

2024 7th International Conference on Advanced Algorithms and Control Engineering (ICAACE 2024)

**Shanghai, China
1-3 March 2024**

Pages 1-810



**IEEE Catalog Number: CFP24UO5-POD
ISBN: 979-8-3503-6145-2**

**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:	CFP24UO5-POD
ISBN (Print-On-Demand):	979-8-3503-6145-2
ISBN (Online):	979-8-3503-6144-5

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

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

Research on Apriori Improvement Algorithm Based on MapReduce	1
Shengshai Zhang, Shaowei Mei	
A Safety Helmet Detection Algorithm Based on Improved YOLOv5s	7
Changpeng Ji, Zhibo Hou, Wei Dai	
Robust image segmentation algorithm based on local correntropy-based generalized loss function	12
Zequn Song, Lingfeng Wang	
Research on the matching algorithm of counselor positions based on BP neural network	17
Lifang Zhang, Jianping Tan	
Research on the performance of different load forecasting methods of park level	21
Pengxiang Zhao, Jialin Yang, Xian Yang, Lin Cong, Chengyou Lv	
A Frequency Extraction Algorithm Based on Frequency Modulated Continuous Wave Ranging	25
Ziyan Pei, Bo Yang, Yong Li, Zeyu Wang	
Based on immune optimization algorithm for multi-storage site selection algorithm	31
Xinyan Wang, Guangjun Qin, Hongsheng Zhao	
A Gradient-Based Adaptive Quantum-behaved Particle Swarm Optimization	37
Hao Mei, Jingjing Zhang, Qingchun Wang, Yuchun Wu, Guoping Guo	
An Enhance Sparrow Search Algorithm based on Individual Dispersion and Niche Mechanism	44
Dahai Li, Xifeng Chen, Nengzhi Zeng, Xin Li	
Fast Collision Detection Method Based on Whale Optimization Algorithm in Virtual Maintenance	49
Zhiyong Luo, Jie Zhang, Xin Dong, Hao Zuo	
Research on Energy Carbon Integration Sharing Algorithm for Green Communities	55
Xianping Lin, Kegang Cui, Xuecai Wang, Qingwei Wang, Xu Zhang, Yu Xing, Libo E, Ruijing Wang	
Image semantic segmentation algorithm based on HN-DeepLabV3 +	60
Yuxiang Wang, Shengling Geng, Yunchuan Xie, Suxin Song	
The research of image interpolation algorithm of video on FPGA	66
Shaowei Li, Liqing Liao	
Fast approximation algorithms for scheduling uniform parallel batch machines with inclusive processing set restriction	70
Yanyue Liang, Lihong Zhang, Shuguang Li	

An Improved Particle Swarm Optimization Algorithm for Large-Scale Optimization	74
Xiangyu Ba, Lei Liu	
Solve the Constrained Shortest Path Problem Using an Improved A* Algorithm	78
Nan Xu, Xiang Wu, Miaomiao Zhang, Xianying Chang	
Research on distributed task allocation algorithm for UAV swarm based on evolutionary game	82
Yansong Kong, Qiang Chang, Hongliang Wang	
Aerial Image Matching Algorithm Based on Edge Boxes	87
Qunzhong Fang, Baoshu Xu, Chengshuo Zhang, Shiyang Jin	
A Kind of SLAM Algorithm Based on Strong Tracking Cubature Kalman filter	92
Guangsong Yang, Yangfan Cui, Yujun lin, Longxing Liu, Bing Li	
Adaptive Formation Algorithm for Dynamic Environment Based on Improved SOM Network	97
Chaofeng Dong, Jianxin Xu	
Performance Optimization Model of Tomasulo Algorithm Based on Queuing Theory	101
Ting Yang, Zhengda Wu, Wenhui Chen, Han Long	
An Innovative High-Dimensional Clustering Algorithm and Its Application to Urban Stratification and Planning	107
Zhuohao Du, Yanshan Qian, Chuanan Li, Yunqi Hu, Junda Qiu	
Research on active control algorithm of impulse noise in excavator cab	112
Yu Xiao, Hongqiang Zhao, Qiang Liu, Jiguang Wang	
A hybrid multi-threaded parallel iterated greedy algorithm for Distributed Flowshop Group Scheduling Problems with preventive maintenance	117
Xiaobin Sun, Hongyan Sang, Yasheng Zhao, Wanzhong Wu	
Genetic algorithm-based optimization of arrhythmia classification model	122
Jingpu Zhao, Zhengyang Feng, Yiding Sun, Runqiang Xing, Kai Hu	
Algorithm design of redundant inertial navigation system based on high-precision accelerometers	128
Dalei Liang, Qinyuan He, Huapeng Yu	
Asphalt Pavement Crack Detection based on Improved YOLOv5s Algorithm	133
Qian Liu, Zhen Liu	
A Multimodal Identity Recognition Algorithm	139
Pengfei Li, Haolin Gao, Wenbo Xie, Xuan Zhao	
A Real-time and Efficient License Plate Detection and Alignment Algorithm Based on Neural Network	143
Sen Ye, Lili Yang, Guobiao Zhu, Chuanhan Zhu	

ITSA: an Adaptive Tree Seed Algorithm based on Differential Evolution with Tree Migration and Seed Intelligent Generation	147
Jiansheng Huang, Ruixiang Song, Lingna Li, Yvzhu Ji	
RRT-Trained DDQN Algorithm for Pathfinding Problem of Automated Guided Vehicle	151
Kai Zheng, Jun Liu, Yi Zhang, Yang Shi	
A transmission line defect detection algorithm based on deep convolutional neural network technology	156
Hai Li, Ruirong Tan, Caiyuan Liang, Yuxin Lan	
Depth Estimation Algorithm Based on Transformer-Encoder and Feature Fusion	160
Linhan Xia, Junbang Liu, Tong Wu	
Research on Optimization of New Thermal Insulation Materials Based on Genetic Algorithm	165
Dongyang Li	
A Rapid Satellite Selection Algorithm for BDS and GPS Dual Constellations Based on Ant Colony Optimization Clustering	171
Wang Zhao, Yang Jie	
Pedestrian detection algorithm based on improved YOLOv5	177
Wenjie Li, Yongguo Zhao, Yanfang Zhang, Jia Gao, Xinran Song	
Improved YOLOv7-tiny for Hazardous Vehicle Detection	183
Yu Tian, Dequn Zhao, Suming Zhang, Hongwei Ma	
Attention Standard Deviation Based Token Sparsification	188
En Gao, Jinzhao Wu, Guowu Yang	
A high-density electrical inversion model coupled with neural network algorithm	193
Rongxiang Fu, Jinwang Li	
Development of a Human Activity Recognition Algorithm Based on BiLSTM for Construction Workers	198
Wanzhou Li, Xiao Sun, Tianxiao He, Taotao Jiang	
Research on short text clustering algorithm combining BERT and BTM	205
Ying Guo, Yonglin Leng	
A Hierarchical traffic sign image recognition algorithm keeping the local topology	211
Longhui Liu, Wenhui Gong, Wenjie Wang, Zhiqiang Zeng, Wei Li	
A steel surface defect detection algorithm based on YOLOv7-tiny	216
Yechen Zhang	
Path Planning Algorithm for Unmanned Sailboat Under Different Wind Fields Based on Dueling Double Deep Q-Learning Network.	221
Zhen Sun, Bo Yin	

Point Cloud-Based Preprocessing Algorithms for Human Pose Estimation	226
Zhenghui Fang, Aifeng Liu, Ke Li, Zhenyu Liu	
A New Recommender Algorithm Based on Signed Networks and Attitude Information Consistency on Online Rating Systems	231
Peng Zuo, Zhen Jia	
Edge Computing-Based Wildfire Detection and Optimization Algorithm	236
Zheng Hu, Sihong Shi, Yiming Ye, Weiwei He, Zhi Yang, Xiaojuan Li, Shengwen Feng	
Patient's Emotion Computing Under Robot Vision	241
Hongjun Chen, Junlian Xiang, Fuqiang Luo, Lei Ma	
Action Quality Assessment with Multi-scale Temporal Attention Mechanism	247
Wei Wang, Hongyu Wang, Yingguang Hao, Qiong Wang	
Refractive Detection System Based on EEG and Singular Spectrum Analysis	252
Hongyi Ren, Yishi Han, Jianyang Gong	
Research on Soil and Water Conservation Measures Optimization Scheme Based on Improved Binary Lion Swarm Algorithm	256
Penghui Cao, Jiapeng Xiu, Zhengqiu Yang	
Optimization of session topic backtracking method based on interactive text	262
Ding Chen, Ziang Song, Zhenyu Song, Yatao Xu	
Infrared Image Recognition of Substation Equipment Based on Yolov5-GDE	266
Dahua Li, Wenpeng Zheng, Xiao Yu, Qiang Gao	
A Knowledge Recommendation Model in Teaching Chinese as a Foreign Language	273
Jingzhe Zhang	
Enhanced Limb Constraints and Global Attention Integration for 3D Human Pose Estimation	278
Binzi Wang, Yang Shu, Xiangrong Fu, Youdong Ding	
A Modified Evolutionary Multitasking Approach with Efficient Knowledge Transfer for Solving Capacitated Vehicle Routing Problems	283
Zhihao Chen, Anqi Pan, Hongrui Shi, Xue Feng	
FFAFR: Feature Fusion Attention Network for Colorful Filter Removal	287
Yang Shu, Liya Tian, Binzi Wang, Xiangrong Fu, Wanyu Yang, Youdong Ding	
Extraction of Keywords for Describing Defects in Standard Rail Lines Bridge Equipment	292
Xinquan Guo, Junbo Li, Kun Shen, Lin Li	
A Vehicle Re-identification model based on global and local feature enhancement and fusion	296
Yadong Zhang, Dequn Zhao, Suming Zhang, Hongwei Ma	
Improved End-to-End 6D Pose Estimation Method Using Multiple Feature Guidance	302
Mingkun Liu, Guangkun Feng, Fulin Liu, Zhenzhong Wei	

Deep Learning Improved Social Force Model to Simulate Crowd in Varying Scenes	307
Dapeng Yan, Chongzhi Bai, Lian He, Gangyi Ding	
A Transformer Framework Based on Self-Supervised Contrastive Learning for EEG-based Emotion Recognition	313
Haolun Wen, Tianyou Yu	
An Improved Underwater Object Detection Method Based on YOLOv5	318
Gang Wang, Sheng Zhuang, Qiang Zhao	
Personalized Learning Recommendation Method Based on Knowledge Graph	323
Lulu Dong, Hao Wang, Lu Yang	
A CNN-based approach combining temporal-shift-module and attention for Motor Imagery classification	329
Miao Cai, Yu Zeng	
A Filtering Non-Discriminative Features Method for Person Re-identification based on Transformer	333
Xuejing Li, Zhewei Zhang, Yujun Cheng, Wenshuang Xing	
A Chinese text classification model based on XLNet and BiGRU	337
Yicai Wang	
Research on intelligent classification of work orders based on TFIDF_SP algorithm and LDA-Word2vec model	342
Donghui Jin, Desheng Wang, Yunhao Hu, Shuqing Zhou, Guanggan Huang, Bangguang Hou, Jia Gao	
Monocular visual odometry based on deep convolutional networks with image enhancement and attention mechanisms	347
Yixiang Wang, Yi Zhang, Xiangde Liu, Zhe Zhou	
From Local to Global: An Anatomy-Aware Deep Learning Approach for Deformable Registration of Brain MR Images	353
Haoyu Liu, Yuanyuan Pu, Jun Ni, Linfei Wang, Xiongbin Wang, Dapeng Tao, Yanhua Yang	
Research on Semantic Matching of Thesis Themes Based on Comparative Learning and Adversarial Training	358
Xu Zhang, Zengzhen Shao, Zhuangzhuang Li, Shuai Han, Yajing Sun	
Enhanced Monocular Depth Estimation: A CNN integrating Semantic Segmentation Embedding and Vanishing Point Detection	363
Bin Li, Xiaofeng Han	
Implicit Sentiment Analysis Based on Chain-of-Thought Prompting	368
Zhijia Duan, Jialin Wang	
Tennis Ball Recognition in Complex Scenes Based on Improved YOLOv5	372
Qizheng Li, Yuan Zhao	

Dp-graph2vec: Learning Differential Privacy Representations of Graphs	378
Hengdi Su, Yingpeng Sang, Hong Shen	
MWRC3D: 3D Object Detection with Millimeter-Wave Radar and Camera Fusion	384
Ren Wang, Ningyun Lu	
TP- Model: A Time Series Classification Framework with Temporal Association Self-Learning Capabilities	390
Zongchao Huang, Kewen Li	
Semantic segmentation of spatial elements in underground garages: A CNN-based Camera-LiDAR fusion method	395
Shiyong Lu, Shaoming Zhang, Songlin Zhang	
Specific Emitter Identification based on ACGAN and STFT	400
Bin Wang, Jun Xie, Feng Wang	
Early Screening for Alzheimer's Disease Based on OCT Image Classification	404
Weiwei Li, Shuang Wu, Yingzi Chen, Xinyu Wang	
Emotional Analysis of Online Evaluation of Tourism Based on Improved Bayesian Algorithm	408
Miao Dong, Weichang Jiang, Rongrong Sun	
Multi-task Learning with Graph-guided Feature Fusion module for Nuclear Instance Segmentation	412
Huanyu Mei, Yunpeng Zhong, Jiabao Fan	
Research on Chinese Named Entity Recognition Methods for Machine Learning	419
Ying Ji	
Research on Taxi-Carpooling Matching Schemes Considering Passenger Personalized Needs	423
Dian Jin	
HRS-Former: A high-resolution ship remote sensing image feature extraction model	428
Zhengding Sun, Gang Zhu, Jiandan Zhong, Lijun Song	
A Multimodal Knowledge Graph Representation Learning Method Based on Hyperplane Embedding	434
Weixing Zhang, Tianyu Du, Cong Yang, Xuexiang Li	
SSA-ECNet: Semantic Segmentation Architecture with Enhanced Cross-Attention Mechanism	438
Minghui Li, Zengmin Xu, Ruxing Meng, Lingli Wei, Weisen Luo	
Instance Segmentation of Nematode Image based on Transformer with Skeleton Points	442
Tenghui Ma, Ke Zhang, Jinzhong Xu, Lele Xu, Chenchen Zhang, Lili Guo, Ye Li	
Feature Disentangled for 3D Object Recognition	449
Anfeng Li	

Study on Combined-CNN Model for Classification of Terrorism Text	453
Rui Lu, Junbo Huang, Yunping Qu, Linying Li	
Research on Weakly Supervised Anomaly Event Detection Method Based on Video Temporal Features	458
Wanru Du, Quan Zhu, Xiaoyin Wang, Xiaochuan Jing	
Multi-Scale Residual Image Stitching Network Combining Homography and Thin-Plate Spline Motion	464
Chenxuan Wang, Yanchao Xing, Yingchao Lin	
NES²Net: A Number Estimation and Signal Separation Network for Single-Channel Blind Signal Separation	469
Zean Dai	
Improving cumulative coal recognition in YOLOv5s network	475
Jianyu Li, Chengliang Zhang	
Resilient Quantized Consensus in Adversarial Environment Using Trusted Neighbors	479
Peng Zhang, Ziming Luo, Sentang Wu	
VAC:Enhanced visual-LIDAR fusion SLAM framework using square Marker	484
Xuewei Tang, Ting Sun, Lei Deng, Baohua Chen	
Transformer-Based Joint Classification Network for Diabetic Retinopathy and Diabetic Macular Edema	488
Zehao Li, Ye Wang, Lin Wang	
Online Maintenance of Disjoint Line Segment Sets Utilizing Treap and Strict partial Ordering Theory	493
Yuanxing Zheng, Lihua Song	
Periodic pulse feature enhancement method based on spectral amplitude modulation and unbiased autocorrelation index	497
Peng Wang, Zhenming Chen	
Artistic Font Generation from Character Stroke Extraction and Controllable Image Diffusion Models	504
Lin Zhu, Li Bin	
Using Emotion Analysis, Eye tracking, and Head Movement to Monitor Student Engagement among ESL Students with Facial Recognition Algorithm (Mediapipe)	509
Axin Huang, Mary Jane C.Samonte	
Advancing Precision in Lung Cancer Subtyping: Integration of Machine Learning Feature Selection with MLP	514
Hao Yu, Siyu Zhan, Shuang Liu, Lu Guo, Rui Huang	
A Framework for Categorizing Complaint using Large Language Model	519
Liu Yuan, Xiaoye Ouyang, Ran Bai, Xiaoling Zhu, Yanguo Zhou, Yi Zhang, Chenyu Liu	

Earthquake electromagnetic precursor anomaly detection method based on EEMD-LSTM-IF	524
Fei Zhou, Yongming Huang	
Optimizing Inception-V3 for Brain Tumor Classification Using Hybrid Precision Training and Cosine Annealing Learning Rate	528
Junxin Wang, Lianzheng He, Xinqi Zhou	
An Adversarial Text Generation Framework Based on Multi-view and Extended Semantic Space	533
Xue Du, Xuanwei Lin, Ximeng Liu	
Lightweight Curve Estimation Method For Low-Light Image Enhancement	538
Guorong Yin, Lingfeng Wang, Haichang Li, Yilun Li	
A feature engineering strategy for data-driven predictive models of educational building's electricity consumption	542
Zhe Li	
Multi-target cloud trajectory prediction method based on improved YOLOv5s and DeepSORT	547
Jinwei Liao, Shuang Chen, Wen Liu, Hang Wang, Xiang Yan, Yong Yang	
MSoln-PSO: Searching for Multiple Solutions and Numerically Verifying the Riemann Hypothesis	552
Enlong Shang	
Research on Tea Shoot Monitoring and Recognition Based on YOLOv5 Improved Algorithm	557
Yongcai Yu, Wei Huang, Shuting Yang, Chen Ming, Hua Chen, Gengfei Zhang	
Electric power multi-source heterogeneous data fusion model based on edge computing	562
Pengzhan Fan, Feng Dai, Yu He, Ze Zhang, Hongming Zhu	
VMD-IDBO-LSTM: Short-term Photovoltaic Power Prediction Models Based on Similar Day Clustering	566
Qian Li, Dong Li, Dahua Li, He Tian, Qiang Gao	
Multivariate Data Acquisition Strategy by Employing Signal Processing on Graph in Edge Computing based Industrial Internet of Things	572
Lishan Yang, Yining Zhang, Chenglin Bai, Hengying Xu, Guizhen Wang, Xuezhen Wang	
Refined rainfall prediction using the RR-DP-PSO algorithmic model	577
Pengying Deng, Liuli Yao, Sicong Huo, Hailin Wei	
Human body parameter measurement based on neural networks and curve fitting	583
Chunyan Liu, Yang Wang, Jiapeng Li, Kejie Zhang, Siyu Liu, Xiayan Si	
Measurement of water content in oil-water two-phase system based on optimized EWT-FK algorithm	587
Wanyang Yan, Lei Liang	

Single Image Reflection Removal with Data Augmentation-Based Training Images	592
Hui Hu, CHIA Wai Chong, YunLi Lee, Kok-Lim Alvin Yau, Han Huang	
Industrial Internet of Things Intrusion Detection Model Integrating Graph Attention Network and Gated Temporal Convolutional Network	596
Chenghe Peng, Ying Zhang	
Direct position determination of OFDM signals via weighted extension subspace data fusion method	600
Yang Qian, Xinlei Shi, Jinke Cao, Xiaofei Zhang	
Linear array DOA estimation based on CNN-SEBlock under low signal-to-noise ratio	604
Xiao Wang, Liang Zhang, Xiangdong Meng	
Learning to Generate Critical Trajectory for Autonomous Vehicle Based on Natural Driving Data	608
Xuhui Fu, Biao Yu, Hui Zhang, Ziwen Zhao, Ziyu Chen, Chen Hua	
A Simulation Parameter Identification Method for Single Peg and Hole Assembly Based on Virtual-Real Comparison	614
Xiaoyao Wang, Zhiqi Lan, Shuo Zhao	
Forest Fire Detection Method based on Improved YOLOv7	618
Peiyuan Shi, Xiaopeng Wang	
Internet of Things Massive Data Analysis System Based on Association Rules Algorithm	623
Chao He	
Optimization Design for Structure with Interval Parameters Based on Adaptive Ant Colony Algorithm	628
Chunyan Pei, Yingshuang Zhang	
TriFusionNet: Comprehensive Adaptation to Viewpoint Changes and Physiological Information Integration in 3D-based Person Re-identification	632
Chunsheng Hua, Wenqian Zhang, Xiaoheng Zhao, Hao Zhang	
Research on denoising method for improving wavelet threshold function based on sparrow optimization algorithm	638
Xincheng Jin, Cunliang Yan	
Pallet Detection and Localization Based on RGB Image and Point Cloud Data for Automated Forklift	642
Dianjun Fang, Jialiang Han, Jiajie Shao, Chunmiao Zhao	
SOC Estimation of Ship Lithium Battery Based on UKF-VFFRLS	648
Siyuan Liu, Menghong Yu	
SMA: A suitable-matching area selection dataset	654
Supeng Jiang, Yunpeng Liu, Depeng Zou, Hengjia Qin, Haibo Luo	
A fall prediction method for the elderly based on graph attention networks	659
Chen Zhou, Lingyi Li, Zhangmin Wang, Julong Pan	

Atmospheric Prediction Model Based on Multi-Graph Spatiotemporal Convolutional Network	664
Ruixiang Song, Yunfeng Li, Qingbo Yu, Xin Xu	
Granularity structure of type II intuitionistic fuzzy information systems and their information measures	669
Qiaozhen Zhang, Qinghai Wang, Wenxin Cheng	
Research on automatic driving hazard cutting scene based on real driving data	676
Shiman Liu, Bo Wei, Pengchao Zhao, Xin Hu	
Key wavelengths screening based on causality analysis in predicting apple brix	681
Sijiang Zhuo, Chaoyuan Cui, Yun Wu, Ye Song	
A New Offloading Method in Cloud Platforms: Reducing Latency based on Data Compression	685
Zhiqin Yang, Zhennan Zhou, Han Dong, Xiaoning Feng	
RunningPoseEval: A Dataset with Evaluation Standards for 3D Human Pose Estimation in Running Training	692
Wenwen Tong, Wen Zhang, Weimin Wang, Guoqing Deng	
Continuous blood pressure estimation via Gaussian regression model with the Bayesian optimization	699
Zhuofan Lin	
Novel ACGAN-based framework fault detection technique for unbalanced data	705
Haodong Wang, Jianhua Lyu, Linchao Chen, Baili Zhang	
Day-ahead load forecasting method considering cumulative effect of temperature	709
Qiang Ye, Yuqing Cai, Wuxiao Chen, Zhijun Jiang, Jiaxin Cai, Kai Liu	
Three-Dimensional Urban Airflow Prediction Method Based on Space-Filling Curve Autoencoder	714
Pin Wu, Longjie Weng, Yubo Wang, Weibing Feng	
Gangue detection method of coal belt conveyor based on shuffle attention and mobilenetv2	718
Tao Hu, Libo Zheng	
Time Series Forecasting Based On Combinatorial Models and Optimization	722
Zichang Sun	
Data Pipeline Training: Integrating AutoML to Optimize the Data Flow of Machine Learning Models	730
Jiang Wu, Hongbo Wang, Chunhe Ni, Chenwei Zhang, Wenran Lu	
Using Machine Learning to Construct a Simplified Scale for Assessing Mental Status Among Undergraduates	735
Meng Yuan, Jun Yang	
Attention Mechanism-based CNN-BiLSTM for Sales Revenue Prediction	740
Yixuan Han	

Grades Prediction Through Use of The BP Nerual Network Model	744
Mingjuan Ding	
A Protein Structure Prediction Approach Leveraging Transformer and CNN Integration	749
Yanlin Zhou, Kai Tan, Xinyu Shen, Zheng He, Haotian Zheng	
Apple Detection and Yield Estimation Based on YOLOv5	754
Zhaoyang Li, Xue Bai, Chao He, Pengfei Jiang	
Research on the Application of Microservices in Command Information Systems	759
Mingchao Han, Jie Zhang, Fuxue Wang, Rui Yan, Yangyang Wang	
Research on Meteorological Data Quality Control Based on Association Rule Algorithm	766
Weiwei Shan, Haoyu Zhang, Yongming Luan, Hongshuo Li, Jinhui Zhu	
Machine Learning-Based Vehicle Intention Trajectory Recognition and Prediction for Autonomous Driving	771
Hanyi Yu, Shuning Huo, Mengran Zhu, Yulu Gong, Yafei Xiang	
A novel data mining framework for discovering association rules in multivariate time series	776
Shengwei Wang, Jianhua Lyu, Baili Zhang	
Momentum Prediction for Tennis Matches based on Counter-Factual Analysis and Multi-LGBM	781
Jingxiang Guo, Jinxuan Zhu, Sixu Lin, Feng Shi	
Integrated Data-Driven and Physics-Driven Multi-Module Magnetic Equilibrium Calculation and Analysis Tool	786
Shuhang Bai, Chenguang Wan, Yemin Hu, Zhi Yu	
Highway Capacity Prediction based on Neural Network	792
Weiting Sun	
Prediction of dissolved gas volume fraction in transformer oil based on CVMD and LSTM	796
Chunming Fu, Xiaolin Chen, Zhen Li, Bing Xu, Haoxue Min, Kun Wang, Yanchun Liu, Gen Li	
Network traffic forecasting model based on Improved Fireworks Algorithm optimized CNN-BiGRU	802
Han Qi, Abdullah Gani, Dianshuo Fu, Changqing Gong, Liyuan Wang	
Cross-domain diagnosis of mechanical system typical faults based on Pretrain-Finetune machine learning model	806
Pengfei Shen, Cheng Tang, Fengrong Bi, Mingzhi Guo	
Online Learning Based Control for Mobile Vehicle to Avoid Static Obstacles via Kernel Based Safe Dynamic Model	811
Somia Kanwal, Ambreen Basheer	
The optimal preventive maintenance strategy for balanced systems considering energy-saving	817
Mengmeng Lin, Yinghao Meng, Zihao Xu, Zhen Yin	

Life cycle maintenance decision of civil aero-engine problem decoupling considering structural correlation	822
Haiguang Liu, Yalong Feng, Zhengfeng Bai, Xuyun Fu	
Development of weld seam recognition system based on line profile sensor	829
Jia Wei, Changming Yang, Zhihua Wu, Li Sun, Junjie Tang	
Limit Protection Control for Solid Ducted Rocket Based on Command Governors	833
Zongyu Zhang, Zongqing Wang, Meng Tang, Qinghua Zeng	
Disturbance Propagation Model of Turn-back Behavior in a Crowd Flow Network and Elimination Mechanism Approach	839
Rongyong Zhao, Rahman Arifur, Fengnian Liu, Yanhua Wu, Rongzhao Huang	
PDR Heading Elasticity Compensation Method Based on Modal Identification	843
Yinshou Sun, Zhi Xiong, Xiaodong Li, Yan Cui, Yunong Qian	
Optimization of Printed Circuit Board Drilling Task Scheduling Process Based on Improved Genetic Algorithm	847
Zuo Wang, Chunrong Pan, Wengqing Xiong, Lifa He, Wenqing Long	
Cubic chaotic initialization joint orthogonal crossbar strategy to improve the whale algorithm	853
Ying Xia, Qingsong Huo, Yanchun Wang, Yinbei He	
Smart Farm Remote Monitoring and Management System	857
Nana Han, Hui Wang, Liguang Wei, Qi Wang	
Research on Control Method of PVC Distillation Process Based on PSO-BFO	863
Lei Zhang, Yong Kang, Xiaomeng Dong, Siyu Wang, Yunsheng Wang, Shunyi Li	
Research on AC control strategy of battery electric vehicles based on fuzzy PID	868
Hong Zheng, Ting Dong, Wenbo Li, Wei Wang	
Coordinated Scheduling Optimization of Automatic Container Terminal Based On Hybrid Genetic Particle Swarm Optimization Algorithm	873
Heyu Huang	
A modified parameter optimization method of support vector machine based on genetic algorithm	878
Junyan Yang, Xiaorong Zhang	
Optimization of Disassembly Sequence Based on Improved Bald Eagle Search Optimization Algorithm	882
Zhiyong Luo, Chao Xu, Xin Dong, Pengzhen Hong	
Enhancing Neural Network Efficiency with Streamlined Pruned Linear Adapters	887
Chenyang Mao, Yanjun Guo, Zhe Zhu, Tuo Leng	
Fatigue detection system for extracting driver's eye features	891
Weihang Chen, Xuebai Zhang, Sigan Chen	

A Novel Real-time Laser Targeting System Based on Hybrid Differential Algorithm	895
Lei Huang, Lei He, Wugang Lai, Fanqiang Lin	
Research on brake stability control strategy for distributed electric vehicles	899
Han Luo, Mamatjan Tursun	
Optimization of Clamping Die Axis Control Strategy for Pipe Bending Machine Based on DEFORM-3D Finite Element Analysis	907
Liang Zhang, Qingzhu Zhang, Chenghao Liao, Lianghong Li, Yulan Wei, Bing Li	
Robot-aided Aiming Coordinate Positioning System Based on Vision and Infrared	911
Zhen Zhang, Bing Li, Yulan Wei, Zhaoxiang Dong, Boyang Zhang, Yang Zhang	
Research on Building Environmental Quality Evaluation Based on Improved Genetic Algorithm	915
Xin Huang	
Research and Implementation of Fuzzy Test Method Based on Multi-armed Bandit	920
Yiwen Qin, Jincheng Jiang, Changzhi Li, Futao Lu, Kaiwen Deng, Zengyu Yang	
A Novel Frequency Recognition Method for SSVEP Based on Multi-stimulus Multi-subset Strategy	926
Jiayi Li, Xiaoyan Deng, Zhuliang Yu, Manqi Lin	
Research on Traffic Scheduling Optimization of Vehicle Ethernet based on TSN	933
Xuguang Hou, Daliang Sun, Shengli Huang, Jiabao Fan, Guangda Liu, Lieyan He	
A Hybrid Remora Optimization Algorithm with Variable Neighborhood Search for the Flexible Job Shop Scheduling Problem	942
Zheng Yang, Xiaodan Liang, Yajing Li, Haoyue Wang	
Integrated control strategy for nonlinear PID cross-coupling contour error compensation based on active disturbance rejection control	951
Yongliang Lu, Jun Zhao	
Building a Smart Agriculture System Based on STM32	958
Baichu Peng, Jinsen Hu, Laiquan Deng, Qiuxiang Tao, Wen Chen, Weilin Yin	
Thermal runaway detection of lithium-ion battery based on SE-Res-LSTM	962
Zhicheng Cao, Changhao Li, Yuancheng Cao, Shuping Wang, Jiaqing Zhang	
Yaw Stability Control in Electric Formula Racing Cars Considering Tire Stability Margin	968
Yufan Qian	
Power Grid Resource Early Warning Strategy based on Mutation Identification	972
Ling Luo, Long Chen, Shunli Lv, Tianyu Wang, Xin Liu, Zhongqi Guo	
Microservice Traces Anomaly Detection Based on Structural Clustering and Graph Attention Autoencoder	977
Yu He, Xiuguo Zhang, Peipeng Wang, Mingxiu Liu, Zhiying Cao	

Research on Optimal Logistics Configuration Based on Game Model	982
Yuzhen Li	
Utilizing Deep Learning for Enhancing Network Resilience in Finance	987
Yulu Gong, Mengran Zhu, Shuning Huo, Yafei Xiang, Hanyi Yu	
Optimization of PID Control Strategy for Mars Probe Landing Process	992
Yu Peng, He Xiao, Yang Yu	
GRDNet: A Lightweight Railway Foreign Object Intrusion Detection Algorithm	998
Zhaonan Wang, Lin Wei, Caixia Meng, Lei Shi, Yufei Gao, Qingxian Wang	
A scheduling method based on an improved niche genetic algorithm for engineering machinery and equipment considering construction processes	1003
Ping Shen, Zhongsheng Yang, Hanming Zhou, Weilong Xue	
Server load balancing scheme based on Weighted-Round Robin combined with Least Connections algorithm in SDN	1008
Yue Zhou, Chunyou Liu	
Research on identification and positioning method of coal carriage based on improved YOLOv5	1013
Lingfeng Zhang, Chengliang Zhang	
Optimization Study of Variable Spray Technology in Dust Removal Systems	1017
Baoren Wang, Yifei Zheng, Shuang Yao, Yongquan Wang	
Research on tow surface defects detection technology based on YOLOv5	1021
Zhuochen Li, Xin Liu, Min Li, Hua Bai, Yutong Fu	
Algorithm improvement strategy for ship Controllable Pitch Propeller propulsion system based on improved PID control	1030
Haoyu Hu, Guichen Zhang	
Smart Parking Guidance System	1034
Shenghua He, Yucong Kuang, Haoxiang Wang, Chaoyang Yang, Yun Shi, Jiahao Yue	
Profit maximization decision of supermarket based on heritage algorithm optimization	1039
Yang Zhang, Jiang Li, Wenjia Chen, Yongxing Xiao	
Optimization of Multi-UUV Cooperative Detection Formation Based on Particle Swarm Optimization	1043
Yonghao Zhang, Changyou Xue, Jiakuan Yang	
Research on Effectiveness Evaluation Method of Acoustic Detection Equipment Based on Grey Clustering	1049
Zikang Liu, Wentie Yang, Zuoshuai Wang, Yidong Xu	
On randomized block Gauss-Seidel methods for solving inner inverses of a matrix	1054
Zhiwei Guo, Wendi Bao, Lili Xing, Weiguo Li	

A Study of Reliability Algorithm for Repairable Control System Based on Markov Process	1061
Hong Wang	
Optimization of Cluster Transportation Task Scheduling Based on Reinforced Genetic Algorithm	1065
Jiaqi Li, Zhi Zhang, Xiaobing Shang	
Electric Vehicle Charging and Discharging Based on Multi-agents Reinforcement Learning	1070
Jian Yu, Bifeng Yang, Liwei Gu, Ting Chen, Wenhao Zeng, Daisen Bian, Chunguang Liu	
A Hybrid Starting Method Based on Improved Sliding-Mode Control for Permanent Synchronous Motor	1076
Xinyue Jin, En Xie	
Decrease Longitude Diversity in Lane-conditioned Trajectory Prediction	1082
Xiang Xu, Xiao Wang, Jin Tang, Futian Wang	
Performance Improvements in Natural Gradient Descent Method	1089
Fengyu Le, Shaojun Dong	
Dynamic Modeling and Control Research of 6-DOF Parallel Mechanisms	1093
Qinghong Li, Yuanyuan Xu, Bin Zhao	
Fault diagnosis of Motor bearing based on improved SSA optimized VMD combined with convolution Neural Network	1098
Hongkai Zhang, Ting Fang, Fanliang Meng, Jiaming Han, Chong Dong	
Autonomous Vehicles Driving at Unsigned Intersections Based on Improved Proximal Policy Optimization Algorithm	1107
Yu Jiang, Yiying Wei	
State of Charge estimation of Lithium-ion Batteries based on Temporal Convolution Network and Unscented Kalman Filter	1113
Chao Huang, Yiying Wei, Chen Zhou	
Deep reinforcement learning-driven wireless sensor placement for IIoT-integrated smart production	1120
Xiaozhu Liu, Xiang Yin	
An estimation method for state of charge of lithium-ion batteries based on adaptive multi-innovation fractional order unscented Kalman filtering	1127
Weimin Gu, Zuxin Li, Shengyu Shen, Ping Yu, Wusong Dong, Dingding Liu	
Design of Low-power YOLO Accelerator Based on FPGA	1132
Yunhui Qu, Jintao Wang	
Automatic driving lane change safety prediction model based on LSTM	1138
Wenjian Sun, Linying Pan, Jingyu Xu, Weixiang Wan, Yong Wang	
Research on High Precision Distance Measurement of Femtosecond Laser Based on Discrete Kalman Filter	1143
Zeming Zhang, Tianliang Jiao, Sheng Zhang, Yuanqin Xia	

Research on Key Technologies for 3D Collaborative Design of Substation	1148
Yuan Gao, Xingyu Ran	
Adaptive sliding mode fault-tolerant control of redundant electro-mechanical actuator system	1152
Jianzhong Yang, Kang Yuan, Xiaozhe Sun	
Rolling bearing fault diagnostics using SSA-ELM and TVF-EMD multi-scale entropy	1158
Shuo Song, GuangcuanWu, Wenbo Wang	
A navigation method for UUVs under ocean current disturbance based on deep reinforcement learning	1165
Dan Zou, Lina Lu, Weihua Zhang, Jizhou Guo	
PFEMEF-DET: All-Weather Surveillance Detector Based on Progressive Feature Enhancement and Mutual Enhancement Fusion With Visible and Infrared Sensors	1169
Hongzhi Xie, Runxin Niu	
Foreign object detection method in aerial images of power transmission lines based on scale adaptive YOLOv5	1174
Xudong Chen, Lili Han, Yali Huang, Junwei Gao, Yinghao Xiao, Baoguo Xue, Lingli Peng	
A smoke flow control method for aircraft cargo cabins considering delay and disturbance	1179
Jianzhong Yang, Shanghua Guo, Xiyuan Chen	
Fault-tolerant control of remotely operated vehicle thrusters based on the dung beetle optimizer	1186
Zheyuan Yin, Wenyang Gan, Jiexiu Ou, Zhuo Wang	
NBD-YOLOv5: an efficient and accurate aluminum surface defect detection method	1190
Dingcong Wu, Fanqin Meng	
A lightweight model for detecting overlapping anomalies in steel sections based on yolov5	1197
Dunhui Xiao, Ting Fang, Jiaming Han, Chong Dong, Shijian Luo, Shuai Liu	
Routing optimization of electric vehicles under uncertain travel time	1204
Shijie Lai	
Research and Application of Variational Mode Decomposition in Sluice Vibration Detection	1208
Peng Ding, Qin Li, Jinghong Li, Pengxiang Yu	
Research on pavement crack detection based on improved YOLOv4	1212
Qian Liu, Zhen Liu	
A power parameter optimization method for pure electric buses based on urban driving cycle	1218
Chenyang Li, Tengchao Huang, Longxiang Chen, Qiang Lin, Qingyuan Zhu	
Detection of Solid Material Leakage Based on Deep Convolutional Neural Network	1223
Xiangyu Zhao, Xueyi Zhang, Zipeng Zhao, Ruirui Zhao	

An Output-Controllable Stochastic MTJ Spin Based Ising Machine for Solving Combinatorial Optimization Problems	1229
Haodi Tang, Wenhan Chen, Luo Hong, Yufeng Xie	
Research on Over-Speed Protection Control Method for Aircraft Engines Based on Control Barrier Functions	1233
Bai Jie, Zeliang Xu	
Design of Open Modular Avionics for Launch Vehicle Test and Launch Control System	1238
Cong Xu, Zhen Ling, Pengfei Xu, Qiangqiang Sui	
Application of impedance control based on multi-subgroup improved Marine predator algorithm in compliance control of robotic arms	1243
Zheng Zhang, Wenbin Wu	
Efficiency Optimization of Three-Phase DAB Converter Based on APWM Cascade SPS Control	1248
Xiaoxian Qu, Xueqin Bi, Can Wang	
Research on Mobile Intelligent Detection Technology Based on Local Features of Assembly Process Quality Based on Multi-Visual Sensor Fusion	1253
Qian Wang, Man Qiu, Wanzhen Wang, Hanyu Zhang, Fei Chen	
Simulated smoke closed-loop flow control method in aircraft cargo hold	1257
Jianzhong Yang, Taian Zhao, Xiyuan Chen	
Short-Term Wind Power Prediction under Cold Wave Weather Conditions based on Neural Prophet	1262
Jiaqiu Hu, Wenchuan Meng, Jian Tang, Yixin Zhuo, Zhi Rao, Siyang Sun	
Comparative Study of CKF and UKF in Dimensionality Reduction Fast Transfer Alignment of Inertial Navigation Systems of Shipborne Equipment	1267
Yongjun Wang, Jingshuo Xu, Shaokang Ji	
Application and development trend of electrical automation engineering control system	1271
Zijun Yu, Qian Liu	
A BERT-based with fuzzy logic Sentimental Classifier for Sarcasm Detection	1275
Jiakun Dai	
Research on multi-UAV logistics distribution model based on improved particle swarm algorithm	1281
Tianshi Liu, Yingna Duan, Minjie Hao	
Optimization of Reentrant Hybrid Flow Shop Scheduling Problem Based on Improved Grey Wolf Algorithm	1286
Yue Yu, Yang Hu, Yanran Ge	
An Optimized Extreme Learning Machine Based On Improved Dung Beetle Algorithm	1291
Ying Lan, Xiaoyu Lin, Yang Li	

Design and Application of Active Monitoring System for Secondary Equipment in Substation	1297
Ji Zhang, Zheng Liu, Ling Luo, Haiquan Wang	
Washing Machine's Working States Recognition Based on Audio Fusion Feature	1302
Siqiang Xu, Cuiyun Gao, Yang Zhao, Zengyuan Wu, Fei Du, Hongqiang Wang	
The use and improvements of permanent magnet synchronous motors in the field of new energy vehicles	1307
Zisong Huang, Qian Liu	
Bi-directional Joint Model for Intent Detection and Slot Filling	1311
Bin Luo, Baiming Feng	
Design of a Trace Logistics Vehicle based on STM32 Microcontroller	1315
Jianzhuang Zhang, Chengliang Zhang, Mingyuan Ma, Gaoya Feng	
Key Parameter Identification for Elevation Equilibrator Electro-Hydraulic System Based On Improved PSOA	1319
Shanping Yang, Yuewu Li, Dangyong Shi, Bo Yan	
Research on lane-changing model for intelligent vehicles based on sparrow search algorithm	1324
Li Zeng, Tao Peng, Qiang Chen, Ningguo Qiao, Tingting Duan, Jinfeng Gong, Shenhao Hou	
Upsampling Autoencoder for Self-Supervised Point Cloud Learning	1328
Jian Shi, Genfu Yang, Zizhao Wu	
Autonomous Driving in Unity Simulated Environments using End-to-End CNN Approach	1335
Yi Fan	
Evaluation of anti-UAV swarm combat effectiveness based on grey cluster analysis	1339
Runze Wu, Weishi Peng, Yixuan Ma	
Simulation Study on Biped Walking Gait in Low Gravity Environment Based on Computer Human Body Measurement Model	1343
Chunhua Xue, Jianjian Lin	
Quadruped Robot Motion Control Method Based on Adaptive Weight Coefficients MPC	1347
Zhipeng Nan, Lin Xu, Chengleng Han, Guorui Zhao	
Flight test requirements evaluation techniques based on Evidence Network	1355
Yu Jia, Shuang Wang	
Quantum Ensemble Learning with Quantum Support Vector Machine	1359
Zhiqian Yu, Zhaoyun Chen, Cheng Xue	
Route Planning for Intelligent Agents Based on Improved A * Algorithm	1364
Bing Liu, Yunhong Ma, Zheping Pan, Nana Guo, Shiqiang Hu, Lingkun Luo	
Trajectory planning of 6-DOF manipulator based on joint space	1369
Guoxin Li, Jingyue Song, Wenjing Zhang, Qiangjian Wu	

Integrating improved DWA with A* algorithm for robot path planning	1373
Chongqiang Xia, Zhengguang Ma, Guangliang Liu, Yanfang Zhang, Yali Wang, Jiamei Wang	
Research on Stiffness Adaptive Admittance Control for Wheelchair Robotic Arms Based on Fuzzy Control	1378
Jiacheng Li, Haitao Luo, Pengyu Gao, Desheng Zeng	
Trajectory Planning Method for Underwater Mobile Robot in Nuclear Power Plant	1384
Zhi Liu, Jun Liang, Jianqiang Hu, Li Chen	
Reliability Assessment of Target Recognition Task Based on Unmanned Aerial Vehicle Simulation System	1389
Wenfei Wan, Yusen Lin, Mu Chen, Pengfei Xu, Xiaobing Li, Bin Shang	
Research on Geometric and Dynamic Modeling of Robot Football Match Based on Deep Learning Algorithm	1393
Tianbo Yu, Yue Wang	
Research on Asphalt Pavement Crack Detection using YOLOv5 Model	1397
Wenxiu Wu, Xiaoyong Zou, Zhihua Fang, Xiangzhen Fang, Xiaohong Song, Aiping Yang, Zhen Liu	
Kinematic Analysis and Control of the Handling Robotic Arm	1402
Yu Shi, Yanchen Liu, Pengke Guo	
Research on Automatic Identification of Asphalt Payment Defects Based on Deep Learning	1407
Huang Jing, Xinxu Zhang, Zhihua Zhang	
Multi-objective particle swarm optimization-based optimization model for heliostat field design	1413
Kylin Zhang, Haodong Sun, Fangpo Li, Zhenzhen Gao, Dong Wang	
High-fidelity Joint Self-Driving Simulation Platform for Unmanned All-Terrain Vehicles	1420
Chunmao Jiang, Runxin Niu, Xuhui Fu, Ziwen Zhao, Hui Zhu, Hui Zhang	
Construction and application of artificial intelligence crowdsourcing map based on multi-track GPS data	1425
Yong Wang, Yanlin Zhou, Huan Ji, Zheng He, Xinyu Shen	
Research on Motion of Multi-DOF Pipe Bending Robot	1430
Haonan Ye, Bing Li, Yuanbin Wang, Qingzhu Zhang, Yulan Wei, Yiqing Wu	
Robust Multi-Sensor Fusion SLAM Based on Road Network and Reflectivity Enhancement	1434
Ziyu Chen, Hui Zhu, Biao Yu, Xuhui Fu, Chunmao Jiang, Shijin Zhang	
Multi-stage Local Path Planning Algorithm Based on Obstacles as Anchor Points	1440
Jianyi Zhu, Xiaojun Wang, Xianyu Qi, Bin Lian, Yanpeng Dong	
Vehicle local path planning based on artificial potential field method	1446
Junwen Pan, Yi Jiang, Jin Mao	

Path planning algorithm of mobile robot based on improved Q-learning	1450
Ze Yu, Jin Mao, Wei Qi	
Design and Implementation of an AI-Driven Hybrid Framework for Risk Assessment	1454
Haibo Zhang, Xi Yang	
Automatic Programming Method and System of Multi-axis CNC Pipe Bender	1462
Boyang Zhang, Yulan Wei, Liangyou Li, Jiwen Peng, Hongtao Han, Bing Li	
UAV Path Planning by Fusion of Improved Ant Colony and Genetic Algorithms	1466
Zifeng Yang, Chen Huang	
An optimal allocation method of driving forces for a redundantly actuated parallel chewing robot	1470
Guifei Wang, Jinying Zhang, Xiaoli Ma, Jian Chen	
Research on Automatic Registration Method of Three Dimensional Point Cloud for Robot Patrol Trajectory in Substation	1475
Zhuowei Xu, Guowei Xu, Daoqing Fan, Yu Ma, Kai Peng	
Force Demand Planning of UAV Cluster Adversarial via Hybrid Group Swarm Optimization	1479
Jingyan Zhao, Xiaoxiang Hu, Hanyu Qian, Wenjie Guo	
Kinematic Parameter Calibration for Parallel Robot based on Robust Estimation and PCR algorithm	1485
Jin Wang, Renge Zhang, Weijun Hu, Haiyun Zhang, Guodong Lu, Silu Chen, Jingbo Luo	
ARD-Unet: An Attention-based Redisual Dense Unet for Accelerated Multi-modal MRI Reconstruction	1491
Cheng Yang, Hongwei Du	
FLF_YOLO: an efficient and lightweight network for small target detection in aerial photography	1497
Bin Jia, Naixiang Ao, Xinyi Wang, Xueyi Zhao, Bingbing Xiong	
Efficient Cross-Scale Integration For UAV Object Detection	1501
Zhengyang Wang, Yue Yu, Zihan Hu, Yijia Zhu	
Memory Teacher: Memory Fusion and CARF for Semi-supervised Pest Region Detection	1505
Jiale Zhou, Junqing Zhang, Jiqing Chu, He Huang, Youqiang Sun	
Benders Decomposition for Inventory Routing Problem under Milk-Run	1509
Ke Zhou	
Grasp Control Method For Robotic Manipulator Based On Federated Reinforcement Learning	1513
Yue Wang, Shida Zhong, Tao Yuan	
Intelligent Navigation Method for Substation Inspection Robot Based on 3D Point Cloud	1520
Sheng Fan, Guowei Xu, Daoqing Fan, Zhidan Fang, Rongzhou Liao	

Efficient Compiler Option Tuning: Exploiting Objective Interdependencies for Enhanced Performance	1524
An Shao	
Localizing Drones From Monocular Images Using Modified YOLOv8	1528
Qi Qin, Changzhen Qiu, Zhiyong Zhang	
Modified WFO: A Novel WFO Variant for global optimization problems	1533
Xiucheng Shen, Ning Fang, Junmeng Cui, Qi Cao	
A visual-inertial SLAM-based localization method for intelligent vehicles in weak textured environments	1538
Yongxiang Zhang, Mingheng Zhang, Chengzhong Xu, Chunqi Wang	
Grouped Guidance Convolutional Networks for Absolute 3D Human Pose and Joint Rotations Estimation	1545
Hua Zhang, Shujie Li, Wei Jia	
Gait Recognition Based on Modified OVR-CSP Fusion Feature and LSTM	1551
Xiaoyu Dong, Cuiyun Gao, Zhonghai Lu, Wanli Zhang, Yang Zhao, Xinyu Jiang	
Design of dual-robot collaborative handling control system	1555
Li Wang, Bingfeng Qian, Lei Zhang, Shenjie Chen	
A Human-computer Interaction Optimization Method for Command and Control System Based on Gesture Complexity	1560
Jiaying Li, Jiadao Huo, Quanmao Yao	
Stochastic Analysis of Touch-Tone Frequency Recognition in Two-Way Radio Systems for Dialed Telephone Number Identification	1565
Liqiang Yu, Chen Li, Longsen Gao, Bo Liu, Chang Che	
Target Detection system of Microrobot based on YOLOv5 algorithm	1573
Xin Yi, Hao Li	
The path planning research for mobile robot based on reinforcement learning particle swarm algorithm	1577
Yang Yang, Linhao Zhang, Haodong Guo	
Load Balancing Job Shop Scheduling with AGVs: a Multi-objective Optimization Approach	1581
Zhenhong Ye	
Process Planning Generation for Reconfigurable Manufacturing Systems Based on Improved Squirrel Search Algorithm	1586
Dong Li, Jiping Yang, Xiaorong Gong, Qing Xia	
AUV 3D path planning based on improved sparrow search algorithm	1592
Yao Cheng, Wengang Jiang	
Adaptive Control of Extracorporeal Membrane Oxygenation Based on Extremum Seeking Control	1596
Hanlin Wang, Shiwei Wang, Wei Zhang, Nan Liang	

Physical Layer Security Performance Optimization of Unmanned Aerial Vehicle-Assisted Wireless Network	1600
Zichen Yang, Woping Xu	
MetastasisGuard: Effective Neural Network for Bone Metastasis Risk Prediction in Breast Cancer	1606
Yixin Xue	
UE-GS: High-quality 3D Gaussian Splatting real-time rendering for Unreal Engine	1610
Xiaodan Jin, Xuefei Han, Hai Nan, Zhijian Xue	
Industrial Mobile Manipulator Motion Planning based on Double Work Space Using Improved Genetic Algorithm	1616
Xin Zhang, Bo Wei, Yizhou Li, Xinyu Kong	
Author Index	