

2025 IEEE 8th International Conference on Pattern Recognition and Artificial Intelligence (PRAI 2025)

**Guiyang, China
15-17 August 2025**

Pages 1–462

IEEE Catalog Number: CFP25AX3-POD
ISBN: 979-8-3315-7406-2



Copyright © 2025, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

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

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

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

IEEE Catalog Number:	CFP25AX3-POD
ISBN (Print-On-Demand):	979-8-3315-7406-2
ISBN (Online):	979-8-3315-7405-5

Additional Copies of This Publication Are Available From:

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

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

TABLE OF CONTENTS

Improved YOLOv8n-based Algorithm for Road Object Detection in Foggy Weather	1
<i>Wenjie Huang, Zhenyu Chen, Dan Zhang, Fengmin Peng, Mingshen Huang, Guojin Xiao</i>	
GTWNet: A High-Accuracy and Lightweight Framework for Rice Pest Detection	6
<i>Shilei Deng, Gaowei Wu, Wensheng Zhang</i>	
A Lightweight YOLOv12n Object Detection Network for Underwater Degraded Environments	15
<i>Fengmin Peng, Qiong Gao, Dan Zhang, Guojin Xiao, Wenjie Huang, Mingshen Huang, Weihao Yang</i>	
Unified Face Attack Detection Via Multi-Scale CNN-ViT and Graph Convolutional Networks	21
<i>Xinyu Chen, Jun Liu, Zengxi Huang, Dazhi Zhang</i>	
Impact of Different Rain Removal Preprocessing Methods on Rainy Object Detection Performance	27
<i>Jie Dong, Dong Su, Siyi He, Haoyi Tang, Lingjun Liu, Zhonghua Xie</i>	
A Lightweight Object Detection Algorithm for Complex Traffic Environments	32
<i>Yi Wang, Nian Jia, Zengxi Huang, Ziping Liu</i>	
Application of Object Detection in Sleep Disordered Breathing	38
<i>Haonan Guo, Qingqing Yan, Li Zhou, Hairu Zhao, Yuxin Mao, Fangyi Zhang</i>	
Improved Hyperdimensional Computing Strategies for Epileptic Seizure Detection	44
<i>Zhen Zhang, Zhifa Jiang</i>	
Forest Fire Object Detection Based on an Improved YOLOv5s	50
<i>Zhengji Li, Shichao Xiang, Xinrui Li, Yufan Wen, Peiyao Wang</i>	
Brain Tumor Detection Using Advanced Deep Learning Models - Vision Transformer and EfficientNetV2	56
<i>Yang Liu, Li-Jun Yu</i>	
Occlusion-Aware Instance Segmentation for Scene-level Sketches	61
<i>Chenghao Li, Shiping Dong, Shizhe Zhou</i>	
GhostAxSeg: A 0.45M Network with Ghost Backbone and Axial Attention for Real-Time Polyp Segmentation	67
<i>Li Xintao, Sun Xuemei</i>	
Decoupling Spatial and Frequency Feature for Superpixel Segmentation	73
<i>Guanghui Yan, Haowei Du, Xiaohong Jia</i>	
Multi-Scale Feature Fusion UNetFormer: Improving the Accuracy of Remote Sensing Urban Scene Image Segmentation	79
<i>Shichun He, Xiaodong Yu, Desong Chen, Xi Kuang, Maolin Zhang</i>	
Investigating the Impact of Semantic Segmentation on Detail Reconstruction in Single-Image 3D Generation	85
<i>Linyi He</i>	
Laser Holographic Image Segmentation and Recombination Processing Method Integrating Artificial Intelligence Technology	94
<i>Zhou Hong, Yang Chunqing</i>	

GrapeCPNet: A Data-Driven Deep Learning Approach for Automated 3D Phenotyping and Predictive Analytics in Grape Cultivation	100
<i>Sumit Mamtani</i>	
Study on Mango Disease Classification Based on YOLOv8 and Multidimensional Data Enhancement	111
<i>Yi Zhang, Bin Zheng, Yinbo Lin, Xiaoming Du</i>	
Flexible Superpixel-Based Graph Neural Network for Hyperspectral Image Classification	117
<i>Haojie Hu, Jiaxin Li, Shuanghao Fan, Fang He, Dong Wang</i>	
An Interpretable Image Classification Approach Using Prototype-Based Deep Belief Rules	121
<i>Jiawei Wu, Lianmeng Jiao, Quan Pan</i>	
Balancing Redundancy Reduction and Feature Retention: a Pca-Svm Approach to Hyperspectral Image Classification	128
<i>Yang Mengyao, Uzair Aslam Bhatti, Zhang Junfeng, Nodira Sherjanova, Ogabek Sultanov, Yonis Gulzar</i>	
<i>Huang Mengxing, Feng Siling</i>	
A Gated Convolutional Network for Autism Spectrum Disorder Classification and Functional Connectivity Analysis	134
<i>Hua Zhou, Jianbin Zhong, Liwei Fan, Yan Tang</i>	
Large-Scale Network Traffic Classification Using Graph Clustering-Enhanced E-GraphSAGE	140
<i>Yuxin Ma, Jun Ma, Yan Fan</i>	
FuseNet: Feature Enhancement-Based Multi-Frame Depth Estimation	148
<i>Rui Ni, Mingwei Cao</i>	
Two-Stage Feature Selection Algorithm Based on an Improved Grey Predictive Evolutionary Algorithm for Depression Detection	156
<i>Mengyuan Li, Shuhua Mao</i>	
Large-Parallax Image Stitching with Multi-Scale Feature Fusion and Boundary Awareness	164
<i>Su Wang, Mingwei Cao</i>	
A Lightweight and Adaptive Method for Dynamic Feature Suppression in Visual SLAM	172
<i>Jie Xia, Jianan Jiang, Dechao Chen</i>	
DCFSNet: A Feature Significance-Driven Framework for Scientific Visualization Color Mapping	178
<i>Jian Zhang, Xiaorong Zhang, De Xing, Fang Wang, Liang Deng</i>	
One-Stage Mesh Denoising Method Based on Nonlinear Total Generalized Variation Framework	189
<i>Yupeng Wang, Huayan Zhang</i>	
A Robust Method for Image Registration in Large Parallax and Weak Texture Scenes	198
<i>Su Wang, Mingwei Cao</i>	
ATFNeRF: Attention Fusion-Based Neural Radiance Fields for Sparse View Inputs	206
<i>Li Jin, Jiageng Huang, Zhenxing Xu, Wei Gao</i>	
Institch: an Incremental Approach to Stitching Low-Overlap Images	212
<i>Ning Li, Haifeng Zhao, Mingwei Cao</i>	
Primary Beam Effect Elimination for Mid-Frequency SKA Imaging Using a Uformer Network	221
<i>Yuxin Xia, Li Zhang, Xinglong Wang, Zujuan Xu, Ming Zhang, Long Xu, Zhibin Zhang</i>	

Augmented Hybrid Cost Volume Network for Stereo Matching	226
<i>Chenglin Dai</i>	
Wide-Field Effect Correction for Low-Frequency SKA Imaging Using a Multi-Stage Network	234
<i>Xinglong Wang, Li Zhang, Mei Lu, Zujuan Xu, Yuxin Xia</i>	
3D Reconstruction of Photovoltaic Scenes Based on Aerial Images	238
<i>Zilong Wang, Mingwei Cao</i>	
Observation Simulation and Mitigation of Polarization Effects in Mid-Frequency SKA	246
<i>Yang Liu, Li Zhang, Chao Li, Huijie Yang, Jinbo Zhao</i>	
Research on Abnormal Behavior Detection and Risk Assessment Method of Big Data based on Graph Neural Network	251
<i>Haiqing Zhang, Wenxuan Hou, Zihao Yang, Zuyue Yang, Yukun Pan</i>	
A Novel Attention Fusion Approach for Joint Object Detection and Classification in Facial Expression Recognition	257
<i>Bohao Li, Cheng Peng, Kun Zou, Wenhui Zhou</i>	
Wavelet-Guided Progressive and Dynamic YOLO for SAR Ship Detection in Complex Scenarios	264
<i>Xipeng Chen, Ming Hao, Jie Guo, Long Zhuang</i>	
SPBNet-YOLO: Improving Small Object Detection in UAV Imagery Under Diverse Conditions	271
<i>Muhammad Noman Tariq, Hongying Zhang, Meerab Rahim Khan, Sijia Zhao</i>	
A CT Defect Detection Method for Additive Manufacturing Workpieces Driven by Digital Models and Virtual Simulation	277
<i>Li Ning, Zhiyu Gao, Haibin Lan, Baixiang Zeng, Linhai Xu, Wei Guan, Xiaolong Chen, Lindan Zheng Qianni Wang, Bingyang Wang, Changsheng Zhang, Jian Fu</i>	
A Tual-Flow Network Based on Attention Mechanism and Global Information for Small Object Detection	283
<i>Ning Wang, Meijuan Zhou, Zhong Ma</i>	
An Intelligent Detection Method for Lake Water Environments: Identification and Research of Plastic Bottles Based on the YOLO Series	288
<i>Zhipan Wu, Yunhe Jiang, Huaying Du, Xulian Luo</i>	
Collaborative Anomaly Detection Using Agent-Based Modeling in Smart Manufacturing	296
<i>Shuai Yuan, Haoxu Nong, Yunbo Rao</i>	
Power Line Foreign Object Invasion Detection Algorithm Based on RGB-D Multimodal Images	302
<i>Jianfeng Wu, Yaosheng Huang, Shangbing Yang</i>	
MTL-YOLO: Multi-Task Learning-Based YOLO for Detecting Bone Irregular and Discontinuity	307
<i>Shifeng Shang, Mingwei Cao, Haifeng Zhao</i>	
MelVQGAN: An Enhanced Neural Codec with Fine-Grained Spectrogram Preservation for High-Fidelity Speech Generation	316
<i>Siyuan Zhou, Hongxia Bie</i>	
Video Retrieval Architecture Based on Contrastive Learning and Gaussianized Label Mechanisms	323
<i>Kaixuan Sun, Lepeng Wang, Yutao Yao, Jiang Shao, Jiajia Nie, Xueqing Li, Zenghuan Cheng</i>	

Research on Immersive Meta-Universe Interaction Design Based on User Behavior Perception	334
<i>Liu Mengyu</i>	
Etutor: An End-to-End Multimodal Framework for AI-Driven Educational Video Generation	340
<i>Henghui Meng, Kainan Liu, Chengxiang Li, Yifan Li, Da Shang, Zihao Jia</i>	
MIDI and Text Conditioned Diffusion Model for Style-Controlled Music Generation	348
<i>Dan Guo, Sha Yu</i>	
Student Learning Profile Based on AI Agent and Multimodal Data Fusion	353
<i>Binhui Tang, Renwei Liu, Qianqian Liu, Keke Zha, Yishan Lu</i>	
The Precise Portrayal of Multi-Dimensional Students' Growth Trajectories in the Informatization Construction of Colleges and Universities	361
<i>Qiuqiong Hu, Wenxuan Hou, Zihao Yang</i>	
Architecture and Application Path for On-Device Deployment of Aviation Large Vision Models	367
<i>Xilin Zhang, Bo Liu, Ziliang Du, Yang Shao</i>	
Robust Measurement Algorithm for Nozzle Atomization Angle based on Fog Field Intensity	372
<i>Zhongyu Meng, Anran Dai, Ao Wang, Ju Liu, Junxiang Wang, Qijun Luo</i>	
Intelligent Warning System for the Elderly Living Alone Based on OpenPose and YOLOV8	378
<i>Yuyang Fang, Bin Lu, Yusheng Cai, Zhen Zhang</i>	
TFDS Analysis and Resolution Strategy of Image Problem Under Train Speed Change Condition	384
<i>Sha Wen, Qingmao Ren</i>	
Impact of Rural Virtual Tourism Experience on On-Site Travel Intention Mediated by Place Attachment	389
<i>Hua Dong, Qiang Wei</i>	
Fusiontrack: an Adaptive Hybrid Tracking Framework Overcoming Rapid Object Motion, Frequent Occlusions, Dynamic Scene Transitions, and Appearance-Scale Variations	394
<i>Akhil Penta, Vaibhav Adwani, Ankush Chopra</i>	
Multi-Objective Optimization Model and Enhanced Genetic Algorithm for Fresh Food E-Commerce Distribution under Time Window Constraints	405
<i>Fugui Fang, Jian Yang</i>	
An Intelligent Approach for Arch Height Index Measurement Based on Machine Vision	411
<i>Wenjie Chen, Xiaoming Li, Zhengjun Li, Haiyan Chen, Bin Lu, Zhengrui Zhang</i>	
UAG-FusionNet: An Uncertainty and Gradientguided Deep Medical Image Fusion Network	417
<i>Yingjie Feng, Siling Feng, Mengxing Huang, Qingkui Chen</i>	
Chest X-Ray Diagnosis with Joint Report Generation and Lesion Localization Using Multimodal Vision-Language Models	423
<i>Houxuan Zhang, Kuan Huang</i>	
Application Research of Time Series Prediction Algorithm Based on Meta-Learning	430
<i>Li Xiuhe, Liu Nanling, Zhang Haiyan, Wang Xin, Gan Guihua</i>	
MUST: Fast Cardiac MR-to-US Image Conversion via Style Transfer	437
<i>Yusong Wang, Bo Peng, Hongmei Zhang, Han Yang</i>	

Guided 3D Generation Through Depth Image Fusion Utilizing Diffusion Model	445
<i>Yifan Wei, Xingwang Zhao</i>	
DIGRD: Disguised Inertial Gait Recognition Dataset and Method	452
<i>Hao Li, Zhaoyang Wu, Wei Wu, Shichao Wu</i>	
Research on Classification and Recognition of Traditional Chinese Medicines Based on YOLOv8-MSDA	458
<i>Guihua Zhang, Junchao Dai, Yue Guan, JiaNing Li, Yin Liu, Jiashu Sun</i>	
CT Image Automatic Recognition Method Based on Two-Dimensional Segmentation and Three-Dimensional Visualization	463
<i>Baixiang Zeng, Zhiyu Gao, Haibin Lan, Linhai Xu, Wei Guan, Xiaolong Chen, Lindan Zheng, Qianni Wang, Shuangwei Yu, Changsheng Zhang, Lindan Zheng, Qianni Wang</i>	
An Ecological Footprint Image Dataset for Automatic Identification of Paleontology Discovery	468
<i>Yinghao Cai, Shaoning Zeng</i>	
Topic Identification and Comparative Analysis on LLM Research	474
<i>Hongwei Fan, Hong Li</i>	
Performance Evaluation of YOLOv11 for Ship Recognition in Complex Sea Surfaces	480
<i>Hanqing Xue, Chao Chen, Xiaowei Shao, JunXiang Zhao, XiaoMing Dou, Hejia Wang</i>	
Research on the Application of Intelligent Video Recognition Technology in Pet Management Systems	486
<i>Hongxia Mao, Chunjie Wang</i>	
Intrusion Event Recognition in Distributed Fiber-Optic Sensing Systems via Domain Adaptation Learning	491
<i>Yuxiang Ni, Linling Wang, Di Wu, Hailong Zhai, Xing Hu, Jing Cheng, Dawei Zhang</i>	
An Improved Bat Algorithm with Multi-Strategy for Multi-Robot Path Planning*	498
<i>Fangyan Nie, Pingfeng Zhang, Ranran Ao, Demin Zhang, Zhenlin Lu</i>	
Design of Debris Sorting Robot System on Coal Mine Belt Conveyor	504
<i>Lei Wu, Ming Lu, Minghui Zhao</i>	
Exploring the Application of Improved GA in Multi-objective Path Planning for Engineering Robots	510
<i>Zejun Gong, Hui Zhao, Wei He, Yaoguang Zhao</i>	
Boundary Recognition System for Intelligent Lawn Mowing Robot Based on mmWave Radar	516
<i>Aiqing Wang, Yu Qin, Zhiguo Shi, Yong Wang</i>	
Hierarchical Task Decomposition for Long-Horizon Robotic Autonomy via Multimodal Language Model Synergy	522
<i>Genjian Yang, Liuhua Zhang, Zhiwei Gao</i>	
AG-Net: Category-Level 6D Pose Estimation Network Based on Attention Mechanism and Global Enhancement	529
<i>Bowen Shi, Jinlong Shi, Suqin Bai, Ruixue Gong</i>	
Galaxy Image Reconstruction from Sparse Sampling Using a Stripformer-Based Deep Learning Network	537
<i>Zujuan Xu, Li Zhang, Yuxin Xia, Xinglong Wang, Ming Zhang, Long Xu, Zhibin Zhang</i>	

Transformer-Based Multimodal Spatio-Temporal Fusion Neural Network for Pedestrian Intention Prediction	542
<i>Beixuan Lu, Shujuan Huang, Chao Shen, Feng Xiao, Wenjuan Zhang</i>	
Correction of SKA-Low Primary Beam Effect Based on Deep Learning	551
<i>Jinbo Zhao, Li Zhang, Mei Lu, Chao Li, Yang Liu</i>	
Research on Fault-Tolerant Methods for Matrix Multiplication in GPGPU	555
<i>Yingke Gao, Peidao Wang, Pei Wang, Zheng Yang, Shenglong Li, Bo Liu</i>	
A Dynamic Graph Attention Network with Sub-Sampling for Wheat Phenotype Prediction	560
<i>Songtao Wu, Jing Xu, Yuxia Sheng</i>	
FDSCNet: Flexible Dynamic Sparse Compression Network for Music Source Separation	566
<i>Chengmi Zhang, Dan Guo, Sha Yu</i>	
DFECformer: An iTransformer-Based Model with Variable Differential and Frequency Enhanced Channel Attention for Multivariate Time Series Prediction	572
<i>Desong Chen, Xi Yu, Mengji Yang, Xiaodong Yu, Shichun He</i>	
Performance Analysis and Adaptive Behavior of the Least Linex Function-Based Filter	578
<i>Hui Zhong, Shiwei Yun, Yihui Yang, Liwei Wang, Chuanwu Zhang, Sihai Guan</i>	
Graph Attention Network for Industrial Equipment Fault Diagnosis Based on Learnable Mel Filters	584
<i>Hong Zhang, Bin Wang, Xi Kuang, Yuanyi Hou, Dawei Zhao, Hangyu Zou, Jianwei Zhang, Dekun Hu</i>	
Aero-Engines' Fault Diagnosis Based on 1DCNN-BiLSTM	591
<i>Jiaju Wu, Linggang Kong, Ze Xiu, Yao Pan, XiaoDong Wang, Chuan Chen</i>	
Broadband Effect Elimination of Low-frequency SKA Based on Deep Learning	597
<i>Chao Li, Li Zhang, Yang Liu, Jinbo Zhao</i>	
E- NEXT-TDNN: An Enhanced NEXT-TDNN with Dynamic Weighted Aggregation and Attentive Feature Fusion for Speaker Verification	602
<i>Bohua Li, Lin Zhang, Ye Jiang</i>	
Research and Application of Smart Home Assistant System Based on AI Big Model	608
<i>Haiqing Zhang, Zihao Yang, Jiahui Wang, Luhan Li, Qingyue Qin</i>	
NoNitro: A UAV- and AI-Empowered Integrated System for Soil Nitrate Control	614
<i>Emma Tong, Sophia Chen, Jun Wu</i>	
Research on Intelligent Scheduling Algorithm for Public Transportation System Based on Neural Network	620
<i>Xiaofeng Yan, Hongwei Zhang, Jie Zhao</i>	
Research and Implementation of Path Planning Algorithm for Autonomous Vehicles	626
<i>Min Yan, Zhangling Yan</i>	
A Prediction Method for State Variables in Mixing Processes Based on Stacking Model	631
<i>Ziyang Song, Faping Zhang, Yiming Lu</i>	
A Novel Task Allocation Method for UAVs to Maximize the Number of Assigned Tasks	636
<i>Jihua Xu</i>	

Edge-AI Empowered Self-Organizing Drone Swarms for Urban Underground Infrastructure Monitoring	641
<i>Hangfei Zhang, Lin Li, Wenan Yi, Dianyi Song, Liming Liu</i>	
LLM-Driven Fire Safety Assistant	646
<i>Shan He, Yuwei Hu, Hongyu Li, Ting Li, Yanyan Hu, Fengmei Tang</i>	
Ethical Considerations on the Application of Unmanned Systems in Urban Warfare	651
<i>Hangfei Zhang, Cheng Xie, Wenan Yi, Rui Zhang, Li Cai</i>	
Expert-Novice Disparities in Eye Movement Patterns During Primary Flight Training	660
<i>Yuanyuan Zhang, Sicheng Tong, Xiaoguang Zhou, Yuan Zhou, Quanchao Wei</i>	
Adaptive Huber Based Federated Learning for Sparse Optimization	667
<i>Ji Cheng, Hongxin Zhao, Xin Wang, Wanping Zhang, Zhaoqilin Yang</i>	
A Bottom-Up Olympic Medal Prediction Framework Based on Multiple Machine Learning and Statistical Methods	673
<i>KeYuan Zhang, ChenXing Li, Bin Zheng, Jingdong Zhang</i>	
Optimization of Sepsis Drug Delivery Based on Continuous State Space Deep Reinforcement Learning	678
<i>Zhiyu Ren, Yiwei Liu, Peiyu Fang, Mengting Ni</i>	
Attention-Enhanced CNN-LSTM for Ship Intention Prediction Using AIS Data	684
<i>Bo Yang, Xiao Liu, Zhenya Wang, Shui Yu, Yunbo Rao</i>	
MIL-Transformer: A Novel Deep Learning Framework for Predicting Sertraline Treatment Outcome in Major Depressive Disorder Using Resting-State EEG	691
<i>Haipeng Lin, Jin Xie, Yaning Han, Xin Gao, Minghao Li, Yang Zhan, Zhanhong Du, Pengfei Wei</i>	
A Novel Hybrid Prediction Model of Stock Closing Price Based on CEEMDAN-SE-VMD and ARIMA-CNN-BiLSTM-Attention	698
<i>Peiyao Wang, Qiang Dai, Zhongying Qiu, Xinyu Deng</i>	
Design of an Energy-Efficient Hybrid-Precision Neural Network Accelerator with a Unified Memory-Compute Architecture	705
<i>Feng Jiao, Siying Bi, Shu Wang, Zhong Ma, Jin Huang, Siwei Xiang, Chen Yang</i>	
Severity Analysis of Depression Based on Text Convolutional Neural Network	713
<i>Xianlong Tan, Shuhua Mao</i>	
Multi-Strategy Improved Whale Optimization Algorithm – Back Propagation Neural Network Damping Prediction Model	721
<i>Yuanyuan Jiang, Xianghua Jiang, Chenhong Du</i>	
MGACMR: Multi-Granularity Feature Adversarial Cross-Modal Retrieval Model	727
<i>Xiaorong Zhang, Sipeng Deng, Jiakang Deng, Cheng Chen, Guijuan Wang</i>	
A Hybrid Informer-LightGBM Framework for Enhanced Carbon Emission Forecasting in Industrial Parks	735
<i>Xingyun Yan, Jie Hu, Lingyu Wang, Mingzhu Fang, Hairui Wang, Meixing Guo, Bin Chen, Jin Qi</i>	
An Efficient Swin Transformer Architecture Based on Grouped Query Attention	741
<i>Li Wang, Zhong Ma</i>	

Research on Short-Term Photovoltaic Power Generation Forecasting Based on TCN-Transformer Model Fused with Cross-Attention Mechanism	746
<i>Ji Zeng, Xiuqiong Hu, Yunsong Luo, Yuekun Wang</i>	
A Hybrid Simulated Annealing Genetic Algorithm for BI-Objective Optimization	754
<i>Wenchao Fang</i>	
Research on the Impact of Digital Game Experience on Willingness for on-Site Travel	762
<i>Chen Li</i>	
Research of a Medical Knowledge Extraction Algorithm Based on Graph Neural Networks	768
<i>Hongxia Liu, Hui Li, Hui Tan, Xiangben Hu</i>	
Temporal and Causal-Aware Summarization of Legal Public Opinion With Large Language Models	776
<i>Wei Zhang, Yang Kou</i>	
An Assisted Medical Diagnosis Question Answering System Based on Knowledge Graphs	785
<i>Liu Fang, Chen Yang, Chen Jiansong</i>	
Emotional Prediction of Tourism Reviews Based on Knowledge Graph and Multimodal Feature Fusion	791
<i>Xin Li, Yuyu Zhou, Aiming Xian, Fujia Huang, Ke Wang, Shengying Yang</i>	
Design and Application of an Evaluation System for Large Language Models	798
<i>Ying Shen, Zhiyuan Cao, Mingang Chen</i>	
Incremental Multi-View Clustering with Knowledge Distillation and Contrastive Learning	806
<i>Hongpeng Chen, Hongwei Yin, Wenjun Hu</i>	
Multi-Information Fusion Knowledge Graph Representation Learning Method Based on Large Language Model	812
<i>Junjie Ma, Ruiyang Shang, Junpeng Bao, Yifeng Huang</i>	
Cliva-Med: A Lightweight Vision-Language Model for Medical Visual Question Answering	821
<i>Juni Stefanus Santoso, Xiaohan Ma, Kehui Song, Rize Jin, Xuguang Qiu, Hongbo Zhao</i>	
An Optimization Method for LLM-Based Retrieval-Augmented Generation System on OpenWebUI	827
<i>Yuejiao Wang, Haochen Zhang, Shen Li, Meijuan Zhou, Zhong Ma</i>	
Ethical and Security Challenges of Large Language Models in Public Health Systems: A Survey	833
<i>Jie He, Fengshi Jing, Deyi Liang, Hao Ren, Qimeng Luo, Yewei Xie, Haobin Zhang, Weibin Cheng</i>	
EmotionChat: Emotional Chain of Thought based MLLM for Dialogue Generation	839
<i>Yu Bai, Sirui Zhao, Min Zhang, Shifeng Liu, Yifei Zhu, Tong Xu</i>	
CyberLog Analyst: A Real-Time Security Log Analysis Pipeline Powered by LLM - Architecture, Implementation, and Evaluation	848
<i>Mouhamadou Mame DIOP, Mamadou BA, Khalifa SYLLA, Samuel Ouya</i>	
Temporal Knowledge Graph Reasoning With Dynamic Context-Aware Attention and Evolutionary Learning	854
<i>Qingkui Chen, Siling Feng, Mengxing Huang, Yingjie Feng</i>	
Unsupervised Sentence Representation Learning via Rank and Self Distillation with LLM-Augmented Negative Sampling	860
<i>Yuyang Wang, Rize Jin, Wei Zhao</i>	

Universal End-to-End Automated Evaluation Framework for Retrieval-Augmented Generation System	866
<i>Shen Li, Haochen Zhang, Yuejiao Wang, Meijuan Zhou, Zhong Ma, Feng Liang</i>	
Agent-Based Traffic Monitoring and Regulation System for SDN	871
<i>Xiaodan Guo, Falong Zhou, Weihao Du, Mengdie Deng, Xun Zhu, Juming Bao</i>	
Third-Party Privacy Data Leak Analysis on Ontario Hospital Websites	877
<i>Tarun Kalyani, Justin Stewart, Yan Yan, Sampsa Rauti, Ville Leppänen, Zuhaibuddin Bhutto, Wenjun Lin</i>	
Privacy-Preserving Computing Architecture for Secure Big Data Processing in Distributed Environments	883
<i>Haiqing Zhang, Wenxuan Hou, Yue Guan, Zihao Yang</i>	
Vertically Partitioned High-Dimensional Data Publishing with Differential Privacy	889
<i>Junming Zhang, Jingru Wang, Shigong Long, Shengguang Bai, Lun Wang</i>	
Secure Storage Strategies for Massive Data in Network Computing Environments	895
<i>Yan Xu, Hongmei Liu, Xinrui Gong, Zeren Fan</i>	
Analysis of User-Privacy, Third-Party Data Sharing and Consent Mechanism on Online Pharmacy Websites in Ontario	901
<i>Atikor Ibodeng, Zuhaibuddin Bhutto, Yan Yan, Sampsa Rauti, Ville Leppänen, Adegboola David Adelabu Wenjun Lin</i>	
Research on Network Security Management Strategies and Applications Based on AI Large Model Background	908
<i>Xiaolan Yu</i>	
Document-Level Cyber Threat Intelligence Relation Extraction via Relation Directed Graph	912
<i>Rui Wang, Yu Yan, Jiaoli Liu, Po Hu, Jianyi Liu</i>	
Study of Imperfect Key to Characterise the Security of Optical Encryption	918
<i>Lingfei Zhang, Haiqing Zhang, Wenxuan Hou</i>	
Development of a Portable Drilling Simulator Training System Based on Unity3D	923
<i>Jian Yang, Fugui Fang</i>	