2025 10th International Symposium on Advances in Electrical, Electronics and Computer Engineering (ISAEECE 2025)

Xi'an, China
20-22 June 2025

IEEE Catalog Number: CFP250J9-POD
ISBN: 979-8-3315-1339-9

Copyright © 2025 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: CFP250J9-POD
ISBN (Print-On-Demand): 979-8-3315-1339-9
ISBN (Online): 979-8-3315-1338-2

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

Offshore wind power capacity prediction based on integrated optimization model 1
Cheng Yang, Lili Kang, Ying Li

Non-Cooperative Bidding Strategy in Electricity Markets Based on Multi-Agent Deep Deterministic Policy Gradient 6
Qingkai Sun, Peng Ji, Hexiao Liang, Xin Chang

A Comprehensive Study on Electricity Market Clearing and Bidding Strategies Using Nash Equilibrium 10
Qingkai Sun, Xian Zhang, Ziming Ma, Xin Chang

Research on an Optimization and Dispatch Decision-Making Model for Electricity Market Operation Based on Big Data 15
Qingkai Sun, Zheng Zhao, Menghua Fan, Dengfeng Wang, Su Yang, Qiuyang Ma

Federated Learning-Enhanced Distributed Ledger Framework for Electricity Trading Data Assets Rights Confirmations 19
Shijie Ji, Mingyang Lei, Zhuyu Shi, Wanli Hu, Ning Yang

PV Power Prediction Method Based on NGO-Improved VMD Decomposition and TCN * 26
Jiaojiao Qiao, Haoyang Huang

Research on Evaluation system and method for the Efficiency and Benefit of Power System with High Proportion Renewable Energy Planning 30
Guifen Jiang, Xu Gui, Peiru Feng, Jiaqing Wang, Xuli Wang

High order harmonic error compensation strategy of voltage based on phase-locked loop 38
Rongxing Zhang, Tuanlong Zhang, Qingshuai Yu

A Novel Deep Reinforcement Learning Approach for Microgrids Scheduling Considering Demand Response and Vehicle-to-Grid Systems 44
Weina Zhang, Zhikai Xi, Zhongqin Bi, Yingyi Hong

Optimal scheduling of multi-energy complementary systems based on an improved NSGA-II algorithm 50
Xingtao Song, Jiayu Wang, Yuhai Zhang, Panpan Zhang, Ruikang Zhang, Ranran Wang

Research on the optimization strategy of battery capacity in an islanded microgrid 56
Jianye Dong, Hao Liu, Xingtao Song, Panpan Zhang, Yuhai Zhang, Ranran Wang

Research on Electric Charge Calculation and Risk Control Strategy Based on Electricity Market Environment 62
Shuhua Pan, Wenzhe Yang, Zishen Gan

Synergistic Strategy for Electric Vehicle Charging Infrastructure Planning and Energy Management Based on Multi-Objective Optimization 68
Yong Jin, Yue Zhong, Xiang Chen, Zheng Wu

Enhanced Air Conditioner Power Identification under PV Disturbances Using a Staged Model 73
Zhiheng Xu, Chong Gao, Ran Cheng, Junxiao Zhang, Tao Yu, Minhang Liang

A Deep Learning-Based Substation Siting Assistance Method 78
Fei Meng, Jing Liu, Liangfu Zhang, Leilei Xu, Yankun Du

Substation Site Selection Based on Power Load and Topographic Factors 83
Tianheng Guo, Shen Luo, Xiaoyi Tang, Rongzeng Yu, Yi Zhou

Research on the efficiency improvement algorithm of electric vehicle energy recovery system based on GaN power module 88
Feng Chen, Lan Yue, Guoping Xu, Hongjing Liang, Shangxi Li

Research on Digital Transformation of Electrical Systems in Nuclear Chemical Plants 93
Jingbo Zong, Meng Wang, Yifei Zhang

Robust Optical Power Forecasting Across Temperatures: A New L-I Model with Enhanced Temperature Dependence 99
Jingxiang Yang

A Novel High-Resolution Prediction Model of Photovoltaic Power Generation with a Multi-Attention Mechanism 104
Wei Zhao, Zhen Xiong, Yong Zhang, Fuen Xue, Ang Sha, Shuo Chen

Research on Current Ringing in Dual Active Bridge Converters 108
Lidong Shi, Baolei Dong, Xu Huang, Xiao Wang, Mochen Xu, Xiaobin He

MPPT Control Strategy for Photovoltaic with Partial Shadow Based on Improved Squirrel Search Algorithm 113
Zhanzeng Li, Yunrui Zhang

Frequency Security Assessment of Power Systems Based on Dynamic Inertia Constants 119
Jie Fu, Qian Zhang, Weilong Tao, Xunting Wang, Haiwei Wang

Short-term prediction of photovoltaic power generation for small sample based on generative adversarial networks 124
Minjie Wang, Qian Zhang, Weibo Yuan, Jinjin Ding

Analysis and Optimization Suggestions on the Automatic Transfer Switching Logic of the 10kV Station Service Power System in Converter Stations 128
Junjie Lan, Cheng Yang, Dabin Huang, Shiwei Zhao, Han Zhang, Shikai Li

Multi-timescale Load Forecasting Based on Deep Diffusion Modeling
Chao Yang, Zhongwei Heng, Hua Zheng, Changsheng Su, Shaofei Lu, Ruixuan Zhang, Siyuan Liang 133

Research on torque pulsation minimization strategy based on fractional order ILC and sliding mode control PMSM 138
Tianyi Lan, Yifan Xue, Bingjun Liu, Jiakang Wang

Research on the Issues of Motor Losses and Torque Ripple for BLDC Motors 144
Kehao Cai, Lifang Shen, Chuanhui Zhu, Hao Wang, Xinxue Wang

Research on Loss and Theft Prevention Logistics Solution Based on NFC and Anti-Open Circuit Wiring Technology 149
Haiqing Jiang, Rui Gao, Xue Li

A Virtual Synchronous Control Algorithm Based on Enhanced Adaptive Sparrow Search Algorithm 153
An Chen, Jingxian Sun, Cheng Zhang, Shen Luo, Fei Meng, Yijiang Wu

Load Prediction of electric vehicle charging station based on ASC-GCN-LSTM 161
Zhong-wen Shang, Qian Zhang, Min-jie Wang, Jie Fu, Yong Zhang

Research on Fire Safety Emergency Management Model Based on Multi-Agent Simulation 166
Guoyu Liu, Zhihui Chen, Xinhui Wang, Xiaobin Liu, Zhimin Chen, Tiande Luo

Analysis of the Causes and Optimization Methods for Small Current Error Fluctuations in Measurement 170
Jingfeng Yang, Fusheng Li, Bin Qian, Xiangyong Feng, Hongxuan Luo, Yi Luo

Improved extremely random tree based low voltage user electricity theft and breach of contract identification technology 175
Daiwei Chen, Fenqiang Li, Fuhua Li, Jiazi Chen, Xiaodan Zeng, Xing Jin, Zhiheng Jiang

A Strategy for Airborne Distributed Parallel Data Transmission Based on FPGA 179
Hao Zhang, Zhiyong Zhang, Yitong Lu, Jun Zhao

Precision Time Synchronization Measurement System Based on Shift Counting Method Using FPGA 184
Yunhao Gao, Binxin Hu, Pengcheng Hao, Rong Zhang, Feng Zhu, Guangdong Song

Design and Implementation of a High-Voltage Fast Switching Positron Beam Cluster Signal System 188
Hui Wang, Fuyan Liu, Jinfeng Xiao, Hongqiang Zhang, Xiaotian Yu, Xin Ouyang, Mian Wang, Haibiao Wu, Peng Kuang, Zhang Peng, Baoyi Wang, Xinzhong Cao

Immunity test and failure analysis of tunneling magnetoresistance current sensor 194
Guanying Wang, Xianfeng Liang, Genghui Deng, Yansong Zhang, Meizhen Xiao

Optimization of Support Vector Machine Model Based on Kernel Function Selection and Its Application in Electromagnetic Environment Adaptability Analysis 199
Mingzhong Liu, Yao Yu, Meng Jun, Junfeng Chen, Zhi Yuan, Hongrong Yang

Power Transformer Audio Anomaly Detection Based on the Hybrid Time Attention Spectrogram Fusion Network 203
Yu Peng

A Cyber Threat Intelligence Sharing Scheme Based on Consortium Blockchain in the Energy Industry 207
Xueqin Gao, Rixuan Qiu, Zhiyuan Luo, Kai Chen, Tianfu Xu, Qun He, Yunqing Hu, Xiaoxue Bai

Parameter estimation method for micro-motion target based on pseudo-range profile sequences 212
Xun Han, Xin Feng, Jia Zheng, Yin Kuang

Impacts of Mobility during Security Attacks in MANETs 217
Tingfang Sun, Abdur Rashid Sangi, Shengyi Qi, Yiyang Hu, Zhuchang Gu

Attention-Driven Deep Reinforcement Learning for Efficient Task Offloading in Mobile Edge Computing 223
He Dong, Zheng Dou, Yanqi Ji, Jian Dong

Air UAV tracking algorithm based on Transformer 229
Xinyu Bai, Mengyu Sun, Peng Wang, Shuangquan Li, Xiaoyan Li, Bin Wang

Hardware Design of Trigger Control System for Time-Frequency Domain and Pulse Analyzer 234
Zhifeng Zhang, Long Li, Ting Qu, Cui Li, Yang Liu, Lun Zhang, Yanping Pu, Naili Guo

Real-time identification method of power grid impedance based on intermittent harmonic injection 239
Qiukun Zou, Xiaolong Zhou, Yanfeng Meng, Wenbiao Li, Congcong Zhang

A high-precision frequency offset estimation method for GMSK under the condition of signal starting position deviation 244
Yuqi Wei, Xu Li, Ying Liu

Doppler-aided positioning based on Kalman filtering method for fused LEO navigation systems 249
Weiwei Wang, Zhangjian Lu, Lin Han, Yuanbo Yao, Lianjun Xu, Guoyong Wang, Lang Bian

Design and ground simulation verification of low-frequency cable for unmanned autonomous detection of complex mechanism products in space 253
Haiyuan Wang, Yingchun Wang, Nai Zhang, Changhe An, Hongwei Li, Kun Wang

Network Fault Prediction Method based on CNN-LSTM-Attention 260
Shuyi Dong, Zhigang Huang, Zhengzhou Yang, Jing Chen, Wantong Han, Zhengzhe Cheng

Wavelet-Enhanced Multi-scale Swin-Deformable DETR for SAR Ship Detection 264
Junjie Zeng, Xinxin Tang

Infrared and Visible Image Fusion Model Based on Wavelet-Convolution and Transformer 268
Yanwei Chen, Lihan Zheng, Yapeng Wu, Chen Yang, Haoyan Guo, Wentao Shi

High isolation UWB-MIMO antenna with notch characteristics 273
Mingming Gao, Xue Zhao, Xinyue Zhang, Xuan Du, Ruize Huang

Non-Invasive Intraocular Pressure Monitoring System Based on Amplitude and Phase Detection Technology 277
Xin Zhang, Xin Ma, Tongyu Guo

An Improved Canny Algorithm for Corneal Topography in Placido 281
Tongyu Guo, Xin Ma, Xin Zhang

A Digital AGC Design Method Based on RF Digitization 285
Chao Fu, Feng Xu

Design of a Compact High-Rejection Bandpass Filter for K-band Downconverters in Satellite Communication Systems 289
Siyi Wang, Simeng Wang, Libo Wu, Ni Zhong

A Lightweight Security Authentication Protocol for VANET Traffic Emergency Message Broadcasting 293
Aocheng Yang, Jintao Yao, Wenxue Wei

Tree Structure Optimization Based on NeRF Reconstruction: Single-Tree Segmentation and Skeleton Extraction 305
Hongchun Qu, Xiaojun Liu, Dongju Lu, Bo Fang

A Multi-Level Attention-Fused Large Kernel Network for Remote Sensing Image Segmentation 312
Jing Li, Peiran Feng

Design of a Light-weight Compact Electro-Optical Servo Turntable System 316
Hui Yang, Peiqin Zhang, Fei Li, Kaige Wen, Yihui Feng, Songbo Li

Solid State Drive Key Performance Research Overview 320
Jun Tian, Lu Yuan, Mingjie Fang, Shuoxun Jin

Low-altitude Obstacle Model Identification Method for Power Transmission Corridor Based on Improved 3D Point Cloud Feature Fusion 324
Hua Qin, Boqiu Yuan, Ou Pu

Automated Diagnosis of Eight Retinal Diseases from OCT Images Using Deep Learning with Attention Mechanisms 328
Wenhan Li, Zonghai Zhu

Structural Optimization Design of Intelligent Flexible Sensors Based on Analytical Methods 332
Xinai Wen, Xiaoliang Sun, Guanggang Zhou, Chong Wu

Index Randomization with Dual SRAM-PUF for Spectre Mitigation in RISC-V Branch Predictors 336
Mengyu Zhang, Kai Nie, Xiao Zhang

Low-Altitude Drone Detection System Based on YOLOv8 342
Xiaorui Nie, Yuhong Xing, Guiru Xu, Yajing Lu, Baochu Li, Qinli Deng, Yahong Ma

Research on Nonlinear Surveying and 3D Modeling Methods for Underground Distribution Pipelines in Large Cities 346
Junwei Gao, Yinghao Xiao, Baoguo Xue, Muxi Lin, Gang Wang

Research on Real time Scheduling Method of Embedded Operating System Based on Soft PLC Control 353
Yunhua Liu, Shaohui Du, Yang Yang, Zihao Tang, Wei Quan, Shijie Li

Research on Corrosion Fault Diagnosis of Grounding Grid Based on MIDBO Algorithm 359
Qingze Cao, Hongbo Guo, Yuebo Jia, Feng Gao

Research on Validation Oriented DMA Misaligned Transmissions 364
Jie Zhang, Kuisheng Wang

Research on GPU Virtualization Scheme in Domestic Embedded Virtualization Platform Based on Rust 368
Chengchen Li, Ruyi Ding, Zhe Duan

Efficient Collaborative Mapping Based on Bird's-Eye View Intelligent Recognition and 3DGS 374
Tianqi He, Jiajie Song, Jingchun Cheng, Xiong Pan

Optimising Microwave Darkroom Layout to Enhance Test Accuracy Using Reinforcement Learning 380
Da Chu

Research on Anti-Static Floor Inspection Robot Technology 385
Zijun Hu, Xing Xu, Zhiliang Gao, Yibo Dong

Security Application and Practice of Joint Computing in Industrial Control System 390
Jinbao Yang, Sushuang Han, Zhaoqiang Liu, Yuanzhi Jiang

Design-Technology Co-Optimization and Statistical Process Variation Analysis of Complementary GAAFETs-Based Full Adder Circuits 395
Yunjie Li

Vertex Convolution-Based Planar-Dominant Point Cloud Segmentation Algorithm 400
Jiaqi Cai, Haobo Huang, Guohui Li, Weiya Chen, Lin Wan, Jianjie Wu

Neighborhood Segmentation Based Feature Vertex Detection for Point Cloud 406
Hai Chen, Guohao Deng, Guohui Li, Weiya Chen, Lin Wan, Jianjie Wu

Effect of Gate Bias and Channel Length on Total Dose Effect in FinFET Bulk Silicon Devices 411
Xiaodong Zhao, Fan Yang, Xunying Zhang, Hongxia Wang, Yuanyuan Cui

Parameter Identification of LuGre Friction Model for Ball Joint Motor based on DDPG Algorithm 415
Yong Zhang, Qian Zhang, Minjie Wang, Jie Fu, Zhongwen Shang

Structural Design of a Highly Adaptive Insulator Detection Device and Its Wrapping Climbing Strategy 420
Chenglin Wei, Liting Huang, Cheng Zhang, Zongwu Tong, Yuchen Wei

Delay insensitive serial register file with limited area 427
Anping He, Yang An, Mingshu Chen, Jun Ma

FPGA-Accelerated Implementation and Optimization of Oriented FAST Features for SLAM 431
Wenyu Dong, Bo Jiang, Hong Xu

A Formal Requirements Modeling Method Based on HVRM for Safety-Critical Systems 437
Yajiong Dong, Jun Hu, Lisong Wang, Zehua Dong, Jialei Dai, Shaohan Liu

Analysis of Asynchronous Chip Packaging Costs Based on IR Drop 443
Anping He, Zhaocheng Li, Jingjing Guo, Juntao Hu, Jun Ma

DPVIT: A CIP-Assisted Diagnosis Model Based on Enhanced Swin Transformer Through Bitemporal CT Images 447
Xiaodong Shi, Yuncheng Jin, Qi Xia, Jing Zheng, Bin Sun, Xinyu Jin, Jianya Zhou

The Panoramic Video Stitching Method for Dynamic Scenes 452
Xiaorong Cui, Lingzhe Xu, Shuangbiao Zhang, Jing Huang

Integrated Perception, Planning, and Control for Autonomous Racing: A Case Study on Formula Student Autonomous China 457
Yakang Wei, Xiaozhang Zhu, Xunlin Xu, Ke Song

Research on UE5 Pathfinding Based on Improved A* Algorithm 462
Zhian Deng, Minhua Shi, Yuxuan Chen

Intelligent Robot System for Campus Security: A Robust Solution for Automated Inspection and Remote Monitoring 467
Xiaofeng Lin, Wanyi Yu, Jiankun Bai, Guangxu Chen

The Research on Fault Diagnosis Method for Milling Robot Electric Spindle Based on U-Net Enhanced Generative Adversarial Network 472
Fahui Liang, Shengzhe Lu, Renming Yu, Chundi Zhao, Linsen Song, Yiwen Zhang

LightWeight Helmet Wearing Detection Algorithm for Improved YOLOv8n 476
Liangmiao Jin, Haiming Li

Mobile application recommendation based on graph embedding depth model 481
Can Zhong, Haiming Li

YOLO-DSE: PCB surface defect detection with the improved YOLO 485
Jinyu Chen, Wenjia Liu

Research on Insulator Defect Detection Algorithm Based on Dual-Sampling TWave-YOLOv9 491
Tao Yang, Daolei Wang

Optimized unified query verification scheme for cloud database services 495
Sicheng Zhang, Xiuxia Tian

BMQA: Leveraging Large Language Models for Semantic Guidance in Temporal Knowledge Graph Q&A 500
Zihui Ye

Multi-Objective Artificial Physics Optimization Algorithm Based on Population Dynamic Clustering Strategy 504
Lirong Kou, Liping Xie

DCSGAN: A Few-shot Classification Method Based on Multi-scale Attention GAN 508
Huixuan Wang, Lichan Zhou, Yuqing Yang, Haifeng Yang

CHC-DETR: An End-to-End Efficient Defect Detection Network 515
Zihan Hu, Chuanlin Zhang, Jun Hu ,Zhongyang Fan, Jinze Li, Liangmiao Jin

Intelligent Topology Optimization via Multi-Stage Contrastive Generative Adversarial Networks 520
Fenghua Hu, Zhuowei Wang, Qifeng Bai, Chong Chen, Lianglun Cheng

Enhancing Vehicle Type Classification in Rare Scenarios with Consistency-Aware Generation 524
Zehong Wei, Guo Wei, Xuelian Zheng

Emotion Recognition on FER-2013: A Deep Learning-Based Comparative Analysis 529
Beining Niu, Abdur Rashid Sangi, Baha Ihnaini, Shengyi Qi, Yawen Huang

Peer-record enhanced contrastive learning knowledge tracing model 534
Guanyu Chen

A Comprehensive Review on Test Case Generation and Prioritization in Software Combinatorial Testing 538
Shihai Zhao, Peisheng Han, Geng Liang

Adaptive Large Language Model Fine-Tuning via LoRA-Based Low-Rank Modulation and PPO Reinforcement Learning 543
Zewen Zhu

Machine Learning-Based Excitation Waveform Classification Model for Magnetic Components 547
Zhenyu Li, Xu Wang, Tianyu Wang

Enhancing Automated Penetration Testing Through a Comprehensive Cyber-Security Knowledge Graph 551
Yuan Pan, Guocong Feng, Kaitian Huang

BTGPT: Generative pretrained transformer for benign network traffic 556
Kaitian Huang, Chunmei Zhang, Guocong Feng, Yuan Pan

Dual-Stream Feature Fusion Network for Electrode Sheet Defect Detection in Lithium-Ion Batteries 561
Chuchu Rao, Yeshen Lan

Solar panel defect detection based on improved YOLOv8-SDLW 566
Longbin Zhai, Huimin Meng

Research on weather prediction methods based on hybrid machine learning models 571
Mantao Zhang, Lin Su

Programming-Language-Aware Models for Effective Web Attack Detection 576
Guocong Feng, Yuan Pan, Chunmei Zhang, Kaitian Huang

UAV Imagery Enhanced with Vegetation Indices for Accurate Weed and Tobacco Segmentation Based on Deep Learning 581
Yulun Chen, Kuo Song, Jialuo Du, Feng Xue, Boheng Li, Xiaoyu Zhang, Xianglong Guo, Yong Sun, Jianghan Tao

Spark-based Improved Ant Colony Algorithm for Solving TSP Problems 586
Yuqi Ma, Guofang Liu, Guangzhen Xu

Enhanced GAN-Based Model for Telecom Customer Churn Prediction 590
Cong Li, Tao Li, Haitao Liu

A squeeze-and-excitation-attention-block-based SAR denosing network 594
Zhengjin Guo, Zhenlong Xu, Wei Tang

ECA-Enhanced YOLOv7 with SSA Tuning for Real-Time Autonomous Driving Object Detection 599
Jiankun Bai, Wanyi Yu, Xiaofeng Lin, Changqing Cai, Zitao Huang

Research on Power Line Semantic Segmentation Algorithm Based on Improved DeepLabv3+ 605
Jiaqi He, Duanjiao Li, Juanwen Yao, Hong Liu, Xiaogang Zhang, Jiaxing Duan

VCDFuzz: A Vulnerability Characteristic Guided Directed Greybox Fuzzing Approach 610
Haonan Zhang, Jianfeng Zhang, Yi Ren, Xin Zhao

Towards Practical N-Day Attack Detection: A Few-Shot Learning Perspective 619
Kaitian Huang, Chunmei Zhang, Yuan Pan, Guocong Feng

Optimizing Predictive Maintenance: Addressing Imbalanced Data with Sampling Techniques and Stacking Models in Fault Prediction 624
Ye Shang

Entity Recognition in Chinese Classics via Fine-tuned Large Language Models 630
Jianfei Dang

Dynamic Gradient Compression and Attack Defense Strategy for Privacy Enhancement of Heterogeneous Data in Federated Learning 635
Conghui Wei, Yaqian Lu

Iterative Optimization of Apriori Algorithm Based on Dynamic Transaction Filtering 640
Yu Zhang, Jing Zhong

PCB Board Defect Detection Algorithm Based on Improved YOLOv8 644
Meijie Zhao, Haoyuan Xu, Saltanat Biibosunova, Shuo Zhang

Ceramic Ring Defect Detection: An Algorithm Constructed on the Improved YOLO11 Model 648
Hongge Dong, Shengqi Guan, Zhen Yang

Denoising-Enhanced Dynamic Graph Modeling for Anomaly Detection in Multivariate Time Series 652
Zhaoyang Liu, Zhijian Yang, Xingpeng Zheng, Xin Xie

Research on Domain Privilege Escalation Mechanism Based on sAMAccountName Spoofing 658
Hongyang Zhao, Yuxiang Lin

Aeroengine remaining useful life prediction via integrating gated and hybrid attention transformer 663
Hongchun Qu, Gansen Duan, Xuhui Liu, Heze Tai

Detection of Aflatoxin B1 in Maize Using Hyperspectral Imaging Combined with Dimensionality Reduction 670
Quan Zhou, Xiancun Zhou, Xianbin Xie, Jing Zhang

Multi-Agent RAG-Based Framework for Personalized Interaction with Large Language Models 675
Qian Wang, Wuxuan Duan, Haiyan Wang, Zhirong Luan, Yu Wang, Yulu Wang

Blockchain-Enabled Trustworthy Friend Recommendation via Structural Similarity in Ego Networks 681
Zihan Li

Precision Aircraft Detection via Synergistic Super-Resolution and Oriented Rotation Convolution 685
Nan Chen, Biao Zhang, Liangzhi Li

Author Index 690