose Sudhoff (Purdue University, USA), Haichang Li (Purdue University, USA), Joshua Kamphuis (Purdue University, USA), Tim Nadolsky (Purdue University, USA), Yingjie Chen (Purdue University, USA), Kristen Yeon-Ji Yun (Purdue University, USA), and Yung-Hsiang Lu (Purdue University, USA)</i>	

W-Net: Two-Stage Segmentation for Multi-Center Kidney Ultrasound	1522
<i>Yu-Chi Chang (Graduate Institute of Library Information and Archival Studies, National Chengchi University, Taiwan), Chung-Ming Lo (Graduate Institute of Library Information and Archival Studies, National Chengchi University, Taiwan), Yi-Kong Chen (Division of Nephrology, Department of Internal Medicine, Kaohsiung Medical University Hospital, Taiwan), Ping-Hsun Wu (Division of Nephrology, Department of Internal Medicine, Kaohsiung Medical University Hospital, Taiwan), and Hsing Luh (Department of Mathematical Sciences, National Chengchi University, Taiwan)</i>	
When Audio Denoising Meets Spiking Neural Network	1524
<i>Xiang Hao (The Hong Kong Polytechnic University, China), Chenxiang Ma (The Hong Kong Polytechnic University, China), Qu Yang (National University of Singapore, Singapore), Kay Chen Tan (The Hong Kong Polytechnic University, China), and Jibin Wu (The Hong Kong Polytechnic University, China)</i>	
When to use Demographic Data in Healthcare Models: A Bias-Responsible Approach	1528
<i>Sebrina Zeleke (The Ohio State University), Tanya Berger-Wolf (The Ohio State University), and Xia Ning (The Ohio State University)</i>	
Where to Move Next: Zero-shot Generalization of LLMs for Next POI Recommendation	1530
<i>Shanshan Feng (Centre for Frontier AI Research, A*STAR, Singapore; Institute of High Performance Computing, A*STAR, Singapore), Haoming Lyu (Nanyang Technological University, Singapore), Fan Li (Hong Kong Polytechnic University, China), Zhu Sun (Centre for Frontier AI Research, A*STAR, Singapore; Institute of High Performance Computing, A*STAR, Singapore), and Caishun Chen (Centre for Frontier AI Research, A*STAR, Singapore; Institute of High Performance Computing, A*STAR, Singapore)</i>	
Wildfire Spread Prediction in North America Using Satellite Imagery and Vision Transformer.....	1536
<i>Bronte Sihan Li (Northeastern University) and Ryan Rad (Northeastern University)</i>	
XES3MaP: Explainable Risks Identified from Ensembled Stacked Self-Supervised Models to Augment Predictive Maintenance	1542
<i>Sarala M Naidu (Mälardalen University; Hitachi Energy, Sweden) and Ning Xiong (Mälardalen University, Sweden)</i>	
Zero-shot Domain Adaptation Based on Dual-Level Mix and Contrast	1549
<i>Yu Zhe (RIKEN, Japan) and Jun Sakuma (RIKEN, Tokyo institute of technology, Japan)</i>	
μ Pose: Synthetic Dataset for Human Pose Estimation in Microgravity Environments	1557
<i>Luís Fernando de Souza Cardoso (Ilmenau University of Technology, Germany), Tobias Schwandt (Ilmenau University of Technology, Germany), and Wolfgang Broll (Ilmenau University of Technology, Germany)</i>	

Author Index