Oct.31	Registration Xiangshan Conference Center, Gaoxin District, Zhuhai		
Nov.1	Day 1		
8:30-9:00	Opening Ceremony Chair: Hongbin Ma	Xiangshan Hall	
9:00-9:40	Keynote Speech 1 Chair: Hongbin Ma	Xiangshan Hall	
	Learning and Feedback in the Control of Uncertain Systems		
	By Lei Guo (Academy of Mathematics and Systems Science, Chinese Academ		
9:40-10:20	Keynote Speech 2 Chair: Yaping Dai	Xiangshan Hall	
	A Paradigm Shift in Machine Learning: From Data to Data- Knowledge Environ By Witold Pedrycz (University of Alberta, Edmonton, Canada)	nment	
10:20-10:30	Technical Exchange from YGSOFT Inc. Chair: Yaping Dai	Xiangshan Hall	
10:30-10:40	Tea Break		
10:40-11:20	Keynote Speech 3 Chair: Jinhua She	Xiangshan Hall	
10.40-11.20	Biomimetic Amphibious Spherical Father-son Underwater Robots	111111180111111111111	
	By Shuxiang Guo (Southern University of Science and Technology, China)		
11:20-12:00	Keynote Speech 4 Chair: Jinhua She	Xiangshan Hall	
	Enhancing Collaborative Filtering for Advanced Recommender Systems		
Lunch	By Yasufumi Takama (Tokyo Metropolitan University, Japan)		
13:30-15:50	8 Parallel Sessions: 20 min/each oral presentation, 20 min x 7 (max) = 140 min		
13:30-13:30	OS1, OS2, OS3, OS4, GS1, GS2, GS3, GS4 Meeting Room 304/101/10		
15:50-16:00	Break		
16:00-18:00	8 Parallel Sessions: 20 min/each oral presentation, 20 min x 6 (max) = 120 min		
	OS5, OS6, OS7, OS8, GS5, GS6, GS7, GS8 Meeting Room 304/101/10		
13:30-17:30	Special Session on Wisdom in Systems and Control	Meeting Room 105	
Nov.2	Day 2		
8:30-9:10	Keynote Speech 5 (online) Chair: Hongbin Ma	Xiangshan Hall	
	Teleoperation of Swarm Robotics		
	By Yang Shi (University of Victoria, Canada)	77' 1 77 11	
9:10-9:50	Keynote Speech 6 Chair: Hongbin Ma	Xiangshan Hall	
	Strategic Layout and Practice of AI Education in China		
	By Liqun Han (Beijing Technology and Business University, China)		
9:50-10:00	Technical Exchange from Zhuhai Zhixin Automation Technology Co., Ltd.	Xiangshan Hall	
10:00-10:10	Chair: Hongbin Ma Tea Break		
10:10-10:50	Keynote Speech 7 Chair: Bin Xin	Xiangshan Hall	
10.10-10.50	Opportunities and Challenges for Medical Robotics in the Age of AI	Alangshan Han	
	By Zengguang Hou (Institute of Automation, Chinese Academy of Sciences, C	China)	
10:50-11:30	Keynote Speech 8 Chair: Bin Xin	Xiangshan Hall	
10.50 11.50	AI-Driven High-Definition Glasses-free 3D Light Field Display with Large-Vie		
	By Xinzhu Sang (Beijing University of Posts and Telecommunications, China)		
11:30-12:10	Keynote Speech 9 Chair: Bin Xin	Xiangshan Hall	
	Can LLMs Revolutionize Formal Verification: Gaps and Opportunities? By Shing-Chi Cheung (The Hong Kong University of Science and Technology	(China)	
9:00-11:00	AI Contest Show	Meeting Room 102	
Lunch	THE COMMON SHOTT	mooning reconii 102	
13:30-15:30	6 Parallel Sessions: 20 min/each oral presentation, 20 min x 6 (max) = 120 min		
	OS9, OS10, OS11, GS9, GS10, GS11 Meeting Room 304/103/104/106/108/305		
15:30-16:00	Break	32. 23 2 30. 200/200	
16:00-18:00	6 Parallel Sessions: 20 min/each oral presentation, 20 min x 6 (max) = 120 min		
10.00-18.00	OS12, OS13, GS12, GS13, GS14, GS15 Meeting Room 304/103/104/106/108/305		
14:00-18:00	Special Session on Artificial Intelligence in Education	Meeting Room 105	

14:00-18:00	YGSOFT Inc. Young Scholars Forum: Large Models and Multi-Technology I Applications	Integration and Meeting Room 101
14:00-18:00	Special Session on Innovative Product Roadshow	Meeting Room 201
18:30-20:00	Welcome Banquet	Banquet Hall
Nov.3	Day 3	•
8:30-9:10	Keynote Speech 10 Chair: Hongbin Ma	Xiangshan Hall
	AI for Digital Twin	
	By Yan Zhang (University of Electronic Science and Technology of China)	
9:10-9:50	Keynote Speech 11 (online) Chair: Hongbin Ma	Xiangshan Hall
	Collaborative Innovation Technologies and Applications for Large and Small	Models
0.50 10.00	By C. L. Philip Chen (South China University of Technology, China)	
9:50-10:00	Tea Break Keynote Speech 12 Chair: Jinhua She	Xiangshan Hall
10:00-10:40	Interpretability and Transferability in Deep Learning	Mangshan Han
	By Kazuhiko Kawamoto (Chiba University, Japan)	
10:40-11:20	Keynote Speech 13 Chair: Jinhua She	Xiangshan Hall
	Network Intrusion Detection for IoT Environments with Limited Resources By JianQing Li (Macau University of Science and Technology, China)	
11:20-12:00	Keynote Speech 14 (online) Chair: Hongbin Ma	Xiangshan Hall
11.20 12.00	Adaptive Intelligent Robotic Control Using Fuzzy Deep, Broad and Reinforc	ement Learning
	Techniques ProChine Chile Tori (Change Heine Heinensite Chine)	
Lunch	By Ching-Chih Tsai (Chung Hsing University, China)	
13:30-15:50	6 Parallel Sessions: 20 min/each oral presentation, 20 min x 7 (max) = 140 m	in
	•	n 101/102/103/104/105/106
15:50-16:00	Break	
16:00-17:00	Closing/Award Ceremony	
	·	Xiangshan Hall
	16:00-17:00 Conference Summary & Award Ceremony	Xiangshan Hall
Nov.4	Day 4	Xiangshan Hall
Nov.4 9:00-9:15	,	Xiangshan Hall
	Day 4	Xiangshan Hall
9:00-9:15	Day 4 Hotel -> YGSOFT Inc.	Xiangshan Hall
9:00-9:15 9:15-10:00	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall	Xiangshan Hall
9:00-9:15 9:15-10:00 10:00-10:15	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall YGSOFT Inc> Yunzhou Intelligent Technology Co., Ltd.	Xiangshan Hall
9:00-9:15 9:15-10:00 10:00-10:15 10:15-11:00	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall YGSOFT Inc> Yunzhou Intelligent Technology Co., Ltd. Visit Yunzhou Intelligence Exhibition Hall	Xiangshan Hall
9:00-9:15 9:15-10:00 10:00-10:15 10:15-11:00 11:00-11:15	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall YGSOFT Inc> Yunzhou Intelligent Technology Co., Ltd. Visit Yunzhou Intelligence Exhibition Hall Yunzhou Intelligent Technology Co., Ltd> Tangjia Ancient Town	Xiangshan Hall
9:00-9:15 9:15-10:00 10:00-10:15 10:15-11:00 11:00-11:15 11:00-12:00	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall YGSOFT Inc> Yunzhou Intelligent Technology Co., Ltd. Visit Yunzhou Intelligence Exhibition Hall Yunzhou Intelligent Technology Co., Ltd> Tangjia Ancient Town Visit Tangjia Ancient Town / Tang Shaoyi's Former Residence	Xiangshan Hall
9:00-9:15 9:15-10:00 10:00-10:15 10:15-11:00 11:00-11:15 11:00-12:00 12:00-14:00	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall YGSOFT Inc> Yunzhou Intelligent Technology Co., Ltd. Visit Yunzhou Intelligence Exhibition Hall Yunzhou Intelligent Technology Co., Ltd> Tangjia Ancient Town Visit Tangjia Ancient Town / Tang Shaoyi's Former Residence Lunch and Free Time in Tangjia Ancient Town	
9:00-9:15 9:15-10:00 10:00-10:15 10:15-11:00 11:00-11:15 11:00-12:00 12:00-14:00 14:00-15:00	Day 4 Hotel -> YGSOFT Inc. Visit YuanGuang Smart Park Exhibition Hall YGSOFT Inc> Yunzhou Intelligent Technology Co., Ltd. Visit Yunzhou Intelligence Exhibition Hall Yunzhou Intelligent Technology Co., Ltd> Tangjia Ancient Town Visit Tangjia Ancient Town / Tang Shaoyi's Former Residence Lunch and Free Time in Tangjia Ancient Town Tangjia Ancient Town -> Hengqin Planning Pavilion	

Nov. 1 Saturday

OS1: Organized Session: Learning, Evolution and Control in Dynamical Games

13:30-15:30, Sat., Nov.1 Meeting Room 304

Session Chairs: Yifen Mu; Lin Wang

13:30-13:50 Modeling Complex Systems via Game-Theoretic Learning: Dynamics and Properties of Individual

Agents

Wei Su*

13:50-14:10 Loop Path Topology for Conflict-Free Scheduling of Multi-Robot Warehouse Systems

Jinrui Mou, Zhaokai Liu, Ruyi Jiang, Lin Wang*, Xiaofan Wang

14:10-14:30 Online Model-Pool Selection and Fusion for Adaptive MARL in Wargames

Zhikai Zhou, Hongbin Ma*, Ying Jin, Yehao Fang, Haipeng Wang

14:30-14:50 Coalition Dynamics and Its Dynamic Stability in Three-Player Zero-Sum Games

Wen Zhang, Yifen Mu*

14:50-15:10 Cooperation evolution in an overlapping generations game

Kaibing Li, Renren Zhang*

15:10-15:30 The Algebraic Relationships between DK-STP and STP

Qi An, Changxi Li, Jun-e Feng*

OS2: Organized Session: Human-Centered Intelligent Systems A

13:30-15:10, Sat., Nov.1 101 Fenghuangshan Hall

Session Chairs: Shinichi Yoshida; Eri Sato-Shimokawara

13:30-13:50 Vision Transformer Model for Lung Disease Classification using Chest X-ray Images

Ryota Ueki*; Narufumi Suganuma; Yoshua Kazukuni Nomura; Zhen Zhang; Shinichi Yoshida

13:50-14:10 Synergistic Multi-Task BERT Framework for Event Extraction and Self-Efficacy Assessment in

Rehabilitation Chatbot Dialogues

Yuqi Zhang*; Yuning Shi; Han Shi; Naoyuki Kubota

14:10-14:30 Cascading Features of Convolutional Neural Network for Pneumoconiosis Detection

Keisuke Shiiba*; Shinichi Yoshida; Yui Nomura; Yoshua Kazukuni Nomura; Narufumi Suganuma

14:30-14:50 Validating a Dynamic-Load Pedaling Paradigm for Gait Rehabilitation: A Muscle Synergy Analysis

Qiwei Wu; Jinhua She*; Shijie Guo; Daisuke Chugo

14:50-15:10 Small-Sample Training Data Augmentation via Pix2Pix for YOLO v8-based Fruit Detection

Zhen Zhang*; Shinichi Yoshida

OS3: Organized Session: Physically Inspired Intelligent Optimization: From Theory to Real-World Systems A

13:30-15:30, Sat., Nov.1 102 Hongshulin Hall

Session Chairs: Lan Cheng; Chunmei Zhang

13:30-13:50 A 3D Gaussian Splatting-Based Framework for Occlusion-Aware Reconstruction of Immovable Cultural Heritage from Crowd-Sourced Data

Jianning Qin; Lan Cheng*; Zixi Qi; Zhe Zhang; Wanchen Liu

13:50-14:10 G-COA: an optimization algorithm inspired by celestial motion behavior

Kai Wang; Kuo Yang*; Mifeng Ren; Wenjie Zhang; Zhile Yang

14:10-14:30 A Study on the Force Mechanism of a Many-objective Artificial Physics Optimization Algorithm Based on Clustering and Information Entropy

Weizhe Li; Liping Xie*

14:30-14:50 Optimal regulation of green heating systems in parks considering economy and thermal comfort Yuanyuan Dai; Jianyan Tian*

14:50-15:10 Improved Kepler Optimization Algorithm Based on Hybrid Strategies

Hongge Guo; Pengpeng Su*; Zinan Liang

15:10-15:30 Application of Multi-Strategy Harris Hawks Optimization Algorithm in Path Planning

Yuyan Zhang; Chunmei Zhang*; Fanzhu Hao; Long Ding

OS4: Organized Session: Computational Intelligence and System Engineering A

13:30-15:30, Sat., Nov.1 103 Jinding Hall

Session Chairs: Yang Zhang; Yuan Xu

13:30-13:50 ANAFD: A Lightweight Method for Rapid Plant Fertilization Deficiency Detection Using Optimized NCC Localization and Enhanced Feature Recognition

Xuebin Zhu*; Ying Lin; Wei Ke; Jiaren Liu; Yuan Xu

13:50-14:10 SDAUnet: A Satellite and Radar-Based feature fusion approach for short-term precipitation forecasting

Chongxing Ji; Yuan Xu*; Wei Ke; Lili Tang; Chenyang Yan; Yizhou Zhang

14:10-14:30 Adaptive Multi-Object Tracking with Motion Indeterminacy Diffusion and Dynamic Fusion

Ruihan Yang; Minghao Chen; Pu Du; Yang Zhang; Yuan Xu*

14:30-14:50 Fault Diagnosis Methods Based on Spatio-Temporal Feature Fusion

Yongxin Zhou; Yuan Xu*; Yi Luo; Wei Ke; Qunxiong Zhu; Yang Zhang; Mingqing Zhang

14:50-15:10 Dual-View Contrastive Learning with Multi-Scale Label Propagation

Yuan Xu; Haoting Liu; Junshuo Du; Shu Kong; Yi Luo; Wei Ke; Qunxiong Zhu; Yanlin He; Yang Zhang; Mingqing Zhang*

15:10-15:30 Design and Implementation of Office Automation Management System in Airfield Construction

Li Dong; Xiaofei Yang*; Guoliang Zhai; Haiyang Chen; Xiao Wang; Ronglai Sun; Chao Shi

GS1: General Session: Intelligent Decision-Making and Optimization

13:30-15:30, Sat., Nov.1 104 Tangjia Hall

Session Chair: Bin Xin

13:30-13:50 A Multi-Operator Evolutionary Algorithm for the Multi-Objective WTA Problem

Chengxin Wen; Fuhao Liu; Ting Wang*; Hongbin Ma; Yanhuan Jiang

13:50-14:10 An adaptive multi-granularity dynamic task reallocation method based on CBBA

Binhua Guo*; Bin Xin; Yixi Yang

14:10-14:30 Complete Coverage Path Planning based on Comprehensive Improved Particle Swarm Optimization Algorithm

Jian Fu*; Xinlei Yin

14:30-14:50 Multi-UGV Task Allocation Based on Improved NSGA-II Algorithm for Forest Firefighting

Zijian Zhou; Jia Zhang*; Mingchang Chen

14:50-15:10 Research on Cooperative Application of UAV Swarm based on Cyber Network

Mingqiu Ren*

15:10-15:30 Research on Anti-Drone Task Allocation Based on Deep Reinforcement Learning

Chengliang Zhou*

15:30-15:50 A Situation Awareness Method for UAV Swarm Based on Modified Endsley Model

Bi Wu; Liang Yu; Zhiqian Zhou*

GS2: General Session: Smart Healthcare and Rehabilitation

13:30-15:10, Sat., Nov.1 Meeting Room 106

Session Chair: Jinhua She

13:30-13:50 Deep Learning-based Quantification of Lumbar Disc Herniation on High-resolution Magnetic Resonance Imaging

Lizhong Ding; Wenxin Chen; Qina Wu; Hongdian Zhu; Changsheng Li; Jing Zhao; Xingguang Duan*

13:50-14:10 A Survey of Deep Learning Models from DCNNs to Transformers for Correcting MRI Artifacts and Assisting Smart Healthcare

Dingxi Liu; Lichuan Ning*; Yuanmin Xie

14:10-14:30 LungAide: An effective 3D Transformer V-Net for Lung Nodule Detection

Xinyuan Gao; Lei Dong; Xingwang Liu; Sijie Yin; Hao Chen*

14:30-14:50 Concordance-Assisted Learning for Estimating Optimal Individualized Treatment Regimes with Censored Data

Jianlin Zhang*; Yinglin Jiao; Lin Luo; Hui Dong; Jianuo Yang

14:50-15:10 PID control with pedal torque estimation for safety monitoring in lower-limb rehabilitation robots

Yue Jing; Jinhua She*; Seiichi Kawata; Zewen Wang

GS3: General Session: Smart Grid and Power Systems

13:30-15:50, Sat., Nov.1 VIP Meeting Room 108

Session Chair: Weidong Zou

13:30-13:50 A Quantum-Based High-Precision Current Transducer for Smart Grid Applications

Sanlei Dang; Bo Zhang; Yang Yang*; Qiang Song; Dingqu Zhang; Zhengmin Kong; Mohammad Allahbakhsh

13:50-14:10 Power Grid Equipment Supply Chain Risk Identification Method Based on a Stochastic Configuration Network with Compression Coefficients

Lingxiao Cui*; Haitao Zhang; Jinyong Zhao; Fuling Fan; Ning Xu

14:10-14:30 Enhancing Power Equipment Anomaly Detection Performance with RobustSTL and Anomaly Transformer

Zuo Lu; Yixiang Deng; Peiran Xing; Xiaoyang Wang*

14:30-14:50 A Study on Secondary Control Strategy for Islanded Microgrids Based on Twin Delayed Deep Deterministic Policy Gradient

Yuntao Shi; Haifeng Guo; Xiang Yin*; Keqing Gao; Shufeng Zhang

14:50-15:10 Research on a Joint Quantity-Price Forecasting Model Based on Virtual Power Plant Entity Revenue Optimization

Xiaodong Cheng; Baoshi Wang; Jun Qiao; Lanxu Wu; Pengdong Tian

15:10-15:30 Risk-Averse MPC-Based Secondary Voltage Centralized Compensation Strategy for Microgrids Yuntao Shi; Keqing Gao; Xiang Yin*; Haifeng Guo; Shufeng Zhang

15:30-15:50 Research on Energy Storage Revenue and Electricity Pricing Strategy Based on Virtual Power Plant Operation

Baoshi Wang; Lanxu Wu; Pengdong Tian; Kai Xu

GS4: General Session: Advanced Control Methods-A

13:30-15:50, Sat., Nov.1 VIP Meeting Room 201

Session Chair: Qing Wang

13:30-13:50 Fixed-Time Sliding-Mode Control for Quadrotor Attitude Tracking With Prescribed Performance Mingwei Liu; Qing Wang*; Junzhe Cheng; Bin Xin,

13:50-14:10 The Third-Order Smooth Transition Strategy (TOSTS) apply to the sensor-less tightening system Shuanxin Wang; Yanzhuang Shi; Kewei Chen; Fangyan Dong*

14:10-14:30 Enhanced Active Disturbance Rejection Attitude Control with Resonant Optimization for a Quadrotor Yang Hao; Wei Wei*

14:30-14:50 传感器故障模式下无人机的自适应飞行控制

Xiaoyong Guo; Jianhong Wang*

14:50-15:10 Torque Distribution Strategy Based On Multi-Mode Clutch Transmission

Yang Gao*; Xueliang Shan; Huanhuan Gong; Zhidong Gao; Ruiguang Wang; Zhengxing Dai; Jiangfeng Liu; Yiqiang Liu

15:10-15:30 A Multi-Ship Intelligent Cooperative Control Framework Based on Hierarchical Reward Yang Bai; Hao Li; Chi Zhang; Shengrong Xie*

15:30-15:50 Synergistic Re-parameterizable Attention and Context-Aware Fusion for PCB Defect Detection Benbo Liu; Zhengyu Fu; Jinhua Wu; Kewei Chen; Fangyan Dong*

OS5: Organized Session: Model- and AI-Driven Manufacturing and Service Systems

16:00-17:40, Sat., Nov.1 Meeting Room304

Session Chair: Zhiyang Jia

16:00-16:20 Research on Intelligent Alignment Devices for GIS Disconnectors

Liang Zhao; Yujing Liu*; Xi Zhang; Jiayuan Zhang; Ruifeng Li

16:20-16:40 Vision and Servo-Based Camshaft Pulley Tightening Technology

Xi Zhang*; Jinpeng Yuan; Yujing Liu; Jin Cheng; Zhaohua Pei; Jiayuan Zhang

16:40-17:00 Research on Lightweight Fuel Cell DC/DC

Yue Kong*

17:00-17:20 Virtual Commissioning and Simulation Method for Industrial Robots Based on Digital Twin Technology

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Minghao Duan; Zhenyu Xie*; Xi Zhang; Xin Li; Jinpeng Yuan

17:20-17:40 A cloud-native-based thermal processing simulation platform engineering case

Xingjian Wang; Jianchao Zhang*; Bin Chen; Yijing Zhao; Shihong Yan; Fanlei Min

OS6: Organized Session: Session: Human-Centered Intelligent Systems B

16:00-17:40, Sat., Nov.1 101 Fenghuangshan Hall

Session Chairs: Shinichi Yoshida; Eri Sato-Shimokawara

16:00-16:20 Temporal morphological analysis of NK cells

Takuho Myojin*; Yukinobu Hoshino; Namal Rathnayake; Shimpei Yamamoto

16:20-16:40 A Feasibility Study on Analyzing the Relationship Between Mental States and Music Using

Physiological Signal Processing

Yunheng Li*; Eri Sato-Shimokawara

16:40-17:00 Comparison of Explainability Algorithms for Pneumoconiosis Classification Deep Learning Models

Ryo Takeda*; Shinichi Yoshida; Narufumi Suganuma; Yoshua Kazukuni Nomura; Zhen Zhang

17:00-17:20 Transfer Learning for Low-Resource Human Daily Action Recognition Using Topological Memory and Gated Attention Fusion

Yuning Shi*; Yuqi Zhang; Qingwei Song; Han Shi; Naoyuki Kubota

17:20-17:40 Fuzzy Clustering-Based Data Augmentation for Yuzu Fruit Detection

Kazuki Kagawa*; Shinichi Yoshida; Zhen Zhang

OS7: Organized Session: Physically Inspired Intelligent Optimization: From Theory to Real-World Systems B

16:00-18:00, Sat., Nov.1 Session Chairs: Lan Cheng; Chunmei Zhang 102 Hongshulin Hall

16:00-16:20 Three-Dimensional Path Planning for Multiple UCAVs Based on the MP-GWO Algorithm

Chenghao Li; Chunmei Zhang*; Fanzhu Hao; Zhenyang Zhao

16:20-16:40 MRLLM: Multimodal Knowledge and Feedback Based Refinement Assist for Robotic Arm Operations using Large Language Model Reasoning

Zhibin Yang; Zhi Zheng*

16:40-17:00 DBSCAN clustering and Angle-Correlation driven Bi-Population Constrained Multi-Objective Artificial Physical Optimization

Kaipeng Song; Liping Xie*

17:00-17:20 Intelligent decision-making technology based on brain-inspired spiking neural networks

Song Xu*; Wenjing Duan; Jie Li; Lina Wang

17:20-17:40 Quantum-hybrid Multi-objective Artificial Physics Optimization Algorithm

Xingyu Chen; Liping Xie*

17:40-18:00 An Angle-Penalty Distance and Polarity-Division Guided Algorithm for Many-Objective Electric Field Optimization

Yue Zhang; Liping Xie*

OS8: Organized Session: Computational Intelligence and System Engineering B

16:00-17:40, Sat., Nov.1 103 Jinding Hall

Session Chairs: Yang Zhang; Yuan Xu

16:00-16:20 An Imbalance Fault Diagnosis Method Based on Improved FixMatch Assisted Semi-Supervised CWGAN

Lili Tang; Yuan Xu*; Wei Ke; Chongxing Ji

16:20-16:40 Train delay data generation based on improved CTGAN

Qingyun Fu; Tao Zhang; Shuxin Ding*; Zhiming Yuan; Yanhao Sun

16:40-17:00 MACAE-Based Detection of Acoustic Signal Anomalies in Industrial Equipment

Yang Zhang*; Taoying Chen; Pu Du; Yuan Xu; Mingqing Zhang; Qunxiong Zhu

17:00-17:20 An Algorithm based on History Data for Multi-sensors Error Intelligent Correction

Hao Wang*

17:20-17:40 RDPFlow: A conditional diffusion model for traffic flow prediction with point-wise missing data

Yuan Xu; Chenyang Yan; Qunxiong Zhu; Mingqing Zhang; Wei Ke; Chongxing Ji; Yang Zhang*

GS5: General Session: Smart Education

16:00-17:40, Sat., Nov.1 104 Tangjia Hall

Session Chairs: Bemnet Wondimagegnehu Mersha; Yaping Dai

16:00-16:20 Intelligent Detection of Student Classroom Behavior Based on an Improved YOLOv8 Model

Meng Zhou; Huifang Zhang; Yuchao Peng; Jing Wang; Zhe Dong*; Jie Fan

16:20-16:40 Improving Generative Aspect-Based Sentiment Analysis via Multi-View Data Augmentation and Supervised Contrastive Learning

Yanhong Wang; Lei Chen; Xin Wang; Lin Yao*

16:40-17:00 Dual-Path Attention-Enhanced Graph Convolutional Network for Children's Speech Emotion Recognition

Deneng Tang*; Liwei Lin; Haojie Huang; Qixuan Liu

17:00-17:20 Design and Implementation of a Locally Deployed Intelligent Composition Correction and Personalized Tutoring System for Primary Education

Guanmou Li; Zhifeng Chen*

17:20-17:40 Evaluating Learning States in Synchronous Remote Classes via Qwen2.5-Max with RAG and ReAct Agent

Haoyuan He; Bemnet Wondimagegnehu Mersha*; Yaping Dai; Kaoru Hirota; Wei Dai; Yumin Lin

GS6: General Session: Advanced Robotics and Component Design

16:00-18:00, Sat., Nov.1 Meeting Room 106

Session Chair: Xuan Li

16:00-16:20 Research of Mechanical Characterization of Bio-inspired Artificial Muscles

Yuntao Li; Xiaolong Zhang; Jiaming Bai*; Zuan Li; Guopeng Wang; Deen Bai

16:20-16:40 Design of Space Continuum Robot Based on Spring and Bionic Muscle Antagonistic Actuation

Guopeng Wang*; Senchun Yao; Yanmei Li; Zuan Li; Yuntao Li

16:40-17:00 Kinematic Parameter Calibration for Ophthalmic Surgical Robots with Cameras

Yanlin Li; Kaiyuan Tan; Zhaoyin Tian; Rihui Song*

17:00-17:20 Flexible Wearable Sensor Based on Molecularly Imprinted Polymers for Wound Glucose Monitoring

Jiale Gong*; Xuan Wang; Yizhuo Ma; Maria Abbasi; Runhong Lei; Shengnan Ma; Taha Siredj Mounir Herhira; Niu Zhang; Long Zhang; Jing Wei; Lina Geng

17:20-17:40 Development of an Electrochemical Chiral Sensor Based on UiO-66-NH₂-L-Pro Metal-Organic Fr amework for Enantioselective Detection of Threonine

Yizhuo Ma; Maria Abbasi*; Jiale Gong; Jia Huang; Shengnan Ma; Taha Siredj Mounir Herhira; Niu Zhang; Runhong Lei; Yongrui Li; Lina Geng

17:40-18:00 Design of a CoM Following Device for Microgravity Climbing Tests on Space Bio-Inspired Robot

Zuan Li*; Senchun Yao; Guopeng Wang; Ze Yu; Yuntao Li

GS7: General Session: Machine Learning

16:00-18:00, Sat., Nov.1 VIP Meeting Room 108

Session Chair: Wei Wei

16:00-16:20 Optimization of traction transformer status prediction based on missing data imputation

Guanlin Qu; Wei Wei*; Weifan Wang

16:20-16:40 Online Fine-tuning for Robustness in Offline Reinforcement Learning: Actor-Critic vs Decision

Transformer

Shingo Ayabe; Hiroshi Kera; Kazuhiko Kawamoto*

16:40-17:00 Cascade adaptive phase optimized active disturbance rejection control for ultra-supercritical units

Jiangyu Jia; Wei Wei*

17:00-17:20 Feature Expansion based Graph Transformer for Node Classification

Yun Chen; Canxin Chen; Jiaqing Tong; Xiangyuan Ma*

17:20-17:40 API Sequence Representation via Stochastic Distribution Prediction

Qiaohua Deng*; Wei Dai; Yumin Lin; Weiyan Ma; Yan Yu; Luguang Huang

17:40-18:00 Frequency-Masked Embedding Inference: A Non-Contrastive Approach for Time Series Representation Learning

En Fu; Yanyan Hu*

GS8: General Session: Advanced Control Methods-B

16:00-18:00, Sat., Nov.1 VIP Meeting Room 201

Session Chair: Guiping Lu

16:00-16:20 Intelligent Optimal Control of Lithium-Ion Battery Liquid Cooling Systems Based on Deep Reinforcement Learning

Jiakai He; Zhifei Xu; Yingzi Han; Xingzhu Chen; Jiaxu Zhang; Mengjie Ye*

16:20-16:40 Research on Environmental Regulation in Facility Agriculture Based on LSTM-LLM Cooperative Mechanism

Wenhui Li; Guiping Lu*; Weidong Hu; Yuan Gao; Meiran Zhu; Yuhua Jin; Xuqi Guo

16:40-17:00 Finite-Time Control for Networked Systems with Actuator Saturation under Hybrid Attacks

Menghua Chen*; Wanyuan Chen; Dechang Zou

17:00-17:20 Decoupling-Model-Based MPC Synthesis for 5-DOF Magnetic Levitation Bearings

Taizhou Yin*; Yaojian Wang; Hongze Xu

17:20-17:40 A novel adaptive control method for nonlinear systems subject to state constraints

Hanzhang Qu; Ye Cao*

17:40-18:00 Distributed Model Predictive Control for Perturbed Nonlinear Multi-Agent Systems with Proportional-Derivative-Integral Event-Triggered Mechanism

Zhan Lu; Yan Ren*; Liyun Zhao; Bowen Zhang; Yuanzhuo Hu

Nov. 2 Sunday

OS9: Organized Session: Advanced Sensing and Intelligent Signal Processing A

13:30-15:30, Sun., Nov.2 Meeting Room 304

Session Chair: Xiaoyan Zhao

13:30-13:50 Optimization Methodology for Wire-Generated Magnetic Disturbances in Magnetic Positioning System

Zhipeng Gou; Zhaohui Zhang*; Tianyao Zhang; Xiaoyan Zhao; Fan Song; Hanyuan Wang; Chunlei Li

13:50-14:10 Few-Shot Learning at extremely low signal-to-noise ratio for noise suppression

Peitong Li; Dingshan Li; Bin Yao*; Liang Liang; Yige Wang

14:10-14:30 Detection of Magnetic Anomalies in Underground Cavities Based on SQUID

Hanyuan Wang; Xiaoyan Zhao*; Zhaohui Zhang; Tianyao Zhang; Zhipeng Gou; Fan Song; Chunlei Li; Lei Han

14:30-14:50 Cardiac Magnetic Field Simulator Based on Timing Control

Hongxia Li; Zhaohui Zhang*; Tianyao Zhang; Xiaoyan Zhao; Jianmei Guo; Lei Han

14:50-15:10 Design and Application of a Wide-band Frequency High-precision Multibeam Sonar System

Yunlong Tang; Siyuan Zhang*; Dong Lu; Ke Ding

15:10-15:30 Exploration and Application of a Quality Evaluation System for Cardiac Magnetic Field Signals of Magnetocardiograph

Lei Han*; Zhaohui Zhang; Xiaoyan Zhao; Tianyao Zhang

OS10: Organized Session: Affective Computing and Human-Robot Interaction for Mental Health A

13:30-15:30, Sun., Nov.2

Session Chairs: Zhentao Liu; Longxiang Luo

13:30-13:50 Conversational Multi-modal Emotion Recognition Based on Heterogeneous Dialogue Graph and Sentiment Polarity Contrastive Learning

Chengshan Jiang; Zhentao Liu*

13:50-14:10 Human-machine Consistency Verification of Text Empathy Automated Scoring in Online Peer Support Scenarios

Ruoyan Wu; Dan Chen; Chenling Liu; Zhentao Liu*

14:10-14:30 Cognitive Impairment Detection Based on Clock Drawing Test Image Classification

Jiale Wu; Zhentao Liu*; Enchao Guo; Xingru Jiang

14:30-14:50 Trust as Social Script in Human-machine Communication: Evidence from Mobile Banking Chatbots

Longxiang Luo; Fanke Chen; Zhentao Liu*

14:50-15:10 SHAP-based interpretion of machine learning prediction models for mild cognitive impairment

Zongqin Wang; Zhong Ding; Chenling Liu; Baoliang Zhong; Jin Lu*

15:10-15:30 Culturally Adapted Picture-Description Driven Mandarin Speech Approach for Cognitive Impairment

Screening

Anjie Dai; Dan Chen; Zhentao Liu*; Zongqin Wang; Baoliang Zhong

OS11: Organized Session: Intelligent Perception in Robotics

13:30-15:30, Sun., Nov.2 104 Tangjia Hall

Session Chair: Juntong Yun

13:30-13:50 Application of multimodal perception in target recognition

Jiaxin Tang; Lichuan Ning*; Yuanmin Xie

13:50-14:10 Target Classification and Recognition Technology Based on Motion Parameter Feature Matching

Xuantong Yu*

14:10-14:30 Intelligent Perception of Logistics Crane Based on OpenMV

Xiaolei Peng; Lichuan Ning*; Yuanmin Xie

14:30-14:50 Fast-LIO2 and Vision Fusion Logistics Walking System

Xiangdong Xu; Lichuan Ning*; Yuanmin Xie

14:50-15:10 Maintenance target detection algorithm based on improved YOLO v10

Pengyu An; Yingsun Li*; Zhannan Guo; Xin Liu; Xue Sun; Xiaoyong Zeng

15:10-15:30 A Survey of Multimodal Fusion and 3D Perception Techniques in Deep Multi Object Tracking

Leyuan Zhang; Lichuan Ning*; Yuanmin Xie

GS9: General Session: Object Detection, Recognition and Tracking-A

13:30-15:10, Sun., Nov.2 Meeting Room 106

Session Chair: Zuowei Zhang

13:30-13:50 Aircraft Detection in Remote Sensing Images using YOLOX-DCSA

Meijing Gao*; Sibo Chen; Xiangrui Fan; Huanyu Sun; Xu Chen; Bingzhou Sun; Ning Guan

13:50-14:10 A Context-Aware Cross-Modal Correction and Fusion Network for Anti-UAV Target Recognition

Rui Shen*; Jiawei Niu; Zihan Li; Zuowei Zhang

14:10-14:30 SCS-YOLO: An Occlusion-Robust Object Detection Algorithm Based on YOLO12

Dexin Liu; Chengzhi Ren; Hongyan Ma*; Yuchen Zhang; Wenwen Yu

14:30-14:50 FLSNet: Small Object Detection Algorithm Based On RT-DETR

Wenwen Yu; Yuchen Zhang; Hongyan Ma*; Chengzhi Ren

14:50-15:10 RecreTrack: Synergistic Appearance Modeling for RMOT

Haitao Xiao; Liping Yan*; Yuanqing Xia

GS10: General Session: Defect/Anomaly/Fault Detection and Processing-A

13:30-15:10, Sun., Nov.2 VIP Meeting Room 108

Session Chair: Zengwang Jin

13:30-13:50 An Attention-Enhanced LSTM Method for Industrial Server Anomaly Detection Based on Prediction Error

Zhe Wang; Xiao Huang; Zhan Shu; Guozhu Wen; Tianyu Gong*

13:50-14:10 Cyber Attack Detection Based on Clustering and Adaptive Model Selection

Huayu Song; Zenghui Hu*

14:10-14:30 Dual-Path Ransomware Detection Framework

Yixin Sun*: Hanvu Mao: Wei Dai: Yumin Lin

14:30-14:50 SFL-YOLO: A Lightweight Real-Time Welding Seam Defect Detection Algorithm Based on YOLOv11 Ao Kang; Aidong Ge; Mingcan Sun*

14:50-15:10 Power Material Supply Chain Security Risk Early Warning Based on Self-Adaptive Convergence Factor Matrix-Iterative Extreme Learning Machine

Hongzhi Sun; Jinyong Zhao; Lingxiao Cui*; Jiamian Wang; Shengping Yao

GS11: General Session: Imaging and Image Processing Technology

13:30-15:30, Sun., Nov.2 Meeting Room 305

Session Chair: Sijie Yin

13:30-13:50 Digital Holographic Imaging with Self-Coding Method

Li Song*

13:50-14:10 A Transformer Model for Underwater Image Enhancement Based on Top-k Channel Sparse Self-Attention and an Improved Gated Feedforward Network

Xiuzhi Liu; Hao Liang; Zhishuo Ji; Tao Sui*

14:10-14:30 FreqMix: Low-Frequency Component Mixing for Detail-Preserving Data Augmentation in Low-Light Image Enhancement

Hengyi Zhang; Fengshan Zhao*; Yujie Wang; Wuyou Zhou; Qin Liu; Takeshi Ikenaga

14:30-14:50 SPSP Net-based Image Semantic Segmentation

Yifan Feng*

14:50-15:10 Research on Automatic Image-Based Deskewing Technology for Inspection Camera Preset Positions Using Fuzzy PID Control

Peng Min; Yuan Zhao*; Jing Zhou

15:10-15:30 Adaptive Hypergraph Convolution and Multi-scale Spatial-channel Convolution Fusion Network f or Hyperspectral Image Classification

Shumeng Xu*; Qin Xu; Xing Wang; Chun Zheng; Zhihui Liu; Lijuan Tang; Huiqing Jin

OS12: Organized Session: Advanced Sensing and Intelligent Signal Processing B

16:00-17:40, Sun., Nov.2 Meeting Room 304

Session Chair: Xiaoyan Zhao

16:00-16:20 Immunity of SQUID second-order gradiometry to nearsurface interference in subsurface cavity

Fan Song; Zhaohui Zhang*; Tianyao Zhang; Xiaoyan Zhao; Zhipeng Gou; Hanyuan Wang; Chunlei Li

16:20-16:40 Prediction of IDH Mutation Status in Glioma Based on Terahertz Spectroscopy and Deep Learning

Yubo Wu; Wenzheng Shao; Tianyi Bi; Xiaoyan Zhao*; Zhaohui Zhang; Tianyao Zhang

16:40-17:00 Deep learning-based segmentation and recognition of temporomandibular joint disc and condyle images

Rufu Lin; Qiang Sun*; Xiaoyan Zhao; Zhaohui Zhang

17:00-17:20 FFCNN:Low-SNR Wireless Signal Detection Method Based on Fusion Feature CNN

Liang Liang*; Dingshan Li; Peitong Li; Bin Yao; Wen Wen; Peng Wang; Zhaohui Zhang

17:20-17:40 Research on Isotropy of Glioma Pathological Tissues with Terahertz Time-Domain Spectroscopy

Tianyi Bi; Xiaoyan Zhao*; Yubo Wu; Zhaohui Zhang; Tianyao Zhang

OS13: Organized Session: Affective Computing and Human-Robot Interaction for Mental Health A

16:00-17:20, Sun., Nov.2

Session Chairs: Baoliang Zhong; Weijie Tang

16:00-16:20 A Chinese Multi-label Clinical Corpus Of Patients With Hematologic Malignancies

Shuang Peng; Xinheng Li; Yuzhe Pan; Zhentao Liu; Fuling Zhou*

16:20-16:40 Cross-task acoustic parameters as predictors of mild cognitive impairment

Zhong Ding; BaoLiang Zhong; Hui Chen*

16:40-17:00 Research on Virtual Model Control Algorithm for a Single Leg of Bionic Quadruped Robots

Hualin Pang; Weijie Tang*; Zihan Huang; Weiqing Jiang

17:00-17:20 Research on Optimizing the Dynamic Obstacle Avoidance Stability of Robots Based on MPC

Weiqing Jiang; Weijie Tang*; Hualin Pang; Jian Luo; Yi Deng

GS12: General Session: Moving Object Information Processing Technology

16:00-18:00, Sun., Nov.2

Session Chair: Minling Zhu

16:00-16:20 AnchDrive: Bootstrapping Diffusion Policies with Hybrid Trajectory Anchors for End-to-End Driving

Jinhao Chai; Anqing Jiang; Hao Jiang; Shiyi Mu; Zichong Gu; Shugong Xu*

16:20-16:40 Adaptive Attitude Estimation method Based on Minimum Bounding Sphere

Peng Li; Zhichen Wang; Xinyu Liang; Weilong Ni; Wenan Zhang*

16:40-17:00 A Global Orientation Calibration Method Based on the Fusion of UWB Local Coordinates and Visual Data

Jun Wu*; Xiaofei Yang; Yucheng Yang

17:00-17:20 Hypersonic Vehicle State Time-Series Prediction Based on PG-DGNet

Zhe Wang; Yujing Li; Chuan Zhou*; Jian Guo

17:20-17:40 3DoF Object Pose Prediction with Temporal Guidance Using a CNN-Transformer Network

Weicheng Lu; Yuan Li*; Ryuji Fuchikami; Takeshi Ikenaga

17:40-18:00 WAFMF: Weighted Adaptive Frequency Median Filter for Salt-and-Pepper Noise Denoising

Minling Zhu*; Jiahua Yuan; Jun Miao; Maodong He

GS13: General Session: Object Detection, Recognition and Tracking-B

16:00-17:40, Sun., Nov.2 Meeting Room 106

Session Chair: Zuowei Zhang

16:00-16:20 Underwater Target Recognition using Cascaded Neural Network with Fusion Feature

Fuyan Wang; Jianlei Gao; Pengyuan Qi; Zhe Wang; Xueying Zhang*

16:20-16:40 基于国产算力的双阈值优化机载遥感目标深度开集检测方法

Yikun Wang*; Rui Shen; Jiawei Niu; Zuowei Zhang

16:40-17:00 Research on Entity Recognition Based on the Interaction Information of Character Embeddings and Sentence Embeddings

Yuhang Wang; Yingshun Li; Xian Du*; Xiangan Zeng; Xue Sun; Enhui Wu

17:00-17:20 Gesture Recognition via Transient sEMG Decomposition and Residual Spiking Neural Network

Lifen Wang; Jinting Ma; Jintao Chen; Yiyun Tan; Naifu Jiang; Guo Dan*

17:20-17:40 Improved YOLOv8 for Gesture Recognition in Human-Machine Interaction Under Complex Backgrounds

Ruowu Wang; Yingshun Li; Xian Du*; Xin Liu; Chuanqi Han

GS14: General Session: Defect/Anomaly/Fault Detection and Processing-B

16:00-17:20, Sun., Nov.2 VIP Meeting Room 108

Session Chair: Zengwang Jin

16:00-16:20 Deep Learning Based Real-Time Underwater Vehicle Driver Fatigue Detection

Haiying Wang; Haoliang Wang*; Mingkai Yuan; Maozhou Yang; Yixuan Dong; Saniia Karamatovna Shavinskaia

16:20-16:40 Local Feature-Enhanced LSTM for End-to-End Intelligent Bearing Fault Diagnosis

Wenxu Yang; Hui Xu*; Xue Huang; Yan Li; Changkun Han; Mingsong Bai

16:40-17:00 Uncertainty Support Vector Machine for Rolling Bearing Trustworthy Fault Diagnosis

Tingting Liu; Jing Wang*; Meng Zhou; Yanzhu Zhang; Yanyan Hu

17:00-17:20 Research on intelligent diagnosis of transformer thermal imaging fault based on RESNET and attention mechanism

Meng Liu; Ying Huang*

GS15: General Session: AI for Science and Culture

16:00-17:20, Sun., Nov.2 Meeting Room 305

Session Chair: Shuai Shao

16:00-16:20 Research on Decision Support for Cultural Heritage Conservation Using Agent-based AI Systems with Prompt Engineering—A Case Study of the "Heritage Echo Planet" World Heritage Large Language Model Ximeng Wang; Yuzhe Liu; Shuai Shao; Lijie Wang*

16:20-16:40 Building an AI Knowledge Infrastructure for the World Cultural Heritage Vertical: Methodology and Challenges from Local Databases

Yuzhe Liu; Ximeng Wang; Shuai Shao; Lijie Wang*

16:40-17:00 Sustainable Tourism Water Management Research in Bali Based on Grey Correlation Analysis and Intelligent Optimization Algorithms

Yanran Wei*

17:00-17:20 Weak N-best POAFD for Second Order Initial Value Problems of Ordinary Differential Equations Hongfang Bai*; Jianwei Dong

Nov. 3 Monday

OS14: Organized Session: Intelligent unmanned cluster system technology

13:30-15:30, Mon., Nov.3 101 Fenghuangshan Hall

Session Chair: Jing Li

13:30-13:50 Adaptive Formation Control of Multi-AUVs with ETM

YuLin Luo; Jing Li*; Yang Du

13:50-14:10 Switched Observer-Based Consensus Control for Multi-ASV Systems under DoS Attacks

Ning Nan; Jing Li*; Yang Du

14:10 -14:30 Adaptive Fault-Tolerant Control of Vehicle Platoon with Sensor Faults

Jian Wu*; Junren Gao

14:30-14:50 Adaptive Deep Neural Control for Fractional-Order Nonlinear Systems

Keyun Chen; Qiong Wu*; Jian Wu

14:50-15:10 Further Results on Adaptive Tracking Control of State-Constrained High-Order Nonlinear Systems

Chengfu Han; Yangang Yao*

15:10-15:30 Safety-Constrained Distributed Sliding Mode Control for Vehicle Platoons with Improved Prescribed

Performance Functions

Yulin Zhan; Jian Wu; Dewen Cao*

OS15: Organized Session: Embodied Intelligence, Neural Computation and Intelligent Robotics

13:30-15:50, Mon., Nov.3 102 Hongshulin Hall

Session Chair: Mingyue Cui

13:30-13:50 A Hierarchical Plane-Quadric Surface Fitting Based Framework for Real-Time LiDAR Point Cloud

Compression

Mingyue Cui; Jiakang Zhang; Mingjian Feng; Yuyang Zhong; Yanwei Lu; Chunjie Shu; Yehui Li*; Weibing Li

13:50-14:10 Generative Autonomous Emotionally Intelligent Robot System

Zhijun Zhang*; Wentong Wang, Haomin Yu, Yongchang Chen

14:10-14:30 A Gradient Neurodynamic Solution Enhanced by a Gated Recurrent Unit for Solving Time-Varying

Linear Equations With Robotic Application

Weibing Li*; Jiajun Luo; Yehui Li; Chengzhu Li

14:30-14:50 A Novel Shape Estimation Strategy for Continuum Robots Using Multiple Hall-effect Sensors and

IMUs

Yehui Li; Yujing Kuang; Mingyue Cui*; Weibing Li

14:50-15:10 An Optimized Control Scheme for Mobile Manipulators Based on Penalty Strategy and Variable-

Parameter Neural Dynamics

Zhijun Zhang*; Ruixu Jiao

15:10-15:30 Comparison of Control Barrier Functions and VMEV Methods for Obstacle Avoidance of a Redundant Robot

Lihang Liang; Weibing Li*; Yehui Li

15:30-15:50 Comparative Study of Model-Free Kinematic Control Strategies for Robotic Manipulators

Guanghong Chen; Weibing Li*; Yehui Li

OS16: Organized Session: Advances in Multi-Agent Systems and Visual Perception for Complex Environments

13:30-15:50, Mon., Nov.3 103 Jinding Hall

Session Chair: Licheng Sun

13:30-13:50 AE-BiseNet: Anomaly-enhanced Bilateral Segmentation Network for Industrial Defect Detection Xinyang Wang, Xinwei Wu, Yongjie Hou, Hongbin Ma*, Ying Jin

13:50-14:10 Multi-scale feature fusion point cloud registration for complex industrial environments *Zhentao Guo, Minglei Han, Ao Ding, Hongbin Ma**

14:10-14:30 Dynamic Diffusion-based Stochastic Trajectory Prediction with Time-frequency Analysis Jiaqi Ma, Fuji Fu, Dechen Hao, Jinfu Yang

14:30-14:50 Design and Application of Grinding Trajectory Planning Algorithm for Casting Grinding Robot Xin Wang, Hongbin Ma*, Jinyue Bian, Yanhuan Jiang, Yiyi Yin

14:50-15:10 Multi-Element Localization and Spatial Mapping in Hybrid Wargaming using an Integrated Hierarchical Approach

Minglei Han, Xinwei Wu, Tianhao Wang, Hui Chen, Zhentao Guo, Hongbin Ma*

15:10-15:30 Mathematical modeling of anti-drone swarm warfare based on "Spider Web Operation" Chang Xu, Minzhe Fan, Yiran Chen, Xinwei Wu, Hongbin Ma, Bi Wu

15:30-15:50 Attention-Enhanced Hybrid Graph Neural Network for 3D Localization of Rock Fracture Events Bingchen Li, Jianing Sun, Heyao Li, Chengzhi Zhang, Weixian Teng, Haoyuan Song, Xianrui Ji, Zhibin Yao*

OS17: Organized Session: Feedback control design for distributed parameter systems

13:30-15:10, Mon., Nov.3 104 Tangjia Hall

Session Chair: Kai Liu

13:30-13:50 Adaptive Output Feedback Stabilization for an Unstable Wave Equation with Unknown Parameter Haili Du; Hongyinping Feng*

13:50-14:10 Output Feedback Stabilization for Two-dimensional Nonlinear Parabolic Equation Kai Liu; Zhongjie Han*

14:10-14:30 Disturbance rejection and stabilization for piezoelectric beam equation

Baowei Feng; Huacheng Zhou*

14:30-14:50 Backstepping Stabilization of Stochastic Hyperbolic PDE-ODE Systems

Xuejiao Sun*; Junmin Wang; Kaijing Lv

14:50-15:10 Dual-Feedback GAN for Antiviral Peptide Generation

Song Tao; Junjie Li; Donghua Li; Zuohang Jiang

OS18: Organized Session: Data Analytics and Optimization for Smart Industry

13:30-15:10, Mon., Nov.3

Session Chairs: Te Xu; Zhiming Dong

13:30-13:50 Multi-objective optimization algorithm for integrated slab matching and hot rolling production scheduling with uncertainty

Yufei Lu*

13:50-14:10 A Method for Solving Topology Optimization Problems Using a Graph-based Encoded Differential Evolution Algorithm

Hongxu Pei*

14:10-14:30 Multi-objective Multi-task Optimization Research on Scheduling in Aero-engine Assembly Workshop Huimin Du*, Haohong Xu

14:30-14:50 A Collaboration Optimization Framework for Complex Semiconductor Equipment Scheduling based on Mixed-Integer Linear Programming and Neighborhood Search

Sen Li; Xiangyan Liu; Kunlong Sang; Te Xu*

14:50-15:10 Learning Informed Search Adaptive Knowledge Transfer in Evolutionary Multi-Objective Multi-Task Optimization

Zhiming Dong*; Huimin Du; Kai Fu; Haohong Xu

OS19: Organized Session: AI for Complex Systems & Interdisciplinary Applications

13:30-15:10, Mon., Nov.3 106 Meeting Room

Session Chair: Jianhua Lu

13:30-13:50 Physics-informed neural networks for two-phase flow problems in porous media

Qin Lou*

13:50-14:10 An improved physics-informed neural network for phase field equation: applications in fluid interfacial problems

Haoran Hu*

14:10-14:30 Solving Forward-Backward SDEs via Regularized Neural Networks

Xinyu Wei; Jingtao Shi*

14:30-14:50 Formal System of Rongzhi Learning: A Category Theory-Based Unified Framework for Language-Databases and Cross-Modal Human-Computer Collaboration

Shunpeng Zou; Xiaohui Zou

14:50-15:10 Blockchain-Assisted CP-ABE with Revocation for Vehicular Access Control

Chunming Wu; Yi Lu; Jianhao Qin; Zongze Liu; Jiaxin Yan