

The 38th Chinese Control and Decision Conference

Technical Programmes

Saturday, 16 May, 2026

SatCS **Changsha Hall**
Presentations by Finalists of Zhang Si-Ying Outstanding Youth Paper Award **14:40-16:40**
 Chair: Changyun Wen Nanyang Technological Univ.

14:40-15:00 **SatCS-1**
Deep Contrastive Clustering for Fault Diagnosis in Complex Industrial Processes
 Qiluo Xiong Tsinghua Univ.
 Yaqi Zhu Tsinghua Univ.
 Mi Gao Tsinghua Univ.
 Fan Yang Tsinghua Univ.

15:00-15:20 **SatCS-2**
Joint Reconstruction of High-order Network Topology and System Parameters
 Yixiu Ji Fudan Univ.
 Jie Ding Fudan Univ.
 Xiaolei Li Yanshan Univ.
 Guoqi Li Inst. of Automation(Beijing)
 Xiang Li Fudan Univ.

15:20-15:40 **SatCS-3**
Distributed Optimal Time-Varying Formation Control of Nonlinear Multi-Agent Systems
 Ziyuan Guo Shandong Univ. of Science and Tech.
 Liping Zhang Shandong Univ. of Science and Tech.
 Chuanzhi Lv Shandong Univ. of Science and Tech.
 Huanshui Zhang Shandong Univ. of Science and Tech.

15:40-16:00 **SatCS-4**
Distributed Average Tracking for Open Heterogeneous Multi-Agent Systems
 Tao Xu Nanyang Technological Univ.
 Lihua Xie Nanyang Technological Univ.

16:00-16:20 **SatCS-5**
A Linearly Convergent Distributed Algorithm for Nash Equilibrium Seeking in Malicious Environment
 Kaiyuan Guo Huazhong Univ. of Science and Tech.
 Xuan Zhang Huazhong Univ. of Science and Tech.
 Xiao-Kang Liu Huazhong Univ. of Science and Tech.
 Yan-Wu Wang Huazhong Univ. of Science and Tech.

16:20-16:40 **SatCS-6**
Hysteresis Compensator based Saturated Output Feedback Control For Hysteretic Nonlinear Systems
 Chen Zhang North Univ. of China
 Zhiliang Zhao North Univ. of China
 Miaolei Zhou Jilin Univ.
 Liangcai Su Jilin Univ.

SatA01 **Room01**
Data-driven intelligent optimization and decision for industrial processes (Special Session) **14:30-17:50**
 Chairs: Jing Na Kunming Univ. of Science and Tech.
 Fei Chu China Univ. of Mining and Tech.
 Jiande Wu Yunnan Univ.

14:30-14:50 **SatA01-1**
CogUn-HIRL: A Cognitive Uncertainty-Based Human-in-the-Loop RL Framework
 Ranmeng Lin Northeastern Univ.
 Runda Jia Northeastern Univ.
 Dapeng Jiang State Taxation Administration
 Jun Zheng Criminal Investigation Police Univ. of China
 Kang Li BGRIMM Tech. Group
 Dakuo He Northeastern Univ.

14:50-15:10 **SatA01-2**
Knowledge-Augmented Continual Learning System for Drilling Efficiency Optimization in Complex Formations
 Rui Zhang China Univ. of Petroleum Beijing
 Qihao Li China Univ. of Petroleum Beijing
 Xianzhi Song China Univ. of Petroleum Beijing
 Chengkai Zhang China Univ. of Petroleum Beijing
 Zhaopeng Zhu China Univ. of Petroleum Beijing
 Chaochen Wang China Univ. of Petroleum Beijing

15:10-15:30 **SatA01-3**
Model-free Robust Optimal Control of Batch Processes Based on Stochastic Approximation
 Enze Zhang China Univ. of Mining and Tech.
 Fei Chu China Univ. of Mining and Tech.
 Guobin Zou State Key Laboratory of Intelligent Optimized Manufacturing in Mining and Metallurgy Process Beijing Key Laboratory of Process Automation in Mining and Metallurgy

Guoqing Wang China Univ. of Mining and Tech.
Kang Li State Key Laboratory of Intelligent Optimized Manufacturing in Mining and Metallurgy Process Beijing Key Laboratory of Process Automation in Mining and Metallurgy
Zhen Meng China Univ. of Mining and Tech.

15:30-15:50 **SatA01-4**
A Cross-Frequency Fusion Encoder-Decoder for Multi-Rate Time Series Forecasting
 Yuting Bai Beijing Tech. and Business Univ.
 Haoran Tian Beijing Tech. and Business Univ.
 Jianlei Kong Beijing Tech. and Business Univ.
 Xuebo Jin Beijing Tech. and Business Univ.
 Tingli Su Beijing Tech. and Business Univ.

15:50-16:10 **SatA01-5**
3D Froth Feature Extraction via Stereo Vision for Enhanced Flotation Monitoring
 Yaochu Song Central South Univ.
 Degang Xu Central South Univ.
 Yiwei Chen Central South Univ.

16:10-16:30 **SatA01-6**
Intelligent Model for Underflow Concentration of Lead-Zinc Ore Thickener Based on Perceptual Network Learning
 Zeshan Cai Western Mining Group Co., Ltd.
 Xiaopeng Fan Western Mining Group Co., Ltd.
 Shengwei Li Western Mining Group Co., Ltd.
 Hongyan Yang Western Mining Group Co., Ltd.
 Wei Xu Western Mining Group Co., Ltd.
 Jiangtao Zuo BGRIMM Tech. Group

16:30-16:50 **SatA01-7**
An Automatic Legend Matching Method for Engineering Drawings Based on Block Detection and Feature Memory Bank
 Yang Mo China Communications Information & Tech. Group Co., Ltd

Lei Xiao Dalian Univ. of Tech.
Jiaxing Liu China Communications Information & Tech. Group Co., Ltd
Hang Yuan Dalian Univ. of Tech.
China Communications Information & Tech. Group Co., Ltd

Weiqiang Kong China Communications Information & Tech. Group Co., Ltd.
Wei Zeng China Communications Information & Tech. Group Co., Ltd.
Yanan Li China Communications Information & Tech. Group Co., Ltd.
Cuilan Liang China Communications Information & Tech. Group Co., Ltd.
Jing Wang China Communications Information & Tech. Group Co., Ltd.

16:50-17:10 **SatA01-8**
Incremental Control-based Deep Reinforcement Learning Approach for Time-varying Industrial Process Control
 Bangwu Dai Taizhou Univ.
 Yawei Wu Taizhou Univ.
 Sheng Xu Taizhou Univ.
 Fuli Wang Northeastern Univ.

17:10-17:30 **SatA01-9**
Prediction of Effluent Quality and Process Energy Consumption in Wastewater Treatment Processes Based on CNN-LSTM with Attention Mechanism
 Tianming Deng Shenyang Univ. of Tech.
 Jun Zhang Shenyang Univ. of Tech.
 Yanhong Wang Shenyang Univ. of Tech.

17:30-17:50 **SatA01-10**
Operating Performance Assessment of Complex Industrial Process Based on Adaptive Graph Node Embedding Optimization
 Lili Hao China Univ. of Mining and Tech.
 Ruicong Zhang China Univ. of Mining and Tech.
 Fei Chu China Univ. of Mining and Tech.

SatA02 **Room02**
Data-driven adaptive learning systems and applications (Special Session) **14:30-17:50**
 Chairs: Ronghu Chi Foshan Univ.
 Dong Shen Renmin Univ. of China
 Xuhui Bu Henan Polytechnic Univ.

14:30-14:50 **SatA02-1**
A Data-Driven Prescribed-Time Control Framework via Koopman Operator and Adaptive Backstepping
 Yue Wu Xi'an Jiaotong Univ.

Xinxing Chen Wenliang Li Jianfu Cao	Hongyun Honghe Tobacco (Group) Co., Ltd. Hongyun Honghe Tobacco (Group) Co., Ltd. Xi'an Jiaotong Univ.	Dual-Branch Transformer with Contrastive Learning for Unsupervised Time Series Anomaly Detection Pan Hu Donghe Li Qingyu Yang Wenbo Wang Weizhi Ba	Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ.
14:50-15:10 Direct Heuristic Dynamic Programming Tracking Control for Aerial Work Platforms Weiwei Cao Lin Zhang Zhaoliang Zhang Yuzhe Li	Zhejiang Univ. North Valley Research Linggong Heavy Machinery Co., Ltd Zhejiang Univ.	15:10-15:30 Dual-Strategy Deep Reinforcement Learning Framework for C3DP Path Optimization Jiaxin Yuan Dan Xu	SatA02-2 SatA03-3 Xi'an Univ. of Architecture and Tech. Xi'an Univ. of Architecture and Tech.
15:10-15:30 Direct Data-Driven Cooperative Control for Intelligent Connected Vehicles Platoons Under DoS Attacks Fukun Zhang Na Lin Ronghu Chi	Qingdao Univ. of Science and Tech. Qingdao Univ. of Science and Tech. Foshan Univ.	15:30-15:50 A Machining Feature Recognition Method Based on Minimum Conditional Subgraph Isomorphism Sunxuan Xie Falun Wang Yingji Jiang	SatA02-3 SatA03-4 Nanchang Hangkong Univ. Nanchang Hangkong Univ. Jiangxi Hongdu Aviation Industry Group Co., Ltd
15:30-15:50 Event-Triggered Supplementary Critic Learning Control for Wastewater Treatment Processes Zhiyao Liu Xin Li Jin Ren Ding Wang	Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech.	Guorong Chen Kaijin Cao Wenjie Liao	SatA02-4 SatA03-5 Nanchang Hangkong Univ. Nanchang Hangkong Univ. Nanchang Hangkong Univ.
15:50-16:10 Robust Model-Free Adaptive Control With Enhanced Tracking Performance for Nonaffine Discrete-Time Nonlinear Systems Yun Cheng Shuangyi Hu Qiang Chen	Zhejiang Univ. of Tech. Zhejiang Univ. of Tech. Zhejiang Univ. of Tech.	15:50-16:10 Rail-Guided Bridge Inspection Vehicle Electrical Control Design and Intelligent Bridge Crack Detection Zhongran Gan Ling Xiong Ji Xiao	SatA02-5 SatA03-6 Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech. Electric Control Equipment Co., Ltd. Wuhan Univ. of Science and Tech.
16:10-16:30 Iterative Learning Event-triggered Robust Control for Multi-Agent Systems based on 2D Systems Xuhui Bu Qing Wang Jiaqi Liang	Henan Polytechnic Univ. Henan Polytechnic Univ. Henan Polytechnic Univ.	16:10-16:30 Research on the Development and Application of Industrial Databases Siqi Zhao Jie Liu Tianle Wu Xiaogang Li Yan Li Jia Liu	SatA02-6 SatA03-7 China Academy of Industrial Internet China Academy of Industrial Internet North China Univ. of Tech. China Academy of Industrial Internet China Academy of Industrial Internet China National Accreditation Service for Conformity Assessment
16:30-16:50 Data-Driven Model-Free Adaptive Sliding Mode Control for Multi DC Motor Speed Regulation Tony Blaise Bimenyimana Dong Liu Yijie Yang	Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ.	16:30-16:50 Cross-Modal Fusion-Based Bolt Pose Estimation for Tightening Robot Shengjun Xu Yaokun Liu Bohan Zhan Rui Shen Jun Liu Shujun Xu	SatA02-7 SatA03-8 Xi'an Univ. of Architecture and Tech. Xi'an Univ. of Architecture and Tech. Xi'an Jiaotong Univ. Northwestern Polytechnical Univ. Xi'an Jiaotong Univ. Hubei Hantang Intelligent Sci-Tech Co., Ltd
16:50-17:10 Model-free Adaptive Quantized ILC for Multi-agent Systems under Quantization Parameters Mismatch Huimin Zhang Wenjing Li Ronghu Chi	Shandong Tech. and Business Univ. Shandong Tech. and Business Univ. Foshan Univ.	16:50-17:10 Research on Real-Time Change of Multi-Platform Heterogeneous CAD Models Based on OSLC Siyu Chen Chuming Zhang Jianfeng Cheng Yangjing Zhang Shaokai Zhang Baoran An	SatA02-8 SatA03-9 China Academy of Engineering Physics China Academy of Engineering Physics China Academy of Engineering Physics China Academy of Engineering Physics China Academy of Engineering Physics China Academy of Engineering Physics
17:10-17:30 Event-Triggered Model-Free Adaptive Control for Freeway Ramp Metering under Actuator Saturation Yihan Xu Huarong Zhao Dezhi Xu Li Peng	Jiangnan Univ. Jiangnan Univ. Southeast Univ. Jiangnan Univ.	17:10-17:30 Multi-Campaign Scheduling Optimization Method for Cold Rolling Production Based on Cluster Analysis Jun Zhou Mingze Gao Shixin Liu	SatA02-9 SatA03-10 Shanghai Baosight Software Co., Ltd. Northeastern Univ. Northeastern Univ.
17:30-17:50 Hierarchical Model-Free Adaptive Attitude Consensus Control for Multi-UAVs with Disturbance Rejection Dongyang Li Jingchao Ma Yize Rui Qing Li Runze Chen Xianggui Guo	Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing	17:30-17:50 Multi Strategy Fusion Firefly Algorithm for Hybrid Flow Shop Scheduling Problem Jing Ye Xueyu Dong Yuming Lu Lixuan Qian Jiman Su Yufeng Yao	SatA02-10 SatA03-11 Nanchang Hangkong Univ. Nanchang Hangkong Univ. Nanchang Hangkong Univ. Nanchang Hangkong Univ. Nantong Vocational College of Science and Tech. Univ. of the West of England
SatA03 Smart manufacturing and industrial intelligence (Special Session) Chairs: Shixin Liu Jing Bi	Northeastern Univ. Beijing Univ. of Tech.	Room03 14:30-17:50	
14:30-14:50 A Dynamic Graph Attention Network Based Spatiotemporal Fusion Quality Prediction Framework for Industrial Processes Zijing Wu Tie Li Kaixiang Peng Liang Ma	Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing	SatA04 Distributed optimization and game with applications to robots (Special Session) Chair: Xiuxian Li	Room04 14:30-17:50 Tongji Univ.
14:50-15:10		14:30-14:50 A Distributed Resilient Fusion Filtering Approach for Multi-Rate Stochastic Systems with Multiplicative Noises and Gain Perturbations	SatA03-2 SatA04-1

Zhibin Hu Tana Guo Shiliu Han Jing Zhang Xinyi Zhang	Jining Normal Univ. Jining Normal Univ. Harbin Univ. of Science and Tech. Jining Normal Univ. Jining Normal Univ.	14:50-15:10 <i>Short-term Photovoltaic Power Prediction Based on CPO-CNN-BiLSTM</i> Zhiyun Gao Zihao Cui Xinlu Wang Bowen Duan	SatA05-2
14:50-15:10 <i>A Color Image Encryption Algorithm Based on Chaotic System and STP Diffusion</i> Yaqian Wu Rongpei Zhou	Nanchang Univ. Nanchang Univ.	15:10-15:30 <i>Privacy-Preserving and Consensus-Based Resilient Distributed Energy Management in Cyber-Physical Microgrids</i> Meilian Zeng Huifeng Zhang Shuiqing Ye	SatA05-3
15:10-15:30 <i>Distributed Column Generation for Cost-Efficient Microservice Deployment in Smart Systems</i> Kaili Huang Yuxiang Liu Qi Liu Bo Yang	Shanghai Jiaotong Univ. Shanghai Jiaotong Univ. Shanghai Jiaotong Univ. Shanghai Jiaotong Univ.	15:30-15:50 <i>Multi-Objective Model Predictive Control of PV Energy Storage Systems with Dynamic Weights</i> Yanmin Wang Yangqing Li Rajbondit Pin Andrey A. Achitav	SatA05-4
15:30-15:50 <i>A Weak Texture Image Registration Algorithm Based on Improved DISK</i> Zhiwei Yin Xiaogang Wang Min Wang	Sichuan Univ. of Science and Engineering Sichuan Univ. of Science and Engineering Sichuan Univ. of Science and Engineering	15:50-16:10 <i>Proactive Voltage Control in Distribution Networks Based on Multi-Agent Reinforcement Learning Using Graph Networks</i> Hongen Zhou Yueyang Huang Fuhao Zhang Yuanbo Shi	SatA05-5
15:50-16:10 <i>An Adaptive Enhancement Method for Low-Illumination Images Based on Improved Particle Swarm Optimization</i> Xiaobin Chen Jihui Fan Yiping Chen Chao Wang Zhanzhan Li Yongqiang Zhang	Guangzhou Inst. of Science and Tech. Guangzhou Inst. of Science and Tech. Guangzhou Inst. of Science and Tech. Guangzhou Inst. of Science and Tech. Guangzhou Inst. of Science and Tech. Guangzhou Inst. of Science and Tech.	16:10-16:30 <i>Multi-Step Wind Power Forecasting Based on Multi-Channel Neural Network</i> Yao Wang Yonghui Sun Sen Wang Peibiao Chen Haoran Dai	SatA05-6
16:10-16:30 <i>Accelerated Variance-Reduced Distributed Stochastic Optimization Over Time-Varying Directed Networks</i> Shuai-Qi Li Xiao-Kang Liu Jiang-Wen Xiao Yan-Wu Wang Kaiyuan Guo	Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.	16:30-16:50 <i>Optimal Energy Management of Microgrid Based on Multi-Agent Reinforcement Learning</i> Yikun Qin Jiawen Dong Jinyue Li Jinyang Zheng Li-Ning Liu	SatA05-7
16:30-16:50 <i>Distributed online optimization with differential privacy and quantized communication</i> Mingcheng Dai Yuanjie Fang	Chaohu Univ. Chaohu Univ.	16:50-17:10 <i>A Distributed Multi-Energy Scheduling Strategy for Pelagic Islands Considering Berth Allocation</i> Xu Yi Mian Hu Yang Chen Zhihuan Chen Shengnan Tian	SatA05-8
16:50-17:10 <i>Economic Scheduling of Distributed ADMM Microgrid Based on Multi-agent</i> Haojie Xu Weilin Yang Yixin Zhu Wentao Huang Dezhi Xu	Jiangnan Univ. Jiangnan Univ. Jiangnan Univ. Jiangnan Univ. Southeast Univ.	17:10-17:30 <i>Photovoltaic Power Identification in Distribution Transformer Areas Based on Fuzzy-Aware CNN</i> Xin Chen Wenzhou Lu	SatA05-9
17:10-17:30 <i>A Heterogeneity-Aware Adaptive Distributed Control Algorithm for Tri-Quadrotor Array</i> Yaxuan Liu Qi Gao Xinru Xie Feng Pan	Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech.	17:30-17:50 <i>Single-Phase Grounding Fault Section Location in Distribution Network Based on Multivariate Optimization Algorithm</i> Zhuwei Yang Lian Gao Peng Li Hu Yi Changchuan Chen Yunshan Rui	SatA05-10
17:30-17:50 <i>Fault Location in Active Distribution Networks Using a GWO-PSO Based on an Improved Tent Chaotic Map</i> Zongyu Lv Long Sheng	China Univ. of Petroleum(Beijing) China Univ. of Petroleum(Beijing)	SatA05-11	
SatA05 AI enabled smart grid and energy internet (Special Session) Chairs: Yuanzheng Li Zhigang Zeng	Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.	Room05 14:30-17:50	
14:30-14:50 <i>Improved Weighted GRU Interval Prediction Method Based on Quantile Regression</i> Yi Ning Yucheng Liu Xifeng Guo Zhiyong Liu Xinlu Wang	Shenyang Jianzhu Univ. Shenyang Jianzhu Univ. Shenyang Jianzhu Univ. Liaoning Petrochemical Univ. Shenyang Jianzhu Univ.	SatA05-12	
SatA06 Swarm perception and cooperation control of marine (Special Session) Chair: Jing Yan Chair: Xiping Guan Chair: Yichen Li	Yanshan Univ. Shanghai Jiao Tong Univ. Shanghai Jiao Tong Univ.	Room06 14:30-18:10	
14:30-14:50 <i>Multi-AUV Target Capture in 3D Underwater Environments Based on RODE-MAPPO Algorithm</i> Yalin Xu Xiang Cao Huaxiang Li Yue Wang Haoxiang Li	Anhui Univ. Anhui Univ. Anhui Univ. Anhui Univ. Anhui Univ.	SatA06-1	

14:50-15:10	SatA06-2	Zhiyong Liu Di Zheng	Liaoning Petrochemical Univ. Shenyang Jianzhu Univ.
A Hierarchical Coordination Framework for Multi-Target Pursuit in 3D Underwater Environments			
Haoxiang Li	Anhui Univ.		
Yalin Xu	Anhui Univ.		
Xiang Cao	Anhui Univ.		
15:10-15:30	SatA06-3	Zhiyong Liu Di Zheng	SatA07-2
A Hybrid TCN-PABiGRU Model for Multi-Scale Ship Trajectory Prediction			
Dongdong Mu	Dalian Maritime Univ.		
Guofei Du	Dalian Maritime Univ.		
Jin Wang	Dalian Inst. of Measurement and Control Tech.		
Sida Wu	Dalian Inst. of Measurement and Control Tech.		
Yongwei Lin	Tianjin Hongtu Aviation Tech. Group Co., Ltd.		
Yunsheng Fan	Dalian Maritime Univ.		
15:30-15:50	SatA06-4	Zhiyong Liu Di Zheng	SatA07-3
Cooperative Decision-Making for Multi-UUV Target Tracking to Ensure Persistent Detection Coverage			
Yuexi Zhang	Hubei Minzu Univ.		
15:50-16:10	SatA06-5	Zhiyong Liu Di Zheng	SatA07-4
Predefined-time cooperative trajectory tracking control for unmanned surface vessels			
Chen Zhang	Ludong Univ.		
Lewei Dong	Ludong Univ.		
Ying Liu	Ludong Univ.		
Wuquan Li	Ludong Univ.		
Xuefeng Chen	Changzhou Univ.		
16:10-16:30	SatA06-6	Zhiyong Liu Di Zheng	SatA07-5
A Modular Underwater Robot Self-Reconfiguration Planning Method Based on Graph Isomorphism			
Ziyou Hu	Northwestern Polytechnical Univ.		
Wenqi Meng	Northwestern Polytechnical Univ.		
Zhuo Zhang	Northwestern Polytechnical Univ.		
Rongxin Cui	Northwestern Polytechnical Univ.		
Weisheng Yan	Northwestern Polytechnical Univ.		
Shouxu Zhang	Northwestern Polytechnical Univ.		
16:30-16:50	SatA06-7	Zhiyong Liu Di Zheng	SatA07-6
Optimal Cooperative Hunting Strategy for Multiple Dynamic Targets on Water Surface			
Qiqiang Ga	Dalian Maritime Univ.		
Kai Zheng	Dalian Maritime Univ.		
Sibo Wen	Dalian Maritime Univ.		
Hui Wang	Dalian Maritime Univ.		
16:50-17:10	SatA06-8	Zhiyong Liu Di Zheng	SatA07-7
Fixed-time Trajectory Tracking Control of Unmanned Surface Vehicles under Stochastic Environmental Loads			
Ruyue Cong	Ludong Univ.		
Ying Liu	Ludong Univ.		
Wuquan Li	Ludong Univ.		
17:10-17:30	SatA06-9	Zhiyong Liu Di Zheng	SatA07-8
Topology Optimization for Consensus Control of Multiple Autonomous Underwater Vehicles Systems			
Shaoxiong Qiu	Northeastern Univ.		
Hongli Xu	Northeastern Univ.		
Jingyu Ru	Northeastern Univ.		
17:30-17:50	SatA06-10	Zhiyong Liu Di Zheng	SatA07-9
A Cross-Domain Remote Video Streaming Platform for Mobile Monitoring in Ports: Design and Implementation			
Xiaorui Liu	Yanshan Univ.		
Wenqiang Cao	Yanshan Univ.		
Xian Yang	Yanshan Univ.		
Jing Yan	Yanshan Univ.		
17:50-18:10	SatA06-11	Zhiyong Liu Di Zheng	SatA07-10
Sea Clutter Suppression Based on Optimized Dynamic Mode Decomposition			
Shiqiang Wang	Naval Aviation Univ.		
SatA07	Room07		
Energy big data and energy system digitalization (Special Session)			
Chair: Dongsheng Yang	Northeastern Univ.		
Chair: QinMin Yang	Zhejiang Univ.		
Chair: Yanhong Luo	Northeastern Univ.		
14:30-14:50	SatA07-1	Zhiyong Liu Di Zheng	SatA07-11
Interval Forecasting of Multi-Energy Loads in Integrated Energy Systems Based on a Composite Quantile Regression Neural Network Model			
Yi Ning	Shenyang Jianzhu Univ.		
Xiaofeng Li	Shenyang Jianzhu Univ.		
Xifeng Guo	Shenyang Jianzhu Univ.		
14:50-15:10	SatA07-2	Zhiyong Liu Di Zheng	SatA07-12
EV Charging Pile Early Warning Model with Time-Varying Transitions and Embedded Mechanistic Equations			
Yifan Zhou	China Jiliang Univ.		
Yuchen He	China Jiliang Univ.		
15:10-15:30	SatA07-3	Zhiyong Liu Di Zheng	SatA07-13
Multi-Fault Diagnosis of Lithium-Ion Batteries Based on Ensemble Learning in Real-World Conditions			
Muyao Wu	Hefei Univ. of Tech.		
Lei Bao	Hefei Univ. of Tech.		
Pengyu Liu	Hefei Univ. of Tech.		
Li Wang	Hefei Univ. of Tech.		
15:30-15:50	SatA07-4	Zhiyong Liu Di Zheng	SatA07-14
LLM-based Multimodal Entity Linking			
Qi Liu	Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd		
Bingbing Qiu	Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd		
Xiaodong Xia	Shenyang Power Supply Company of State Grid Liaoning Electric Power Co., Ltd		
Heyang Sun	Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd		
Zhengdao Zhou	Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd		
Enze Yi	Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd		
Tao Ren	Northeastern Univ.		
Xingqi Li	Northeastern Univ.		
15:50-16:10	SatA07-5	Zhiyong Liu Di Zheng	SatA07-15
State-Dependent Sliding Mode Control of Ultra-Supercritical Power Units Using a Fractional-Order Disturbance Observer			
Meiqi Zhao	Northeastern Univ.		
Yingchun Wang	Northeastern Univ.		
Yanhong Luo	Northeastern Univ.		
Xiaoran Shi	Northeastern Univ.		
Weikun Cheng	China Huadian Electric Power Research Inst. Co., Ltd.		
Yuming Ding	China Huadian Electric Power Research Inst. Co., Ltd.		
16:10-16:30	SatA07-6	Zhiyong Liu Di Zheng	SatA07-16
Research on SOC, SOH and RUL Prediction Methods for Lithium-Ion Batteries Based on the ConvMamba Model			
Zhihao Wang	Shenyang Jianzhu Univ.		
Jingwen Zhang	Shenyang Jianzhu Univ.		
Qinwei Zhang	China Fire and Rescue Inst.		
16:30-16:50	SatA07-7	Zhiyong Liu Di Zheng	SatA07-17
Wind Power Prediction Based on CNN-BiLSTM-AM with Test-Time Training Mechanism			
Pengpeng Li	Qingdao Univ. of Tech.		
Fanrong Li	Qingdao Univ. of Tech.		
Endian Song	Qingdao Univ. of Tech.		
Mengyao Zhang	Qingdao Univ. of Tech.		
Xuguo Jiao	Qingdao Univ. of Tech.		
Yunhao Yu	Guizhou Power Grid Co., Ltd.		
16:50-17:10	SatA07-8	Zhiyong Liu Di Zheng	SatA07-18
Multi-model switch-based fuzzy GPC-PI cascade control of main steam temperature system			
Xiaoran Shi	Northeastern Univ.		
Yingchun Wan	Northeastern Univ.		
Dongsheng Yang	Northeastern Univ.		
Yang			
Meiqi Zhao	Northeastern Univ.		
Yuming Ding	China Huadian Electric Power Research Inst. Co., Ltd.		
Weikun Chen	China Huadian Electric Power Research Inst. Co., Ltd.		
17:10-17:30	SatA07-9	Zhiyong Liu Di Zheng	SatA07-19
DST-Mamba: A Dual-Stream Mamba Network with MixHop for Groundwater Forecasting			
Bao Liu	China Univ. of Petroleum		
Haoran Li	China Univ. of Petroleum		
Lei Gao	Commonwealth Scientific and Industrial Research Organisation (CSIRO)		
17:30-17:50	SatA07-10	Zhiyong Liu Di Zheng	SatA07-20
Groundwater Spatio-Temporal Prediction Model Based on Improved Aquila Optimizer Algorithm			
Bao Liu	China Univ. of Petroleum		
Wenqiang Cao	China Univ. of Petroleum		
Lei Gao	Commonwealth Scientific and Industrial R		

Research Organisation (CSIRO)			
SatA08	Room08	Bo Yang	Central South Univ.
New generation of artificial intelligence-based perception, decision and artificial intelligence safety (Special Session)	14:30-17:50	Zhaohui Jiang	Central South Univ.
Chair: Yingwei Zhang	Northeastern Univ.	Dong Pan	Central South Univ.
		Haoyang Yu	Central South Univ.
		Weihua Gui	Central South Univ.
14:30-14:50	SatA08-1	14:50-15:10	SatA09-2
Detection and ReID Are Not All You Need: Accelerate Multi-Object Tracking with Correlation Filter		2D Temperature Field Reconstruction of Blast Furnace Shell via Thermal Couple sensing and Physical Constraints	
Yiding Wang	Beijing Inst. of Tech.	Hao Guo	Zhejiang Univ.
Tong Liu	Beijing Inst. of Tech.	Xiao-Yu Tang	Zhejiang Univ.
Zhijie Hu	Beijing Inst. of Tech.	Xin Wang	Zhejiang Univ.
		Dali Gao	Zhejiang Univ.
14:50-15:10	SatA08-2	Jinkun Li	Zhejiang Univ.
Electromagnetic Signal Modulation Recognition Algorithm Based on Spatial Attention Mechanism		Zhe Liu	Automation Research and Design Inst. of Metallurgical Industry Co., Ltd.
Ping Wang	Lanzhou Univ. of Tech.	Wenhai Wang	Zhejiang Univ.
Fan Wang	Lanzhou Univ. of Tech.		
15:10-15:30	SatA08-3	15:10-15:30	SatA09-3
Iron Ore Classification Using an Improved MobileNetV4		Prediction and evaluation of silicon content in molten iron during dynamic smelting process of blast furnace based on data statistical characteristics	
Jikai Chen	Shenyang Univ. of Tech.	Wenbin Bai	Inner Mongolia Univ. of Science and Tech.
Jiyang Wang	Shenyang Univ. of Tech.	Jian Ding	Wuxi Univ. of Tech.
		Yuyang Zhou	Edinburgh Napier Univ.
15:30-15:50	SatA08-4	Yong Zhang	Inner Mongolia Univ. of Science and Tech.
Feasibility Study of Quantum-Classical Hybrid Attention Mechanism in the NISQ Era: A Case Study on EEG Signal Classification		15:30-15:50	SatA09-4
Chenghao Han	National Univ. of Defense Tech.	Research on a Method for Predicting Molten Steel Temperature Throughout the Entire Process of the Consteel Arc Furnace	
Hao Shi	National Univ. of Defense Tech.	Jinmin Guo	Northeastern Univ.
Hao Li	National Univ. of Defense Tech.	Zhizhong Mao	Northeastern Univ.
Ming Zhang	National Univ. of Defense Tech.		
Zongtan Zhou	National Univ. of Defense Tech.	15:50-16:10	SatA09-5
		Blast Furnace Condition Recognition Based on Unsupervised Labeling and Knowledge Guidance	
15:50-16:10	SatA08-5	Jiaxin Cheng	China Univ. of Geosciences
Attention-Enhanced Multi-Agent Proximal Policy Optimization with Experience Replay		Yunpeng Guo	China Univ. of Geosciences
Jiacheng Zhou	Beijing Univ. of Tech.	Jianqi An	China Univ. of Geosciences
Yuan Wang	Beijing Univ. of Tech.	Sheng Du	China Univ. of Geosciences
Ao Liu	Beijing Univ. of Tech.		
Ding Wang	Beijing Univ. of Tech.	16:10-16:30	SatA09-6
16:10-16:30	SatA08-6	Operating condition recognition in froth flotation with multi-view contrastive feature enhancement	
SG-IRM: Sparsity-Gated Invariant Risk Minimization		Hao Huang	Central South Univ.
Xinyu Zhang	Southeast Univ.	Shiwen Xie	Central South Univ.
Jinya Su	Southeast Univ.	Yongfang Xie	Central South Univ.
16:30-16:50	SatA08-7	16:30-16:50	SatA09-7
An AUV Path Planning and Energy Consumption Optimization Method Based on PPO Algorithm		A Hybrid CNN-Transformer with LoRA Fine-Tuning for Fault Diagnosis of Blast Furnace Ironmaking Process	
Shuaihui Wang	Harbin Engineering Univ.	Xin Su	Zhejiang Sci-Tech Univ.
Zhongying Feng	Harbin Engineering Univ.	Ping Wu	Zhejiang Sci-Tech Univ.
Ye Wang	Harbin Engineering Univ.	Yinzhu Liu	Zhejiang Sci-Tech Univ.
16:50-17:10	SatA08-8	Nabin Kandel	Zhejiang Sci-Tech Univ.
Robust Long-Tailed Malocclusion Object Detection via Geometry-Consistent Patching and Model Soup		Huaiming Wang	Zhejiang Sci-Tech Univ.
Tianyi Zhou	Dept. of Computer Science, Univ. of Exeter	Ruirui Zuo	Zhejiang Sci-Tech Univ.
Xiaobo Liu	China Univ. of Geosciences		
Hongbo Xiang	China Univ. of Geosciences	16:50-17:10	SatA09-8
17:10-17:30	SatA08-9	Adaptive Large Neighborhood Search Algorithm for Solving Multi-Campaign Scheduling Problems in Cold Rolling Production	
Enhanced Multi-Agent Proximal Policy Optimization With Experience Replay and Adaptive Learning Rate		Zhen Wei	Information Business Department, Shanghai Baosight Software Co., Ltd.
Zhengyao Xiao	Beijing Inst. of Tech.	Mingze Gao	Northeastern Univ.
Yuan Wang	Beijing Inst. of Tech.	Shixin Liu	Northeastern Univ.
Jin Ren	Beijing Inst. of Tech.		
Ding Wang	Beijing Inst. of Tech.	17:10-17:30	SatA09-9
17:30-17:50	SatA08-10	Optimal Control of Fused Magnesium Furnace Based on Improved JITL and Nonlinear Model Predictive Control	
Semantic-Aware Authority Allocation for Human-Machine Shared Driving: An End-to-End Vision-Language Model Approach		Aili Lu	Northeastern Univ.
Yi Yang	Zhejiang Univ.	Dapeng Niu	Northeastern Univ.
Chunyue Song	Zhejiang Univ.		
Yi Qian	Zhejiang Univ.	17:30-17:50	SatA09-10
Huang Li	General Office Standing Committee of the Chinese People's Congress	Imitation Learning Based Nonlinear Predictive Optimal Control of Blast Furnace Ironmaking Process	
Jialong Xie	Shandong Univ.	Junbo Liang	Taiyuan Univ. of Science and Tech.
Jiaming Liang	Dept. of Autonomous Driving Lab, Cainiao Network	Zhicheng Zhao	Taiyuan Univ. of Science and Tech.
		Mingjie Li	Taiyuan Univ. of Science and Tech.
SatA09	Room09	SatA10	Room10
AI-driven operational optimization and control of metallurgical process (Special Session)	14:30-17:50	Control theory and control technology (1)	14:30-17:50
Chair: Ping Zhou	Northeastern Univ.	Chair: Zhiwei Zheng	Nankai Univ.
		Co-Chair: Qi Liu	Nanjing Univ. of Posts and Telecommunications
14:30-14:50	SatA09-1	14:30-14:50	SatA10-1
Bidirectional Spatio-temporal Feature Interaction for Multimodal Video Fusion		Signal Temporal Logic Control for a Class of Underactuated Mechanical Systems	
		Zhiwei Zheng	Nankai Univ.
		Shizhen Wu	Nankai Univ.

Yongchun Fang	Nankai Univ.	15:10-15:30	SatA11-3
14:50-15:10	SatA10-2	High performance control of complex systems	
A Hybrid Physics-Informed Neural Network for Battery State of Health Estimation		Chengtian You	Beijing Normal-Hong Kong Baptist Univ.
Qi Liu	Nanjing Univ. of Posts and Telecommunications	Qing-Guo Wang	Wuhan Univ. of Science and Tech.
Jiali Yu	Nanjing Univ. of Posts and Telecommunications	Wentao Fan	Beijing Normal-Hong Kong Baptist Univ.
Lingxin Cui	Nanjing Univ. of Posts and Telecommunications	15:30-15:50	SatA11-4
Mengting Chen	Nanjing Univ. of Posts and Telecommunications	Safe Trajectory Tracking Control for USVs via Disturbance Observer and Control Barrier Functions	
Yuexiu Xing	Nanjing Univ. of Posts and Telecommunications	Yanjiao Liu	Yantai Univ.
15:10-15:30	SatA10-3	Dianfeng Zhang	Yantai Univ.
Robust trajectory tracking control of marine surface vessels under mismatched and matched disturbances via filtered backstepping		Guangru Shao	Dalian Univ. of Tech.
Jingqi Zhang	Bohai Univ.	Hui Shang	Yantai Univ.
Shuanghe Yu	Dalian Maritime Univ.	Zhaojing Wu	Yantai Univ.
15:30-15:50	SatA10-4	15:50-16:10	SatA11-5
Two Stochastic Control Methods for Mean-Variance Portfolio Selection of Jump Diffusions and Their Relationship		H∞ Control of the Active Suspension Systems with Input Delay	
Qiyue Zhang	Shandong Univ.	Junhui Qiu	Nanchang Hangkong Univ.
Jingtao Shi	Shandong Univ.	Yuanguang Zheng	Shanghai Dianji Univ.
15:50-16:10	SatA10-5	16:10-16:30	SatA11-6
Relationship between MP and DPP for Risk-Sensitive Stochastic Optimal Control Problems with Applications		Control of singular multi-agent systems with mismatch uncertainty: A dual-layer integral sliding mode approach	
Huangqing Dong	Shandong Univ.	Lin Li	Univ. of Shanghai for Science and Tech.
Jingtao Shi	Shandong Univ.	Tong Yuan	Univ. of Shanghai for Science and Tech.
16:10-16:30	SatA10-6	16:30-16:50	SatA11-7
Guaranteed-cost cluster formation control of multi-agent systems with impulsive control		A partition-dependent Lyapunov functional approach for variable gain intermittent stabilization of a class of uncertain nonlinear time-delay systems	
Wei Wang	Taiyuan Univ. of Science and Tech.	Yili Wang	Guangxi Univ.
Huimin Tian	Shanxi Univ. of Finance and Economics	Shuning Niu	Guangxi Univ.
Jingjing Fan	Taiyuan Univ. of Science and Tech.	Xiaoyun Lu	Guangxi Univ.
Ruyi Han	Taiyuan Univ. of Science and Tech.	Wu-Hua Chen	Guangxi Univ.
Suping Wang	Taiyuan Univ. of Science and Tech.	Xiaomei Lu	Guangxi Univ.
16:30-16:50	SatA10-7	16:50-17:10	SatA11-8
Event-Triggered Containment Control for Multi-Agent Systems with Unknown Gain Coefficients		A tracking differentiator based on softsign function	
Ziyu Yang	Univ. of Science and Tech. Liaoning	Wenlin Zhou	Institute of Optics and Electronics, Chinese Academy of Sciences
Chuangu Gao	Univ. of Science and Tech. Liaoning		Univ. of Electronic Science and Tech. of China
16:50-17:10	SatA10-8	BinCheng Li	Univ. of Chinese Academy of Sciences
Neurodynamics-Derived Quasi-Newton Zhang-Update Algorithm in Addition to BFGS One for Static Linear Matrix-Vector Equation Solving		Xin li	Institute of Optics and Electronics, Chinese Academy of Sciences
Yunong Zhang	Sun Yat-sen Univ.	Ping Jiang	Univ. of Chinese Academy of Sciences
Jiaming Zhou	Sun Yat-sen Univ.		Institute of Optics and Electronics, Chinese Academy of Sciences
Jielong Chen	Sun Yat-sen Univ.	JinLong Huang	Univ. of Chinese Academy of Sciences
17:10-17:30	SatA10-9	ChangHui Rao	Institute of Optics and Electronics, Chinese Academy of Sciences
Coordinated Thrust Allocation for Air Cushion Hovercraft Based on Improved Particle Swarm Optimization Algorithm			Univ. of Chinese Academy of Sciences
Yuanhui Wang	Harbin Engineering Univ.	17:10-17:30	SatA11-9
Debao Wei	Harbin Engineering Univ.	Research on Full-Speed-Range Sensorless Control of Brushless DC Motors Based on the Improved Weighted Switching Method	
Zheda Ren	Harbin Engineering Univ.	Fengying Ma	Qilu Univ. of Tech.
Hailing Pang	Harbin Engineering Univ.	Zechao Chen	Qilu Univ. of Tech.
Xinyu Wu	MARIC JET	Peng Ji	Qilu Univ. of Tech.
Peng Wu	Harbin Engineering Univ.	Haiyang Hu	Qilu Univ. of Tech.
17:30-17:50	SatA10-10	Wei Yan	Qilu Univ. of Tech.
Improved Parameter Estimation of Dynamic Systems with Kolmogorov-Zurbenko Filtering		Zhenze Wang	Qilu Univ. of Tech.
Liang Zhang	Beijing Normal-Hong Kong Baptist Univ.	17:30-17:50	SatA11-10
Qing-Guo Wang	Wuhan Univ. of Science and Tech.	Linear-Quadratic Non-zero Sum Differential Game with Asymmetric Delayed Information	
SatA11	Room11	Yuxin Ye	Shandong Univ.
Control theory and control technology (2)	14:30-17:50	Jingtao Shi	Shandong Univ.
Chair: Yi Qin	Dong Guan Univ. of Tech.	SatA12	Room12
Co-Chair: Yanping Yang	Donghua Univ.	Intelligent perception, synergic decision-making, and security for robots and unmanned systems (1)	14:30-17:30
14:30-14:50	SatA11-1	Chair: Lantao Xing	Shandong Univ.
Disturbance Observer-Based Adaptive Backstepping Fast Terminal Sliding Mode Control for Quadrotor Trajectory Control under Uncertain Disturbances		Co-Chair: Yi Zeng	Harbin Inst. of Univ.
Hongbo Ye	Dongguan Univ. of Tech.	14:30-14:50	SatA12-1
Yi Qin	Dongguan Univ. of Tech.	A Soft Action Mask-Based Deep Reinforcement Learning Approach for Safe and Efficient Path Planning	
Fang Guo	Dongguan Univ. of Tech.	Fuzeng Mei	Shandong Univ.
Zhonghua Chen	Dongguan Long Tech Company Ltd.	Lantao Xing	Shandong Univ.
14:50-15:10	SatA11-2	14:50-15:10	SatA12-2
Fixed-Time Distributed Control for Proportional Current Sharing and Voltage Regulation in DC Microgrids: A Game-Theoretic Approach		Task Assignment Model of Hypersonic Vehicle Swarm Based on Path-Aware Stackelberg-GA Game Model	
Yanping Yang	Donghua Univ.	Menglu Zhu	Harbin Inst. of Tech.
Shiqi Zhang	Donghua Univ.	Yi Zeng	Harbin Inst. of Tech.
Guangting Huang	Xinjiang Zhongjuyuan Power Service Co., Ltd	Jianxia Gao	Harbin Inst. of Tech.
Yinghao Shan	Donghua Univ.		

Yankui Shi Linjie Li Ruizhi Tong	Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech.	Ruiyin Zhang	Shanghai Univ.
15:10-15:30	SatA12-3	15:10-15:30	SatA13-3
Voting-based Symmetry Order Estimation for Rotational Symmetric Objects		Imitation from Observation via Distilled Reward and Adaptive Snapshot Reset	
Ruixun Yu Weichen Dai Yifan Du Hua Zhang	Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ.	Aoxiang Liu Haohui Chen Wentuo Fang	Central South Univ. Central South Univ. Central South Univ.
15:30-15:50	SatA12-4	15:30-15:50	SatA13-4
A Progressive Multi-Agent Deep Deterministic Policy Gradient Framework for UAV Target Encirclement		Event-Triggered Distributed CBBA for Multi-Trip Multi-UAV Delivery with Dynamic Tasks	
Chaoyue Chen Tao Xu Fanfan Meng	Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ.	Menghui Yang HanLin Pi Bo Wang Huijin Fan Lei Liu	Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.
15:50-16:10	SatA12-5	15:50-16:10	SatA13-5
Generic Fuzzy Adaptive Parameter Regulation for Robust Local Path Planning		An Interval Belief Rule Base Framework for Causal Relationships under Incomplete Information	
Zheyuan Zhang Yuheng Kang Yu Tian Zhiyi Gao Wenjuan Li Yankai Yin	Nankai Univ. Hebei Univ. of Tech. Nankai Univ. Nankai Univ. Nankai Univ. Tiangong Univ.	Xuan Wu Bingyu He Ruijing Cui Yaqian You Xinzhe Huang Jianbin Sun	National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. Information Support Force Engineering Univ. National Univ. of Defense Tech. National Univ. of Defense Tech.
16:10-16:30	SatA12-6	16:10-16:30	SatA13-6
An End-to-End Multi-Scale Feature Fusion Network for Robotic Grasp Detection in Cluttered Environments		Conflict evidence fusion method based on combination weighting method and improved TOPSIS method	
Lei Guo Kaixing Fan Hanyu Dang	Xi'an Univ. of Architecture and Tech. Xi'an Univ. of Architecture and Tech. Xi'an Univ. of Architecture and Tech.	Tianhang Wu Xin Wang	Heilongjiang Univ. Heilongjiang Univ.
16:30-16:50	SatA12-7	16:30-16:50	SatA13-7
Contour Point-Enhanced JDE for Multi-Object Tracking		Multimodal Fusion Network for Quantitative Assessment of Post-stroke Upper Limb Motor Function	
Lehui Chen Yin Zhang Luyang Wang Jingyao Li Yan Wei Yinhong Liu Jinsong Li Wei Liu	Northeastern Univ. Neusoft Reach Automotive Tech.(Shenyang) Co., Ltd. Northeastern Univ. Neusoft Reach Automotive Tech.(Shenyang) Co., Ltd. Neusoft Reach Automotive Tech.(Shenyang) Co., Ltd. Neusoft Reach Automotive Tech.(Shenyang) Co., Ltd. LiaoNing Communication Univ. Northeastern Univ.	Tongtong Shao Ge Gao Gen Li Yanhong Liu	Zhengzhou Univ. Zhengzhou Univ. Zhengzhou Univ. Zhengzhou Univ.
16:50-17:10	SatA12-8	16:50-17:10	SatA13-8
Path Planning for UAV Maritime Reconnaissance Based on SMO-DEACO Algorithm		Ground Target Threat Assessment Using a Stagnation-Triggered Levy IDM-PSO-ELM	
Silun Huang Ruikang Xu Yihan Shi Lei Cui	Beihang Univ. Beihang Univ. Beihang Univ. Beihang Univ.	Siliang Yang Xingxiu Li Xinan Liu Chunhao Liu Panlong Wu Jimin Li	Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech.
17:10-17:30	SatA12-9	17:10-17:30	SatA13-9
Diffusion-Based 2D Path Planning with Environment-Aware Cross-Attention		Adaptive Cross-view Feature Fusion for Real-world Anomaly Detection	
Siyuan Zhao Li Li Qi Zhou	Shanghai Univ. Shanghai Univ. Shanghai Univ.	Zheng Zhang Tong Jia Bowen Ma Yige Hu Zihan Jia Haitao Chen	Northeastern Univ. Northeastern Univ. Northeastern Univ. Northeastern Univ. Northeastern Univ. China Unicom
17:30-17:50	SatA12-10	17:30-17:50	SatA13-10
From Individual to Group: Dynamic Comfort Model for Crowd Navigation		A Dynamics-Constrained Velocity Obstacle Method Based on Reachable Sets for Unmanned Surface Vehicles	
Yan Wei Tian Hao Wu ANG ZHANG Rui Qiao	Chang'an Univ. Chang'an Univ. Shaanxi Inst. of Tech. Chang'an Univ.	Yan Wang Peng Liu Xiaojie Sun Quan An Xiaoning Zhang Yunsheng Fan	Dalian Maritime Univ. Dalian Maritime Univ. Henan Univ. of Science and Tech. Dalian Maritime Univ. Dalian Maritime Univ. Dalian Maritime Univ.
SatA13	Room13	SatAIS	RoomPT
Intelligent decision-making systems and applications (1)	14:30-17:50	Interactive Session	14:30-17:50
Chair: Xin Wang Co-Chair: Cheng Chen	Heilongjiang Univ. Marine Design & Research Inst. of China	SatAIS-01	
14:30-14:50	SatA13-1	Research on the Joint Prediction Method of Source Charge and Valence Considering Data Coupling Characteristics	
Conflictive interval evidence fusion method based on belief projection measure		Xiangyu You Che Liu Xin Ma	Shandong Jianzhu Univ. Shandong Jianzhu Univ. Shandong Jianzhu Univ.
Shangshu Liu Xin Wang	Heilongjiang Univ. Heilongjiang Univ.	SatAIS-02	
14:50-15:10	SatA13-2	A Dual-Archive MOPSO with Adaptive Parameter Tuning for Economic Dispatch of Power Systems	
A Systematic Framework for Selecting Multi-Criteria Decision-Making Methods for Ship Designs		Chongwei Li Huifeng Zhang Shuiqing Ye	Nanjing Univ. of Posts and Communications Nanjing Univ. of Posts and Communications Nanjing Univ. of Posts and Communications
Cheng Chen Pei Zhang	Marine Design & Research Inst. of China Marine Design & Research Inst. of China	SatAIS-03	

Wind Power Forecasting Based on Recurrent Neural Network with a Dual -Stage Attention Mechanism

Hao Wang Wuhan Univ. of Tech.
 Wang Li Wuhan NARI Limited Liability Company of State Grid Electric POWER Research Inst.
 Bingjie Bai Wuhan NARI Limited Liability Company of State Grid Electric POWER Research Inst.
 Zhen Li Wuhan Univ. of Tech.
 Qingyong Zhang Wuhan Univ. of Tech.
 Yalun Zhu Wuhan Univ. of Tech.

SatAIS-04

Multi-Energy System Scheduling Model Based on Distributed Robust Chance-Constrained Optimization

Zedi Wang Shenyang Jianzhu Univ.
 Jiajie Yu Shenyang Jianzhu Univ.
 Wei Gong State Grid Xi'an Power Supply Company
 Xiao Wang Hebei port group datalink tech. (Xiong An) Co., Ltd
 Xifeng Guo Shenyang Jianzhu Univ.
 Yi Ning Shenyang Jianzhu Univ.
 Xingping Wu Shenyang Jianzhu Univ.

SatAIS-05

Low Carbon Optimization Scheduling Model for Multi-Energy Systems Considering Coordination of Solar Thermal Power Plants

Ze-Di Wang Shenyang Jianzhu Univ.
 Zhi-Qi Fang Shenyang Jianzhu Univ.
 Xiao Wang Hebei port group datalink tech. (Xiong An) Co., Ltd
 Wei Gong State Grid Xi'an Power Supply Company
 Xi-Feng Guo Shenyang Jianzhu Univ.
 Yi Ning Shenyang Jianzhu Univ.
 Yang-Ming Di Shenyang Jianzhu Univ.

SatAIS-06

Research on Theoretical Analysis and Calculation Methods of Carbon Emission Flow in Power Systems

Yuxiang Wang Hohai Univ.
 Shu Gu Nanjing Linyang Electric Power Tech. Co., Ltd.
 Wancheng Wang Hohai Univ.
 Maozhong He Hohai Univ.
 Jiaqi Lei Hohai Univ.

SatAIS-07

GMD-Net: A Gated Multi-Scale Decomposition Network for Robust Long-Term Power Load Forecasting

Qi Wang Shanxi Univ.
 Yu Liu Shanxi Univ.
 Yunfei Xie Shanxi Univ.
 Zhongzheng Wang Shanxi Univ.
 Ting Zhao Shanxi Univ.

SatAIS-08

Hierarchical Energy Scheduling and Trading Optimization for Multi-Microgrids Based on Deep Reinforcement Learning

Xin Fang Hefei Univ. of Tech.
 Jianping Wang Hefei Univ. of Tech.
 Qian Zhang Hefei Univ. of Tech.

SatAIS-09

Energy Dispatch for High-Penetration Renewable Energy Industrial Parks Considering Electricity-Carbon Coupling Market

Jingan Zhu Huazhong Univ. of Science and Tech.
 Guorui Zhu Huazhong Univ. of Science and Tech.

SatAIS-10

Adaptive Neural Network Control for Servo Systems with Unknown System Dynamics

Zhaoyang Yu Beijing Inst. of Petrochemical Tech.
 Zhaofeng Zhao Beijing Inst. of Petrochemical Tech.
 Yuhao Jia Beijing Inst. of Petrochemical Tech.
 Miaoli Ma Beijing Inst. of Petrochemical Tech.
 Jian Tang Beijing Inst. of Petrochemical Tech.
 Bin Wang Beijing Inst. of Petrochemical Tech.

SatAIS-11

Implementation of Data Consistency and Location Traceability in Industrial Development Processes

Chuming Zhang China Academy of Engineering Physics
 Jianfeng Cheng China Academy of Engineering Physics
 Yangjing Zhang China Academy of Engineering Physics
 Siyu Chen China Academy of Engineering Physics
 Shaokai Zhang China Academy of Engineering Physics
 Baoran An China Academy of Engineering Physics

SatAIS-12

Disturbance Observer-based Model-Free Control of Blast Furnace Hot Metal Quality

Jieying Zhu Northeastern Univ.

Guojie Li Northeastern Univ.
 Ping Zhou Northeastern Univ.

SatAIS-13

Synergizing Task Decomposition and Multi-Scale Temporal Fusion for Industrial Time-Series Forecasting

Yang Mo China Communications Information & Tech. Group Co., Ltd.
 Zhe Yang China Communications Information & Tech. Group Co., Ltd.
 Yang Liu China Communications Information & Tech. Group Co., Ltd.
 Wei Zeng China Communications Information & Tech. Group Co., Ltd.
 Zhongyi Liu TravelSky Tech. Ltd.
 Yanan Li China Communications Information & Tech. Group Co., Ltd.
 Jing Wang China Communications Information & Tech. Group Co., Ltd.

SatAIS-14

Sensitivity-Based Global Stabilization of Discrete-Time Hypergraph Systems with Nonlinear Parameterization

Yang Cao Southeast Univ.
 Maoyang Su Southeast Univ.
 Peiyu Guo Southeast Univ.
 Yiheng Wei Southeast Univ.
 Junlin Huang Southeast Univ.
 Chanying Li Academy of Mathematics & Systems Science

SatAIS-15

Distributed Online Optimization Algorithm with Forgetting Factor and Gradient Tracking

Tongqing Yang Beijing Tech. and Business Univ.
 Lipo Mo Beijing Wuzi Univ.
 Liming Jiang Beijing Wuzi Univ.

SatAIS-16

Trapezoidal Fuzzy Set based Granular Computing Framework

Shichao Jia Inner Mongolia Univ.
 Guoliang Zhao Inner Mongolia Univ.
 Sharina Huang Inner Mongolia Agricultural Univ.
 Huijia Liao Inner Mongolia Univ.
 Jiawei Kang CSSC Peric Special Gases Co., Ltd.

SatAIS-17

TPDRec: Temporal Plug-In Diffusion Model for Sequential Recommendation

Yunan Liu Bohai Univ.
 Mindong Xin Bohai Univ.
 Ruiying Wang Dongbei Univ. of Finance and Economics
 Junye Xing Bohai Univ.
 Liyan Han Bohai Univ.
 Mingze Li Bohai Univ.

SatAIS-18

Data-driven Fault-tolerant Control for Linear Systems with Intermittent Controller Failures

Yapeng Li Southwest Jiaotong Univ.
 Xiaoyun Feng Southwest Jiaotong Univ.
 Tao Wang Southwest Jiaotong Univ.

SatAIS-19

Symbolic Regression Approach for Model Predictive Control

Zenghao Li Shanghai Electro-Mechanical Engineering Inst.
 Xiaoran Chen Shanghai Inst. of Aerospace System Engineering
 Binfeng Pan Northwestern Polytechnical Univ.
 Zhenxing Shi Shanghai Electro-Mechanical Engineering Inst.

SatAIS-20

A Deep Reinforcement Learning-based Nonlinear Scaling Method for Washout Algorithm in Vehicle Driving Simulator

Kexin Tang Beihang Univ.
 Hengyu Xue Beihang Univ.
 Jingyang Li Beihang Univ.
 Jiale Wu Beihang Univ.
 Jiaxun Sun Federal Inst. of Tech. Zurich
 Qingfeng Lin Beihang Univ.

SatAIS-21

A Structural Risk Minimization Approach for Upper-Bound Envelope Construction Using ℓ_{∞} -Norm Error Control

Haikong Lu Moutai Inst.
 Xinyi Qi Moutai Inst.
 Bin Wang Moutai Inst.
 Qingyao Liu Moutai Inst.
 Fabin Zhang Moutai Inst.
 Xiaoyong Liu Moutai Inst.

SatAIS-22

An Adaptive Sliding Mode Controller for Scissor Aerial Work Platforms

Yuzhe Li Zhejiang Univ.
 Lin Zhang North Valley Research
 Zhaoliang Zhang Lingong Heavy Machinery Co., Ltd.
 Weiwei Cao Zhejiang Univ.

SatAIS-23

Dynamic Multi-AGV Task Scheduling with Time Windows: A Graph-Based Reinforcement Learning Approach

Lequan Zhou Shenyang Univ. of Tech.
 Yanhong Wang Shenyang Univ. of Tech.
 Yu Pang Shenyang Univ. of Tech.

SatAIS-24

Data-Driven Finite-Iteration Learning Control for Multi-Agent Systems

Zhiying An Qingdao Univ. of Science and Tech.
 Zhiqing Liu Qingdao Univ. of Science and Tech.
 Ronghu Chi Foshan Univ.

SatAIS-25

A Dual-Model Collaborative Multi-Agent TD3 Framework for Distributed Control of the Quadruple-Tank Process

Hucheng Yang Xiangtan Univ.
 Jia Wu Xiangtan Univ.
 Wenyan Tang Xiangtan Univ.

SatAIS-26

Axiomatic Fuzzy Set Clustering-Based Stochastic Configuration Networks for Nonlinear System Modeling

Yan Ren Shenyang Aerospace Univ.
 Xiaotong Li Shenyang Aerospace Univ.
 Fan Zhang Shenyang Aerospace Univ.

SatAIS-27

Physics-Informed Multi-Task Learning for Muscle Force Estimation from Kinematic Sequences

Beiyang Huang Southeast Univ.

SatAIS-28

Robust Classification of Long-Duration Trajectories via TCN-Attention and Kinematic Features

Yafeng Huang Nanjing Research Inst. of Electronics Tech.
 Feng Xing Nanjing Univ.
 Nanjing Research Inst. of Electronics Tech.

SatAIS-29

A novel probabilistic spatio-temporal local preservation projection based fault detection strategy for the chiller

Xiuxia Yang Shandong Jianzhu Univ.
 Hanyuan Zhang Shandong Jianzhu Univ.
 Yu Fu Shandong Jianzhu Univ.
 Luyan Liu Shandong Jianzhu Univ.

SatAIS-30

Prediction of Remaining Useful Life for Aircraft Engines Based on Mamba and Multi-Model Integration

Ren Li Shenyang Aerospace Univ.
 Biao Wang Shenyang Aerospace Univ.
 Qing Wang Shenyang Aerospace Univ.

SatAIS-31

Power Allocation and Capacity Configuration of Hybrid Energy Storage System Based on HO-VMD

Meiju Liu Shenyang Jianzhu Univ.
 Mingchang Dong Shenyang Jianzhu Univ.
 Jinrun Liu Shenyang Jianzhu Univ.

SatAIS-32

Short-Term Power Load Forecasting Model Based on GAF-CCBS

Meiju Liu Shenyang Jianzhu Univ.
 RuiPeng Li Shenyang Jianzhu Univ.
 ShiHao Sun Shenyang Jianzhu Univ.

SatAIS-33

Analysis of Drilling Systems for Mine Drilling Rigs and Research on Self-Healing Control Strategies

Qirui Xie China Univ. of Mining and Tech.
 Pengfei Tao China Univ. of Mining and Tech.
 Xiaoyu Zou China Univ. of Mining and Tech.
 Zhongbin Wang China Univ. of Mining and Tech.

SatAIS-34

Modeling of flotation sub-process based on hybrid models

Zixin Meng Northeastern Univ.
 Feng Yu Northeastern Univ.
 Zhizhong Mao Northeastern Univ.
 Yuhe Zhang Northeastern Univ.

SatAIS-35

Modified MEWMA Control Chart for Gumbel Bivariate Exponential-Distributed Data Monitoring

JingWei Liu Nanjing Inst. of Tech.
 FuPeng Xie Nanjing Inst. of Tech.
 GaoJie Zhai Nanjing Inst. of Tech.

SatAIS-36

DH-GOOD: Graph Out-of-Distribution Detection via Feature Disentanglement and Hierarchical Contrastive Learning

Bingbing Qiu Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd
 Qi Liu Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd

Bin Yang

Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd

Heyang Sun

Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd

Bin Zhang

Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd

Shuaichen Tong

Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd

Tao Ren

Cheng Hu Northeastern Univ.

SatAIS-37

A Dual PINNs Architecture for Physics-Data Hybrid Modeling of Coal-Fired Units in Steel Industry

Xuesong Yan Dalian Univ. of Tech.
 Zhongyang Han Dalian Univ. of Tech.
 Tonghui Jia Dalian Univ. of Tech.
 Jun Zhao Dalian Univ. of Tech.
 Wei Wang Dalian Univ. of Tech.

SatAIS-38

Prediction Optimization Control of Non-Gaussian Stochastic Processes Based on Wasserstein Fuzzy Sets

YAN Xiao-ting Taiyuan Univ. of Science and Tech.
 LI Ming-jie Taiyuan Univ. of Science and Tech.
 ZHAO Zhi-cheng Taiyuan Univ. of Science and Tech.
 ZHANG Yuanyuan Taiyuan Univ. of Science and Tech.

SatAIS-39

A Label Noise Filter Based on Adaptive Threshold and Ensemble Iterative Strategy

Man Liu Northeastern Univ.
 Zhizhong Mao Northeastern Univ.
 Dapeng Jiang Northeastern Univ.

SatAIS-40

Rail Pressure Monitoring Algorithm for Engines Based on Dynamic Integrated Models

WeiQi Kang China North Engine Research Inst.
 Fuhong Kuang China North Engine Research Inst.
 Jinguan Yin China North Engine Research Inst.
 Wei Xiao China North Engine Research Inst.

SatAIS-41

Research on Operating Condition Identification Methods Driven by Semi-Supervised Learning and Multi-Source Heterogeneous Data

Xinyue Mei Northeastern Univ.
 Yu Zhang Northeastern Univ.
 Ping Zhou Northeastern Univ.

SatAIS-42

An Event-Driven Method to Ensuring Global Data Consistency in Requirements Management

Yangjing Zhang China Academy of Engineering Physics
 Siyu Chen China Academy of Engineering Physics
 Chuming Zhang China Academy of Engineering Physics
 Jianfeng Cheng China Academy of Engineering Physics
 Shaokai Zhang China Academy of Engineering Physics
 Qiang Ren China Academy of Engineering Physics

SatAIS-43

Risk Assessment and Evolution Analysis of Fluid Catalytic Cracking Unit Based on ISM-BN Model

Jiajia Shen Nanjing Tech Univ.
 Jiahao Chen Nanjing Tech Univ.
 Guo Yu Nanjing Tech Univ.
 Cuimei Bo Nanjing Tech Univ.

SatAIS-44

UC-DetNet: A Hybrid U-Net V2 and Cross-Scale Feature Fusion Network for Steel Surface Defect Detection

Nabin Kandel Zhejiang Sci-Tech Univ.
 Ping Wu Zhejiang Sci-Tech Univ.
 Yicheng Yu Zhejiang Sci-Tech Univ.
 Xin Fan Zhejiang Sci-Tech Univ.

SatAIS-45		Sai Liu	Northeastern Univ.
<i>Strip crown prediction method in hot rolling based on Deep Q learning strategy</i>		Honggang Bi	Intelligent Management Center, Ansteel Group Mining Co., Ltd
Yazhuo Tian	WISDRI Engineering & Research Incorporation Limited	Xianwen Gao	Northeastern Univ.
Heng Zhang	WISDRI Engineering & Research Incorporation Limited	09:15-09:30	SunA01-6
Yunlong Xu	WISDRI Engineering & Research Incorporation Limited	<i>Research on Data-Driven Prediction Maintenance for Underground Mining Electromechanical Equipment</i>	
SatAIS-46		Tao Liang	China Univ. of Mining and Tech.
<i>Joint Optimization of Multi-Stage Dredging Operations via Ridge Regression</i>		Fei Chu	China Univ. of Mining and Tech.
Zhang Shiqian	CCCC TianJin Dredging Co., Ltd	Xiang Ma	SINTEF Industry
Wang Jing	China Communications Information & Tech. Group	Fuli Wang	Northeastern Univ.
Wang Xiaopeng	China Communications Information & Tech. Group	09:30-09:45	SunA01-7
Mo Yang	China Communications Information & Tech. Group	<i>Exploring the Application of Large Language Model-assisted risk identification in HAZOP Analysis</i>	
Yu Tao	CCCC TianJin Dredging Co., Ltd	Haotian Bao	East China Univ. of Science and Tech.
Zhang Yousuo	CCCC TianJin Dredging Co., Ltd	Bing Wang	East China Univ. of Science and Tech.
Wang Ye	CCCC TianJin Dredging Co., Ltd	Wenli Du	East China Univ. of Science and Tech.
Li Yanan	China Communications Information & Tech. Group	SunA02	
Guo Yiyun	Ocean Univ.	Room02	
SatAIS-47		Future robotics technology and application (1) (Special Session)	
<i>Low-Frequency Oscillation Suppression Strategy for Virtual Synchronous Generators Based on Fuzzy Adaptive Parameter Tuning</i>		Chairs: Jingbing Zhang	ARTC and SIMTech, A*STAR
Xinwei Li	Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.	Zhengguo Li	Inst. for Infocomm Research
Junjie Sun	Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.	08:00-08:20	SunA02-1
Xiaoheng Zhang	Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.	<i>Enhancing the Robustness and Accuracy of 3D LiDAR Mapping and Localization Using Adaptive Semantics</i>	
Chengxin Xu	Northeastern Univ.	Liu Jun	SIASUN Robot \& Automation Co., Ltd.
Xiaochen Zhu	Northeastern Univ.	Lv Xiangren	SIASUN Robot \& Automation Co., Ltd.
Sunday, 17 May, 2026		Zhao Qian	SIASUN Robot \& Automation Co., Ltd.
SunA01		08:20-08:40	SunA02-2
Operating performance assessment, fault diagnosis and intelligent maintenance for industry processes driven by knowledge and data (Special Session)		<i>A Guided MPC Framework for Real-Time Motion Control of Bipedal Wheel-Legged Robots</i>	
Chair: Yuqing Chang	Northeastern Univ.	XiYu Zhang	Beijing Univ. of Tech.
Chair: Chunhui Zhao	Zhejiang Univ.	Jiachun Lin	Beijing Univ. of Tech.
Chair: Shuai Tan	East China Univ. of Science and Tech.	ZhiYuan Cui	Beijing Univ. of Tech.
08:00-08:15	SunA01-1	Wang Peng	Beijing Univ. of Tech.
<i>A Novel Uncertainty-aware Pairwise Ranking Method for Remaining Useful Life Prediction</i>		08:40-09:00	SunA02-3
Chenyu Shao	Beijing Inst. of Tech.	<i>Adaptive Impedance Control for Flexible-joint Manipulators with Input Saturation Based on Neural Networks</i>	
Liling Ma	Beijing Inst. of Tech.	Hejia Gao	Anhui Univ.
Siyi Wang	Beijing Inst. of Tech.	Guanghui Wang	Anhui Univ.
Shoukun Wang	Beijing Inst. of Tech.	Tanyu Chen	Anhui Univ.
08:15-08:30	SunA01-2	09:00-09:20	SunA02-4
<i>Dual temporal attention autoencoder for missing value imputation in complex industrial processes</i>		<i>Proprioception-Only Hexapod Locomotion on Unstructured Terrain via Multi-step and Privileged-Enhanced World Models</i>	
Jie Zhang	Northeastern Univ.	Zhe Yang	Zhejiang Univ.
Dapeng Jiang	Liaoning Provincial Tax Service, State Taxation Administration	Ziyi Xu	Zhejiang Univ.
Yuqing Chang	Northeastern Univ.	Qinyuan Ren	Zhejiang Univ.
Fuli Wang	Northeastern Univ.	09:20-09:40	SunA02-5
08:30-08:45	SunA01-3	<i>A New General Dynamic Model of Tendon-Driven Continuum Robots Based on Flexible Beam Theory With Actuation Redundant Simplification</i>	
<i>Symbolic Representation of Sensor Data and Its Application in Fault Diagnosis for TE Process</i>		Qi Zhang	Northeastern Univ.
Yiwei Lou	Harbin Inst. of Tech.	Jingwei Wei	Northeastern Univ.
Jiao Meng	Harbin Inst. of Tech.	YuZhe Mo	Northeastern Univ.
Xin Huo	Harbin Inst. of Tech.	Ziyan Zhang	Northeastern Univ.
08:45-09:00	SunA01-4	Xiaochuan Zhou	Northeastern Univ.
<i>Open-Set Weighted Transfer Adversarial Learning Network for Industrial Process Operating Performance Assessment</i>		Yu Tianyu	Northeastern Univ.
Lulu Fu	Northeastern Univ.	Yaozhong Deng	Northeastern Univ.
Yan Liu	Northeastern Univ.	Yiming Wu	Northeastern Univ.
Dapeng Jiang	Liaoning Provincial Tax Service, State Taxation Administration	09:40-10:00	SunA02-6
Siqi Wang	Northeastern Univ.	<i>Adaptive Backstepping Control for a Quadrotor UAV Transport System with Unknown Load Mass</i>	
Peng Zhao	Northeastern Univ.	Pingcheng Xian	Wuhan Univ. of Science and Tech.
09:00-09:15	SunA01-5	Yanhua Yang	Wuhan Univ. of Science and Tech.
<i>Few-Labeled Flotation Condition Recognition via Manifold-Guided Prototype Rectification</i>		Yang Chen	Wuhan Univ. of Science and Tech.
Dingsen Zhang	Northeastern Univ.	Sami Ud Din	Namal Univ.
SunA03		Room03	
Control and management on smart city (Building) (1) (Special Session)		08:00-10:00	
Chair: Hongyan Ma	Beijing Univ. of Civil Engineering and Architecture	Chair: Yahui Wang	Beijing Univ. of Civil Engineering and Architecture
08:00-08:15	SunA03-1	<i>PSO-Smith-PID Based Line Width Control for 3D-Printed Concrete Forming</i>	
Shuo Tang	Xi'an Univ. of Architecture and Tech.	Jing He	Xi'an Univ. of Architecture and Tech.
Zongfang Ma	Xi'an Univ. of Architecture and Tech.	Zongfang Ma	Xi'an Univ. of Architecture and Tech.

Lin Song	Xi'an Univ. of Architecture and Tech.	Qi Zhang	Shandong Univ.
08:15-08:30	SunA03-2	Zhongzheng Li	Shandong Univ.
Research on Lightweight Loading and Operation of Building Digital Twins Supporting for Multiple Interactive Objects		Haoyu Ming	Shandong Univ.
Rongwei Zou	Army Engineering Univ. of PLA	Xiangyu Zhou	Shandong Univ.
Qiliang Yang	Army Engineering Univ. of PLA	Bo Sun	Shandong Univ.
Chao Mou	Army Engineering Univ. of PLA	09:00-09:20	SunA04-4
Zhiwei Zhang	Army Engineering Univ. of PLA	Hierarchical Robust Energy Management Strategy for Hydrogen-Electric Hybrid Aircraft Propulsion System under Component Degradation	
Jianfeng Wu	Army Engineering Univ. of PLA	Junyuan Hu	Nanjing Univ. of Aeronautics and Astronautics
08:30-08:45	SunA03-3	Lingfei Xiao	Nanjing Univ. of Aeronautics and Astronautics
Research on Photovoltaic Power Generation Power Prediction Based on Improved LSTM		Jie Li	Nanjing Univ. of Aeronautics and Astronautics
Keju Shi	Beijing Univ. of Civil Engineering and Architecture	Weiwang Sheng	Nanjing Univ. of Aeronautics and Astronautics
Junhong Zhang	Beijing Univ. of Civil Engineering and Architecture	09:20-09:40	SunA04-5
Xiangshuo Shi	China Telecom Construction Company Limited	Multi-Agent Pattern-Aware Reinforcement Learning Method for Active Voltage Control in Distribution Networks	
08:45-09:00	SunA03-4	Xinqi Gao	Northeastern Univ.
Research on Hybrid Energy Storage Strategy for Photovoltaic Power Generation Systems		Qingchen Wang	Northeastern Univ.
Jingye Wang	Beijing Univ. of Civil Engineering and Architecture	Xuguang Hu	Northeastern Univ.
Junhong Zhang	Beijing Univ. of Civil Engineering and Architecture	Dazhong Ma	Northeastern Univ.
Xiaolei Xia	Zhongtong Construction Co., Ltd, Digital Infrastructure Division	09:40-10:00	SunA04-6
09:00-09:15	SunA03-5	CNN-LSTM Hybrid for Complete Charging Curve Prediction and SOC Estimation of Lithium-Ion Batteries with Partial Samples	
Research on a Road Crack Detection Method Based on PCA Dimensionality Reduction and a Lightweight Neural Network		Linjun Si	PowerChina HuaDong Engineering Co., Ltd. Control Engineering Co., Ltd.
Weiming Wang	Beijing Univ. of Civil Engineering and Architecture	Yuanhai Si	PowerChina HuaDong Engineering Co., Ltd. Shenyang Univ. of Tech.
Junhong Zhang	Beijing Univ. of Civil Engineering and Architecture	Xiaojian Liu	School of Information Science and Engineering Control Engineering Co., Ltd.
09:15-09:30	SunA03-6	Wenge Yu	PowerChina HuaDong Engineering Co., Ltd. Shenyang Univ. of Tech.
Matrix-Based Pinning Control in Heterogeneous Agents Energy Trading Systems		Xiaoyu	PowerChina HuaDong Engineering Co., Ltd. Shenyang Univ. of Tech.
Yingzhe Jia	Shandong Univ.	Yusheng Yang	PowerChina HuaDong Engineering Co., Ltd. Shenyang Univ. of Tech.
Yiliang Li	Shandong Univ.	Guijun	School of Information Science and Engineering Control Engineering Co., Ltd.
Yanfei Wang	Shandong Univ.	SunA05	Room05
09:30-09:45	SunA03-7	Fractional calculus and fractional-order systems (Special Session)	08:00-10:00
Research on an Intelligent Security Monitoring System for High-precision and Advanced Laboratories Based on Bimodal Perception		Chairs: Junguo Lu	Shanghai Jiao Tong Univ.
Yun An	National Inst. of Metrology	Dingyu Xue	Northeastern Univ.
Zhun Li	National Inst. of Metrology	08:00-08:20	SunA05-1
Yu Huang	National Inst. of Metrology	Pad'e Covering Sets for Stability Analysis of Fractional-Order Time-Delay Systems	
09:45-10:00	SunA03-8	Xiao-Chuang Jin	Aerospace System Engineering Shanghai
Super-Spiral Sliding Mode Control for Permanent Magnet Synchronous Motors Based on Error-Driven and Gain-Adaptive Approaches		Xusheng Xu	Aerospace System Engineering Shanghai Harbin Inst. of Tech.
TiWen Wang	Beijing Univ. of Civil Engineering and Architecture	Qing-Hao Zhang	Shanghai Jiao Tong Univ. Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis
Rong Guo	Beijing Univ. of Civil Engineering and Architecture	Zhen Zhu	Key Laboratory of System Control and Information Processing, Ministry of Education of China Shanghai Jiao Tong Univ. Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis
XiaoYu Zhang	Beijing Univ. of Civil Engineering and Architecture	Jun-Guo Lu	Key Laboratory of System Control and Information Processing, Ministry of Education of China Shanghai Jiao Tong Univ. Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis
HanSheng Wang	Beijing Univ. of Civil Engineering and Architecture	Key Laboratory of System Control and Information Processing, Ministry of Education of China	
HongYan Ma	Beijing Univ. of Civil Engineering and Architecture	SunA04	Room04
08:00-08:20	SunA04-1	New energy control and smart energy (1) (Special Session)	08:00-10:00
Physics Informed Neural Networks Driven Fast Real-Time Control of Hybrid Energy Storage System in Islanded DC Microgrids with Pulsed Power Loads		Chairs: Qiuye Sun	Shenyang Univ. of Tech.
Jian Zhang	National Univ. of Defense Tech.	Xuguang Hu	Northeastern Univ.
Xucheng Huang	National Univ. of Defense Tech.	08:20-08:40	SunA05-2
Shengjun Huang	National Univ. of Defense Tech.	The Effect of the Riemann-Liouville Fractional Integral on Several Classes of Classical Functions and Their Numerical Verification	
Tao Zhang	National Univ. of Defense Tech.	Yao Jia	Army Engineering Univ. of PLA
08:20-08:40	SunA04-2	Wang Jun	National Univ. of Defense Tech.
Hierarchical Homothetic Tube-based Economic MPC for Microgrid Energy Management		Li Junqiao	Army Engineering Univ. of PLA
Zihang Dong	Tongji Univ.	Zhu Yujian	Army Engineering Univ. of PLA
Yifan Shen	Tongji Univ.	Hua Shiling	Unit 32269 of chinese PLA
08:40-09:00	SunA04-3	Li lingyun	Unit 31306 of chinese PLA
Hierarchical collaborative Control of Green Hydrogen Supply Chain under Source-Load Uncertainty		08:40-09:00	SunA05-3
		Joint Estimation of SOC and SOE for Lithium-ion Batteries Based on Adaptive Fractional-order Central Difference Kalman Filter	
		Xianghua An	Liaoning Univ.
		Zhe Gao	Liaoning Univ.
		Yuhang Wang	Liaoning Univ.
		Dongyue Zheng	Liaoning Univ.
		Xiaowei Zeng	Liaoning Univ.
		Qi Wang	Liaoning Univ.
		09:00-09:20	SunA05-4

Numerical Approximation and Discrete Formulation of Complex-Order Operators

Xiaobo Wu Hefei Univ. of Tech.
 Hongli Ma Hefei Univ. of Tech.
 Chuangshi Qi Hefei Univ. of Tech.
 Liping Chen Hefei Univ. of Tech.

Jingyuan Zhan

Beijing Univ. of Tech.

SunA07 Room07
Control theory and control technology (3) 08:00-10:00
 Chair: Wei Wang Beihang Univ.
 Co-Chair: Ruilu An Nanjing Univ. of Posts and Telecommunications

09:20-09:40 SunA05-5

Fractional-Order Enhanced Model Predictive Control for Vehicles with Energy Efficiency Optimization

Ziyue Pan State Key Laboratory of Intelligent Vehicle Safety Tech.
 Beijing Univ. of Posts and Telecommunications
 Jiacheng Huang State Key Laboratory of Intelligent Vehicle Safety Tech.
 Haojian Luo Beijing Univ. of Posts and Telecommunications
 Zengwen Li State Key Laboratory of Intelligent Vehicle Safety Tech.
 Sudong Jiang State Key Laboratory of Intelligent Vehicle Safety Tech.
 Qi Song Beijing Univ. of Posts and Telecommunications
 State Key Laboratory of Intelligent Vehicle Safety Tech.

08:00-08:20 SunA07-1

Triggered Adaptive Safety-Critical Cooperative Control and Application to Multiple Mecanum Wheel Robots

Jiajun Shen Hangzhou Innovation Inst. Beihang Univ.
 Xiaolong Yu Hangzhou Innovation Inst. Beihang Univ.
 Lingfen Zhu Zhejiang Guozi Robotics Co., Ltd. Beihang Univ.
 Yuxiao Liu Hangzhou Innovation Inst. Beihang Univ.
 Wei Wang Hangzhou Innovation Inst. Beihang Univ.
 Jiaqi Yan Hangzhou Innovation Inst. Beihang Univ.

09:40-10:00 SunA05-6

Swin-UNet with Adaptive Variable-Order Fractional Adam for Flood Prediction

Kuishu Wu Univ. of Science and Tech. of China
 Yong Wang Univ. of Science and Tech. of China
 Pengcheng Hu Univ. of Science and Tech. of China
 Shaoqing Chen Univ. of Science and Tech. of China
 Haile Lyu China Water Sunny Data Tech. Co., Ltd.

08:20-08:40 SunA07-2

Event-triggered impulsive control for heterogeneous nonlinear stochastic multi-agent systems

Ruilu An Nanjing Univ. of Posts and Telecommunications
 Xuetao Yang Nanjing Univ. of Posts and Telecommunications

08:40-09:00 SunA07-3

Adaptive Robust Sliding Mode Control of Neural Network for DC Microgrid Energy Storage System

ZhaoZhuo Chai Nanjing Univ. of Posts and Telecommunications
 Yuefei Wu Nanjing Univ. of Posts and Telecommunications

SunA06 Room06

Connected vehicles and low-altitude intelligent transportation systems (Special Session) 08:00-10:00

Chair: Ge Guo Northeastern Univ.

09:00-09:20 SunA07-4

Event-Triggered Fixed-Time Consensus Fault-Tolerant Control of Second-Order Nonlinear Multi-Agent Systems

Jing Sun Anhui Polytechnic Univ.
 Shengping Luo Anhui Polytechnic Univ.

08:00-08:20 SunA06-1

Distributed reinforcement learning-based optimal formation control for UAV-UGV system with prescribed performance

Weichen Li Guangdong Univ. of Tech.
 Hui Fu Guangdong Univ. of Tech.
 Qingzhen Wu Guangdong Univ. of Tech.
 Hongpeng Li Guangdong Univ. of Tech.
 Yu Cui Guangdong Univ. of Tech.
 Haitao Liu Guangdong Ocean Univ.

09:20-09:40 SunA07-5

Research on Distributed Multi-Actuator Coordinated Control for Aero-Engines

Yue Li Dalian Univ. of Tech.
 Yanhua Ma Dalian Univ. of Tech.
 Xian Du Dalian Univ. of Tech.

08:20-08:40 SunA06-2

Bidirectional Pressure Enhanced Traffic Signal Control

Mengze Wang Lanzhou Univ. of Tech.
 Zhiwen Wang Lanzhou Univ. of Tech.

09:40-10:00 SunA07-6

Ground-Prior-Guided Adaptive z-Axis Regularization for the LIDAR SLAM Front End

Jiajun Wu Wuhan Univ. of Science and Tech.
 WeiGang Li Wuhan Univ. of Science and Tech.

08:40-09:00 SunA06-3

ESP-Based Fixed-Time Adaptive Control for Heterogeneous Vehicle Platoon with Sensor Faults

Haonan Qi Henan Univ. of Tech.
 Tianfei Chen Henan Univ. of Tech.
 Lijun Sun Henan Univ. of Tech.
 Xiaoping Liu Henan Univ. of Tech.
 Qiangqiang Guo Henan Univ. of Tech.
 Shuaixin Hou Henan Univ. of Tech.
 Renhan Wu Henan Univ. of Tech.

SunA08 Room08

Control theory and control technology (4) 08:00-10:00

Chair: Yanjun Zhang Beijing Inst. of Tech.
 Co-Chair: Zimao Sheng Northwestern Polytechnical Univ.

09:00-09:20 SunA06-4

Research on YOLO model lightweight and specialized dataset construction method for on-board visual target recognition of intelligent vehicles

Rui Ke Jingchu Univ. of Tech.
 Xue Chen Jingchu Univ. of Tech.
 Yunfeng Zou Jingchu Univ. of Tech.
 Mengyuan Yang Jingchu Univ. of Tech.
 Lin Zheng Jingchu Univ. of Tech.
 Jing Luo Jingchu Univ. of Tech.

08:00-08:20 SunA08-1

Stability Margin Configuration for Second-Order Systems with Output Delay

Wanxin Gao Beijing Inst. of Tech.
 Yanjun Zhang Beijing Inst. of Tech.
 Jian Sun Beijing Inst. of Tech.

09:20-09:40 SunA06-5

DAS-YOLO: An Efficient Vehicle Detection and Recognition Network for Aerial Imagery under Complex Backgrounds and Occlusion Conditions

Zihan Li Xi'an Univ. of Architecture and Tech.
 Rui Shen Northwestern Polytechnical Univ.
 Shengjun Xu Xi'an Univ. of Architecture and Tech.
 Rui Ren Xi'an Univ. of Architecture and Tech.
 Ren Xin Xi'an Univ. of Architecture and Tech.
 Bo He Xi'an Univ. of Architecture and Tech.

08:20-08:40 SunA08-2

Online Optimal Parameter Compensation method of MIMO-PID Controller for Robust Stability

Zimao Sheng Northwestern Polytechnical Univ.
 Hongan Yang Northwestern Polytechnical Univ.
 Zirui Yu Tianjin Univ. of Science and Tech.

09:40-10:00 SunA06-6

Cooperative Control for Locomotives in Heavy-Haul Trains with Communication Time Delays

Nandong Xu Beijing Univ. of Tech.

08:40-09:00 SunA08-3

Asynchronous Control for Singular Interval Type-2 Fuzzy Markov Jump Systems with Time Delay

Fangyuan Liu Harbin Engineering Univ.
 Zhiguang Feng Harbin Engineering Univ.

09:00-09:20 SunA08-4

Local updating of damped gyroscopic systems via AVDF-iterative method

Huiting Zhang Northeastern Univ.
 Zhanshan Wang Northeastern Univ.

09:20-09:40 SunA08-5

Energy efficiency optimization control of PMSM servo system based on adaptive EPH under different operating conditions

Bingchang Lv Qingdao Univ.
 Haisheng Yu Qingdao Univ.
 Jie Zhang Shandong Tech. and Business Univ.

Qing Yang Linzhang Dai	Qingdao Univ. Qingdao Univ.	A Feedback-Enhanced Neural Network with Probabilistic Signaling for Noise-Robust Collision Perception Changmiao Nie Hao Luan Jiaxu Guo Zhiliang Chen	Tianjin Univ. of Tech. and Educ. Tianjin Univ. of Tech. and Educ. Tianjin Univ. of Tech. and Educ. Tianjin Univ. of Tech. and Educ.
09:40-10:00 Fully Distributed Fault-Tolerant Consensus Control for NMASs: An Adaptive Fault Compensation Method Yapeng Yang Zhanshan Wang Wanli Jin	SunA08-6 Northeastern Univ. Northeastern Univ. Northeastern Univ.	09:00-09:20 A Neural Predict-Update Framework for Multi-Object Tracking using Partial Observations Jingchen Xu Chengpu Yu Gonzalo Ferrer Luwei Liu	SatA10-4 Beijing Inst. of Tech. Beijing Inst. of Tech. Skolkovo Inst. of Science and Tech. Beijing Inst. of Tech.
SunA09 Control theory and control technology (5) Chair: Xueqing Zhang Co-Chair: Yifan Liu	Room09 08:00-10:00 Shanghai Spaceflight Precision Machinery Inst. China Univ. of Petroleum (East China)	09:20-09:40 A Localization Method for Warehouse Environment Based on Fusion of Scan Context Descriptors and Reflective Pillars Yu Fang Anmin Huang Junhua Gou Xuebing Yuan Yucheng Jiang Renyuan Zhang	SatA10-5 Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ.
08:00-08:20 Research On Three-degree-of-freedom Trajectory Simulation Based On MATLAB Xueqing Zhang Changxing Shao Mohan Zhao Weixiao Wu MengCheng Zhu	SunA09-1 Shanghai Spaceflight Precision Machinery Inst. Shanghai Spaceflight Precision Machinery Inst. Shanghai Spaceflight Precision Machinery Inst. Shanghai Spaceflight Precision Machinery Inst. Shanghai Spaceflight Precision Machinery Inst.	09:40-10:00 RippleEdge-SOD: Multi-Scale Dynamic Wavelet Filtering for Small Object Detection for Cleaning Robots Yujia Zhang ChaoHao Hua Chenghao Fu Qihang Man Heng Xu Duzhesheng Liao	SatA10-6 Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ.
08:20-08:40 An Improved IEKF for Stochastic Nonlinear Systems with Non-Gaussian Noise Yunheng Xu Li Sheng Yichun Niu Yifan Liu	SunA09-2 China Univ. of Petroleum (East China) China Univ. of Petroleum (East China) Ocean Univ. of China China Univ. of Petroleum (East China)	SunA11 Advanced sensing and intelligent perception (1) Chair: Guofeng Zou CO-Chair: Chengfang Zhang	Room11 08:00-10:00 Shandong Univ. of Tech. Sichuan Police College
08:40-09:00 Adaptive Fault-Tolerant Prescribed Performance Bipartite Consensus Control for Multiagent Systems Based on an Improved PTPF Tianyuan Jia Zhanshan Wang Qiufu Wang	SunA09-3 Northeastern Univ. Northeastern Univ. Northeastern Univ.	08:00-08:20 Few-shot Person Re-identification based on Hybrid Pooling Fusion and Composite Metric Guofeng Zou Yushan Chen Guizhen Chen Zhiwei Huang Guixia Fu	SunA11-1 Shandong Univ. of Tech. Shandong Univ. of Tech. China Univ. of Mining and Tech. Shandong Univ. of Tech. Shandong Univ. of Tech.
09:00-09:20 Force/position control of robot manipulators in contact with a compliant environment under bounded inputs Haoyang Lu Zexuan Feng Wenfeng Shuai Guobao Wu Haoran Fang	SunA09-4 North China Univ. of Science and Tech. North China Univ. of Science and Tech. North China Univ. of Science and Tech. North China Univ. of Science and Tech. North China Univ. of Science and Tech.	08:20-08:40 MLDF: Multi-level diffusion feature fusion for infrared and visible image Chengfang Zhang Haoyue Li Ziliang Feng	SunA11-2 Sichuan Police College Sichuan Univ. Sichuan Univ.
09:20-09:40 Hybrid Sliding Mode Tracking Control of Quadrotor Unmanned Aerial Vehicle Jun-Ke Wang Jing-Jing Xiong	SunA09-5 China Jiliang Univ. China Jiliang Univ.	08:40-09:00 Robust Convolution Nuclear Norm Minimization for Time Series Forecasting Yi Yu Yuyang Li Miaoxuan Zhu Wei Li Chen Lu Guangcan Liu	SunA11-3 Southeast Univ. Southeast Univ. Southeast Univ. Southeast Univ. Southeast Univ. Southeast Univ.
09:40-10:00 Dynamical modeling and nonlinear coupled control for 7-DOF dual overhead cranes Shuo Luan Huaike Shao Hongwen Qi Cungen Liu	SunA09-6 Shandong Jianzhu Univ. Shandong Jianzhu Univ. Tai'an City Industrial Economic Development Service Center Shandong Jianzhu Univ.	09:00-09:20 CLS-GatedFusion: Class Token Controlled Cross-Attention for Multimodal Action Recognition Bingchuan Yang Gang Peng Chuangye Li Chaoze Wang	SunA11-4 Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.
SunA10 Intelligent perception, synergic decision-making, and security for robots and unmanned systems (2) Chair: Guifang Shao Co-Chair: Dan Xu	Room10 08:00-10:00 Xi'an Univ. Xi'an Univ. of Architecture and Tech.	09:20-09:40 Virtual Kernel SegFormer: A Hybrid Architecture for Point Cloud Segmentation Bowen Wu Xiaoyan Li Ju Han Boyue Wang Yongli Hu Baocai Yin	SunA11-5 Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech.
08:00-10:00 Research on Manipulator Visual Servoing System for Glass Slide Sample Transfer Qingyuan Zhu Longbin Lin Changlin Yang Jiale Lin Xingyu Zhou Guifang Shao	SatA10-1 Xiamen Univ. Xiamen Univ. Xiamen Univ. Xiamen Univ. Xiamen Univ. Xiamen Univ.	09:40-10:00 An LSTM-AESO Based Algorithm for Cylinder Pressure Reconstruction in Diesel Engines Yubo Sun Ruidong Hao Chenfan Yang	SunA11-6 China North Engine Research Inst. China North Engine Research Inst. China North Engine Research Inst.
08:20-08:40 Multi-Robot Cooperative Complete Coverage Path Planning Algorithm Based on Non-Partitioned Areas and Improved PISC Yiyang Gao Dan Xu Lin Song	SatA10-2 Xi'an Univ. of Architecture and Tech. Xi'an Univ. of Architecture and Tech. Xi'an Univ. of Architecture and Tech.		
08:40-09:00	SatA10-3		

Wei Bai China North Engine Research Inst.
Yaozong Li China North Engine Research Inst.
Quanhong Chu China North Engine Research Inst.

09:20-09:40 SunA13-5
Risk Assessment of Aircraft Manufacturing Process Based on Improved Analytic Hierarchy Process
Chuang Li Shenyang Aircraft Corporation
Yang Ou Shenyang Aircraft Corporation
Wanfeng Yang Shenyang Aircraft Corporation
Dongxu Qiu Shenyang Aircraft Corporation
Yuanguang Wen Shenyang Aircraft Corporation
Zhizhong Mao Northeastern Univ.

SunA12 Room12
Fault diagnosis, prognosis and prediction maintenance (1) 08:00-10:00
Chair: Guofeng Zou Shandong Univ. of Tech.
Co-Chair: Yunjian Ji Hangzhou Wanxiang Polytechnic

08:00-08:20 SunA12-1
Series arc fault detection based on arc period detection and half-wave symmetry verification
Guofeng Zou Shandong Univ. of Tech.
Zongyao Guo Shandong Univ. of Tech.
Jinjie Li Shandong Univ. of Tech.
Zhaoye Lv Shandong Univ. of Tech.
Guixia Fu Shandong Univ. of Tech.

09:40-10:00 SunA13-6
Orbital-Shell Based Screening Algorithm and Collision Rapid Warning for Large-Scale Space Objects
Jinghan Wang Beijing Inst. of Tech.
Rui Xu Beijing Inst. of Tech.
Zhaoyu Li Beijing Inst. of Tech.
Jiateng Long Beijing Inst. of Tech.
Bang Wang Beijing Inst. of Tech.

08:20-08:40 SunA12-2
Method for extracting weak fault features of rolling bearings under strong noise background
Yunjian Ji Hangzhou Wanxiang Polytechnic
Jiajia Wu Hangzhou Wanxiang Polytechnic
Yingying Liu Hangzhou Wanxiang Polytechnic

SunAIS RoomPT
Interactive Session 08:00-10:00

08:40-09:00 SunA12-3
Fault Detection Algorithm for Electromagnetic Relay Based on Complex Evidence Reasoning
Mengke Yu Chongqing Univ. of Posts and Telecommunications
Yuanlin Wen Chongqing Univ. of Posts and Telecommunications
Mingjia Dan Chongqing Univ. of Posts and Telecommunications

SunAIS-01
Intelligent Setting and Model Predictive Control of Wastewater Treatment Process Based on Case Search Optimization
Hao-En Li Xinjiang Univ.
Si-Yuan Chen China National Heavy Duty Truck Group
Hao-Cheng Wang Shenyang Inst. of Tech.
Xiao-Chen Zhu Northeastern Univ.

09:00-09:20 SunA12-4
Fault Diagnosis Method of Electro-Hydrostatic Actuators Based on Data-Driven
Feyan Gou Northwestern Polytechnical Univ.
Yilin Dong Northwestern Polytechnical Univ.
Xiaojun Xing Northwestern Polytechnical Univ.

SunAIS-02
Evidential Epistemic Uncertainty for Wind Forecasting and Risk-Aware Economic Dispatch under Distribution Shift
Qingcheng Lin Tongji Univ.
Quanquan Xi Tongji Univ.
Xuefeng Li Tongji Univ.
Hui Xiao Tongji Univ.

09:20-09:40 SunA12-5
Scenario Identification for Autonomous Trains: An Explainable Anomaly Detection Framework with XGBoost and SHAP
Wenzhen Zhai Beijing Jiaotong Univ.
Fei Yan Beijing Jiaotong Univ.

SunAIS-03
Analysis of Key Parameters and Research on Performance Impact of VSG Grid-forming Converter
Junjie Sun Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd

09:40-10:00 SunA12-6
Leveraging Domain-Specific Knowledge: A Novel Fault Diagnosis Domain Generalization Framework via Mixture-of-Experts
Junhao Liu China Univ. of Petroleum
Xiaoyong Gao China Univ. of Petroleum

Xinwei Li Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd
Xiaoheng Zhang Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd
Hao Kuang Northeastern Univ.
Xiaochen Zhu Northeastern Univ.

SunA13 Room13
Intelligent decision-making systems and applications (2) 08:00-10:00
Chair: Jinjie Huang Harbin Univ. of Science and Tech.
Co-Chair: Wei Pan Army Academy of Artillery and Air Defense

SunAIS-04
A Semi-Supervised Multimodal Operating Condition Recognition Method for Flotation Process with Contrastive Learning
Xiaoyang Wang Northeastern Univ.
Dapeng Jiang Liaoning Provincial Tax Service, State Taxation Administration
Shu Wang Northeastern Univ.
Di Lu Criminal Investigation Police Univ. of China

08:00-08:20 SunA13-1
News Recommendation Based on Multi-view and Multi-head Self-attention Fusion
Huixin Huang Harbin Univ. of Science and Tech.
Jinjie Huang Harbin Univ. of Science and Tech.

08:20-08:40 SunA13-2
Application of Fuzzy Adaptive Chaos Genetic Algorithm with Approximation Crossover Strategy to Ambiguity Resolution in PD Radar
Binbin Liu Army Academy of Artillery and Air Defense
Wei Pan Army Academy of Artillery and Air Defense
Feng Huang Army Academy of Artillery and Air Defense

SunAIS-05
Lithium-ion Battery SOH Estimation Employing Pretrained Regularized BiGRU-Attention Enhanced PINN
Chongyang Wei Shenyang Inst. of Engineering
Siyuan Liu Tieling Power Supply Company, State Grid Liaoning Electric Power Co., Ltd.
Xinfu Pang Shenyang Inst. of Engineering
Yue Zhu Shenyang Inst. of Engineering
Changyong Yin Shenyang Inst. of Engineering
Haibo Li Shenyang Inst. of Engineering

08:40-09:00 SunA13-3
Adaptive Value Function Discrepancy Correction for Model-Based Offline Reinforcement Learning
Houlin Li Shanghai Jiaotong Univ.
Longyang Huang Shanghai Jiaotong Univ.
Ning Pang Shanghai Jiaotong Univ.
Weidong Zhang Shanghai Jiaotong Univ.

SunAIS-06
PowerSQL: A Large Language Model-Assisted Domain-Adapted Text-to-SQL Framework for Power System Data Querying
Jie Zhao Zhejiang Univ
Minghao Wang Zhejiang Univ
Jingjing Yang China Southern Power Grid Company Limited
Zhiguang Hu China Southern Power Grid Company Limited
Xuejun Jiang Zhejiang Univ
Lifu Ding Zhejiang Univ

09:00-09:20 SunA13-4
An end-to-end recurrent neural physiological model for individual blood glucose prediction
Shuang Wen Northeastern Univ.
Hongru Li Northeastern Univ.
Xiaoyu Sun Northeastern Univ.

SunAIS-07
Application of high-precision scene perception technology in mining arterial transportation
E Yishuai Zhengzhou Non-Ferrous Metals Research Institute Co.,Ltd. of Chalco
WU Jun Zhengzhou Non-Ferrous Metals Research Institute Co.,Ltd. of Chalco

ZHANG Yuan Zhengzhou Non-Ferrous Metals Research Institute Co.,Ltd. of Chalco
Wang Yingwei Zhengzhou Non-Ferrous Metals Research Institute Co.,Ltd. of Chalco
Wang Weifeng Zhengzhou Non-Ferrous Metals Research Institute Co.,Ltd. of Chalco
ZHANG Jie Zhengzhou Non-Ferrous Metals Research Institute Co.,Ltd. of Chalco

SunAIS-08
Research on Intelligent Identification of Coal Mine Surrounding Rock Fractures Based on Borehole Imaging and Three-Dimensional Network Reconstruction
Xin Zhou Nanjing Univ. of Aeronautics and Astronautics
Haobo Wen Nanjing Univ. of Aeronautics and Astronautics
Weikang Li Nanjing Univ. of Aeronautics and Astronautics

SunAIS-09
A Modified Slime Mould Algorithm Using Elite Opposition Based Learning and Equilibrium Pool Strategy
DENG Conghan Fuzhou Univ.
ZHAO Chao Fuzhou Univ.
HUANG Yunyun Fuzhou Univ.

SunAIS-10
An Attitude Control Method for Fixed-Wing Unmanned Aerial Vehicles Based on Dynamic Inversion and Hybrid Sliding Mode Control
Yan Yue Northeastern Univ.
Shu Wang Northeastern Univ.

SunAIS-11
An Incremental Learning Website Fingerprinting nalysis Method Based on Generative Feature Replay
Lei Guan First Research Inst. of the Ministry of Public Security
Mengyu Ma First Research Inst. of the Ministry of Public Security
Yinga A First Research Inst. of the Ministry of Public Security

SunAIS-12
An Interpretable Robust Stochastic Configuration Network based on Dual-Gaussian Mixture Distribution
Qiqi Li China Univ. of Mining and Tech.
Xin Liu China Univ. of Mining and Tech.
Wei Dai China Univ. of Mining and Tech.

SunAIS-13
Few-Shot Evolutive Adaptation of SAM for Sintering Process Monitoring
Xuehan Bai Shanghai Jiao Tong Univ.
Baocong Zhang Shanghai Jiao Tong Univ.
Wei Liu Shanghai Jiao Tong Univ.
Cailian Chen Shanghai Jiao Tong Univ.
Xuda Ding Shanghai Jiao Tong Univ.
Haifeng Zhang Liuzhou Steel Dongxin Co. Ltd.

SunAIS-14
A Neighborhood Attention-Based Adapter for Parameter-Efficient Vision-Language Model Tuning
Hao Guo Nanjing Univ. of Posts and Telecommunications
Huijin Min Nanjing Univ. of Posts and Telecommunications

SunAIS-15
Long-Term SOH Prediction for Lithium-Ion atteries Using a Novel Multivariate RC-Encoder
Yuanhai Si PowerChina HuaDong Engineering Corporation Limited
Linjun Si PowerChina HuaDong Engineering Corporation Limited
Mingming Zhu Shenyang Univ. of Tech.
Junjie Yang PowerChina HuaDong Engineering Corporation Limited
Nianhua Guan PowerChina HuaDong Engineering Corporation Limited
Ziyao Yan PowerChina HuaDong Engineering Corporation Limited
Jinsheng Zou PowerChina HuaDong Engineering Corporation Limited
Yanbin Hou Shenyang Univ. of Tech.

SunAIS-16
A Multi-fidelity Aerodynamic Performance Prediction Method Based on Conditional Distribution Alignment
Rongfeng Cui AVIC Aerodynamics Research Inst.
Yuanhao Jiang Northeastern Univ.
Zhe Liu AVIC Aerodynamics Research Inst.
Chengpeng Guo AVIC Aerodynamics Research Inst.
Shu Wang Northeastern Univ.

SunAIS-17

Formation Target Intent Identification Based on a Static-Dynamic Collaborative Heterogeneous Graph Network
Hanlin Jiang Beijing Inst. of Tech.
Yuan Li Beijing Inst. of Tech.
Xuemei Ren Beijing Inst. of Tech.

SunAIS-18
Pursuit-Evasion Games for Multiple Unmanned Surface Vehicles Based on LD-MADDPG
Yuange Ma Harbin Inst. of Tech.
Lin Zi Huaneng Lancang River Hydropower Inc.
Qianbing Yu Huaneng Lancang River Hydropower Inc.
Yufei Zhuang Harbin Inst. of Tech.
Liangjun Jin Huaneng Lancang River Hydropower Inc.
Lang Li Huaneng Lancang River Hydropower Inc.
Haibin Huang Harbin Inst. of Tech.

SunAIS-19
A learning-based genetic algorithm for multi-constrained industrial silicon order planning
Zhizhao Zhou Kunming Univ. of Science and Tech.
Zuocheng Li Kunming Univ. of Science and Tech.

SunAIS-20
Research on Design and Control Strategy Optimization of High Performance Hybrid Cascaded Converter
Peng Wang Wuhan Univ. of Science and Tech.
Cong Liu Wuhan Univ. of Science and Tech.
Zeyi Lu Wuhan Univ. of Science and Tech.
Feng Yu Wuhan Univ. of Science and Tech.

SunAIS-21
Analysis of Electric Arc Furnace Operation with An Enhanced Cassie-Mayr Hybrid Arc Model
Chengyang Sun Nanjing Univ. of Posts and Telecommunications
Rong Fu Nanjing Univ. of Posts and Telecommunications
Xin Jiang Nanjing Univ. of Posts and Telecommunications

SunAIS-22
Modeling and Analysis of Reflow Oven Temperature Issues Based on Heat Transfer Mechanisms
Dongcheng Luo Civil Aviation Flight Univ. of China
Xijun Liu Civil Aviation Flight Univ. of China
Yiwen Zhang Civil Aviation Flight Univ. of China
Zelin Che Civil Aviation Flight Univ. of China

SunAIS-23
A Reinforcement Learning Method for Solving Coordinated Outbound Scheduling Between Stackers and Circular RGVs
Zihao Liu Kunming Univ. of Science and Tech.
Bin Qian Kunming Univ. of Science and Tech.
Rong Hu Kunming Univ. of Science and Tech.

SunAIS-24
An Improved Binary Harris Hawks Optimization Algorithm for the Multidimensional Knapsack Problem
Lang Li Kunming Univ. of Science and Tech.
Jinsi Zhang Kunming Univ. of Science and Tech.
Aodong Ma Kunming Univ. of Science and Tech.

SunAIS-25
Q-Learning Enhanced Hybrid Ant Colony Optimization for Two-Echelon Heterogeneous Multi-compartment Vehicle Routing Problem
Biao Xiang Kunming Univ. of Science and Tech.
Ning Guo Kunming Univ. of Science and Tech.
Bin Qian Kunming Univ. of Science and Tech.

SunAIS-26
Evaluation of the Operational Status of the Copper Flotation Production Process
Rui Qin North China Univ. of Science and Tech.
Junjie Wang Bar Mill Maintenance Section Zhongtian Special Steel Company Limited
Yuxin Cheng North China Univ. of Science and Tech.
Xuecong Fan North China Univ. of Science and Tech.
Xu Wang State Key Laboratory of Intelligent Optimized Manufacturing in Mining & Metallurgy Process
Zhiqiang Wang North China Univ. of Science and Tech.

SunAIS-27
Analysis of Grid Vulnerability to Extreme Weather and Critical Line Identification Method
Wenliang Xiong Yunnan Univ.
Shi Su Yunnan Power Grid Co., Ltd.
Junyu Liang Yunnan Power Grid Co., Ltd.
Peng Li Yunnan Univ.

SunAIS-28

Game-Theoretic Decision-Making for Aircraft Routing at Junctions Under Communication Jamming

Xueyuan Lv Dalian Univ. of Tech.
Di Wu Dalian Univ. of Tech.
Yunpeng Wang Dalian Univ. of Tech.

Ying He Southeast Univ.
Jinxia Zhang Southeast Univ.

SunAIS-29

STA-DGN: A Spatio-Temporal Attention-Enhanced Dynamic Graph Network for Predicting Traffic Flow in Signalized Intersection

Tong Zhou Chongqing Normal Univ.
Qi Zhang Chongqing Normal Univ.
Yudan Tian Chongqing Vocational Inst. of Engineering
Xiao Yang Chongqing Normal Univ.
Jialong Liu Chongqing Normal Univ.
Guangfu Lin Chongqing Normal Univ.

SunAIS-39

Point-Interval Fusion Model for Photovoltaic Power Forecasting

Xiaoyan Li Xi'an Univ. of Architecture and Tech.
Yuebo Meng Xi'an Univ. of Architecture and Tech.
Guanghui Liu Xi'an Univ. of Architecture and Tech.

SunAIS-40

Scheduling Electric Vehicle Charging Behavior Considering Heterogeneous Charging Demands

Yi Ning Shenyang Jianzhu Univ.
Junming Ha Shenyang Jianzhu Univ.
Xifeng Guo Shenyang Jianzhu Univ.
Zhiyong Liu Liaoning Petrochemical Univ.
Xinlu Wang Shenyang Jianzhu Univ.

SunAIS-30

A Temporal Convolutional Network-based Microscopic Car-Following Model

Hengyu Xue Beihang Univ.
Xingzhou Ren Beihang Univ.
Yuqi Liu Beihang Univ.
Yulong Wang Beihang Univ.
Yuyang Zhao Beihang Univ.
Qingfeng Lin Beihang Univ.

SunAIS-41

Ultra-short-term power load forecasting based on K-L-ISODATA-BiGRU-Attention model

Haiyan Xu Shenyang Jianzhu Univ.
Yong Zhang Shenyang Jianzhu Univ.
Yong Zhao Northeastern Univ.
Yuning Zhao Shenyang Jianzhu Univ.
Xiaofei Wang Shenyang Jianzhu Univ.

SunAIS-31

Platoon Control for Heterogeneous Vehicles With Second-Order Predictive Spacing Strategy

Xiaofan Chen Beijing Univ. of Tech.
Jingyuan Zhan Beijing Univ. of Tech.

SunAIS-42

Optimal Scheduling of Intergroup Pumping of PV Complementary Wells Based on Improved NSGA-III Algorithm

Qu Ruiyi Northeast Petroleum Univ.
Li Yanchun Northeast Petroleum Univ.
Wang Suling Northeast Petroleum Univ.
Dong Kangxing Northeast Petroleum Univ.
Liu Jianguye Northeast Petroleum Univ.
Li Tingting Northeast Petroleum Univ.

SunAIS-32

A CVAE-Based Generative Framework for Citywide Traffic State Reconstruction and Accident Scenario Simulation

Changhao Han Beihang Univ.
Ruiqiang Guo Beihang Univ.
Jingnan Tan Beihang Univ.
Junyi Chen Beihang Univ.
Mingliang Suo Beihang Univ.
Ruoming AN Harbin Inst. of Tech.

SunAIS-43

Sequential Multi-stage Planning Framework for Off-grid Integrated Energy Systems Considering Equipment Degradation

Lihua Lin China Univ. of Petroleum
Xiaoyong Gao China Univ. of Petroleum
Hainan Inst. of China Univ. of Petroleum
Xin Zuo China Univ. of Petroleum

SunAIS-33

Spatiotemporal Dual Attention Trajectory Prediction with Topological Attention Enhancement and Conservatism Constraint

Xiulan Song Zhejiang Univ. of Tech.
Qian Lai Zhejiang Univ. of Tech.
Defeng He Zhejiang Univ. of Tech.

SunAIS-44

Inertia and Damping Estimation of Power Systems Based on System Parameter Identification Method

Jie Li Shanghai Univ.
Xujun Zhang Electric Power Research Inst. of State Grid Gansu Electric Power Co., LTD.
Chen Peng Shanghai Univ.
Yajian Zhang Shanghai Univ.

SunAIS-34

A Hybrid Method for Multi-UAV Cooperative Task Allocation in Urban Logistics based on Sparrow Search and Ant Colony Optimization

Jingjie Li Dalian Univ. of Tech.
Haojie Sun Dalian Univ. of Tech.
Xin Zheng Dalian Univ. of Tech.
Yanshou Luo Beijing Inst. of Astronautical Systems Engineering
Xutong Zhang Dalian Univ. of Tech.
Jun An Beijing Inst. of Astronautical Systems Engineering

SunAIS-45

Dynamic SOC Equalization Strategy Based on Fuzzy Logic Control for Distributed Battery Energy Storage Systems

Shu Liu Chongqing Univ.
Rui Ling Chongqing Univ.
Qingmei Huang Chongqing Univ.

SunAIS-35

Distributed PID Control via Quantitative Feedback Theory for Vehicle Platoon with Actuator Saturation

Xiaoqin Mo Chongqing Univ. of Posts and Telecommunications

SunAIS-46

Optimized Wind Power Forecasting Based on Multi-Scale Feature Extraction and a Transformer-BiLSTM Hybrid Model

Shunfeng Dai Wuhan Univ. of Tech.
Lin Pan Wuhan Univ. of Tech.
Xiaomin Zhao Wuhan Univ. of Tech.
Keyun Peng Wuhan Univ. of Tech.

Chenyang Song

Yongfu Li Chongqing Key Laboratory of Intelligent Connected Vehicles and Vehicle-Infrastructure Cooperation
Chongqing Univ. of Posts and Telecommunications

SunAIS-36

Distributed Cooperative Control of Connected and Automated Vehicles Under Denial-of-Service Attacks in Open Environments

Minglian Pan Nanjing Univ. of Posts and Telecommunications
Shunyuan Xiao Nanjing Univ. of Posts and Telecommunications
Lei Ding Nanjing Univ. of Posts and Telecommunications

SunAIS-47

A Hybrid Wind Power Prediction Model Based on TOC-Optimized VMD and CNN-BiLSTM

Keyun Peng Wuhan Univ. of Tech.
Lin Pan Wuhan Univ. of Tech.
Shunfeng Dai Wuhan Univ. of Tech.
Xiaomin Zhao Wuhan Univ. of Tech.

SunAIS-37

Collision-Free Leader-Follower Formation Control for Unicycle Robots Using Control Barrier Functions

Jun Liu Chengdu Univ. of Information Tech.
Wenzhuo Zhang Chengdu Univ. of Information Tech.
Ping Li Chengdu Univ. of Information Tech.
Gexiang Zhang Chengdu Univ. of Information Tech.

SunB01 Room01

IntelliSense and advanced sensing, detection technology (Special Session) 10:10-12:10
Chair: Yong Zhao Northeastern Univ.
Chair: Qi Wang Northeastern Univ.

10:10-10:30

SunB01-1

A Data-Model Fusion Framework for Gasoline Quality Detection Using Fluorescence Spectroscopy and Inner Filter Effect Correction
Yuheng Tan Zhejiang Univ.
Xingyu Fan Zhejiang Univ.
Jie Yu Zhejiang Univ.
Lei Zhang Zhejiang Univ.

SunAIS-38

PVMatch: Semi-Supervised Semantic Segmentation for Photovoltaic Defects Using Dynamic Pseudo-Labeling and Multi-Scale Feature Consistency

Lingke Zhang	Zhejiang Univ.	Robotics Research Center of Yuyao City
10:30-10:50	SunB01-2	SunB02-4
Pipeline Leak Detection Algorithm for Starch Sugar Ion Exchange System Based on Improved YOLOv8		Hierarchical Optimization based Loco-manipulation Control for Quadraped Robot Carrying Heavy Payload
Liqing Geng	Tianjin Key Laboratory of Information Sensing and Intelligent Control Tianjin Univ. of Tech. and Education	Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech.
Peng Zhou	Tianjin Univ. of Tech. and Education	
Xiaoxia Yang	Tianjin Key Laboratory of Information Sensing and Intelligent Control Tianjin Univ. of Tech. and Education	
Xiaosong Zhu	Tianjin Key Laboratory of Information Sensing and Intelligent Control Tianjin Univ. of Tech. and Education	
10:50-11:10	SunB01-3	SunB02-5
ICDC: Guided Interpolation and Correction with Depth Estimation Prior for Depth Completion		Study of low-latency asynchronous visual inference on ROS2 mobile platform
Mingjun Cong	Huazhong Univ. of Science and Tech.	Jingchu Univ. of Tech.
Gang Peng	Huazhong Univ. of Science and Tech.	Jingchu Univ. of Tech.
Chuangye Li	Huazhong Univ. of Science and Tech.	Jingchu Univ. of Tech.
Jiaqi Yang	Huazhong Univ. of Science and Tech.	Jingchu Univ. of Tech.
Chaoze Wang	Huazhong Univ. of Science and Tech.	Jingchu Univ. of Tech.
Chaowei Song	Huazhong Univ. of Science and Tech.	Jingchu Univ. of Tech.
11:10-11:30	SunB01-4	SunB02-6
The design & experimental verification of carbon-14 breath detection instrument for Helicobacter pylori based on 14C tracer detection technology		Depth-Enhanced Dual-Arm Visual Servoing for Texture-less Fabric Alignment
Shiyong Huang	Chengdu China Nuclear Haichuan Nuclear Technology Co., Ltd Nuclear Power Inst. of China	Shanghai Jiao Tong Univ. Zhejiang Univ. Zhejiang Humanoid Robot Innovation Center Co.Ltd.
Yu Feng	Sichuan Provincial People's Hospital	Ningbo Industry Internet Inst. Co.Ltd. Zhejiang Humanoid Robot Innovation Center Co., Ltd.
Yuru Geng	Chengdu Tech. Univ.	Zhejiang Humanoid Robot Innovation Center Co., Ltd.
Juanqian Shen	Chengdu China Nuclear Haichuan Nuclear Technology Co., Ltd Nuclear Power Inst. of China	Zhejiang Humanoid Robot Innovation Center Co., Ltd. Ningbo Industry Internet Inst. Co., Ltd.
11:30-11:50	SunB01-5	SunB03
Training-Efficient Knee Joint Moment Estimation during Stair Ascent and Descent via a Broad Learning System		Control and management on smart city (Building) (2) (Special Session)
Guoyu Zuo	Beijing Univ. of Tech.	10:10-11:55
Minghui Zhang	Beijing Univ. of Tech.	Chair: Hongyan Ma
Qifei Wu	Beijing Univ. of Tech.	Beijing Univ. of Civil Engineering and Architecture
Shuangyue Yu	Beijing Univ. of Tech.	Chair: Yahui Wang
		Beijing Univ. of Civil Engineering and Architecture
11:50-12:10	SunB01-6	10:10-10:25
Research on the Magnetic Resonance Frequency Measurement Method of the Optical Pumping Magnetometer		SunB03-1
Ying Yang	Tianjin Univ. of Tech. and Education	A Method for Anomaly Detection in Surveillance Video Based on Multimodal Large Language Model
		Chongqin Zhou
		Bennet
		Wondimagegnehu
		Mersha
		Yaping Dai
		Beijing Inst. of Tech. Beijing Inst. of Tech.
SunB02	Room02	
Future robotics technology and application (2) (Special Session)		
10:10-12:10	10:10-12:10	
Chairs: Jingbing Zhang	ARTC and SIMTech, A*STAR	
Zhengguo Li	Inst. for Infocomm Research	
10:10-10:30	SunB02-1	SunB03-2
NST-Transformer-Based Stable Silicon Content Prediction in Blast Furnace Hot Metal under complex Operating Conditions		An End-to-End Hierarchical Framework for Large-Scale Corpus Generation in Intelligent Building Sector
Sen Chen	Wuhan Univ. of Science and Tech.	Zexia Yin
Hong ping Fang	Wuhan Univ. of Science and Tech.	China Communications Information & Tech. Group Co, LTD
Chao bing Zheng	Wuhan Univ. of Science and Tech.	Jing Wang
	Advanced Remanufacturing and Tech. Centre	China Communications Information & Tech. Group Co, LTD
Shi zhuo Huang	Wuhan Univ. of Science and Tech.	Haifeng Jiang
Shi qian Wu	Wuhan Univ. of Science and Tech.	China Communications Information & Tech. Group Co, LTD
		Yang Mo
		China Communications Information & Tech. Group Co, LTD
		Haoyang Pan
		China Communications Information & Tech. Group Co, LTD
		Zhe Yang
		China Communications Information & Tech. Group Co, LTD
		You Wu
		China Communications Information & Tech. Group Co, LTD
		Yanan Li
		China Communications Information & Tech. Group Co, LTD
		Cuilan Liang
		China Communications Information & Tech. Group Co, LTD
10:30-10:50	SunB02-2	10:25-10:40
Transitional Gait Generation Across Rehabilitation Stages for Hemiparetic Patients with Lower-Limb Exoskeletons Based on Optimized Adaptive CPG		SunB03-3
Yuan Gao	Sun Yat-sen Univ.	The arc sag closed-loop control method in the installation of jumpers for ultra-high voltage AC transmission lines
Ping Wang	Sun Yat-sen Univ.	Zhang Haoyang
Xiaoyun Zang	Tai'an City Industrial Economic Development Service Center	Beijing Univ. of Civil Engineering and Architecture
	Sun Yat-sen Univ.	Wang Zhiyuan
		Beijing Electric Power Transmission & Transformation Co., Ltd.
Wanquan Liu		
10:50-11:10	SunB02-3	10:40-10:55
Spatial-DiT: Generalizable 3D Visuomotor Policy for Cross-Object Manipulation via Multi-Scale Spatial Fusion		SunB03-4
Zhu Junjie	Zhejiang Univ. Robotics Research Center of Yuyao City	The arc sag closed-loop control method in the installation of jumpers for ultra-high voltage AC transmission lines
Wang Jin	Zhejiang Univ. Robotics Research Center of Yuyao City	Zhang Haoyang
Li Xiaofei	Zhejiang Univ. Robotics Research Center of Yuyao City	Wang Zhiyuan
Zhang Haiyun	Ningbo Univ. of Tech.	Ju Haoyi
Lu Guodong	Robotics Research Center of Yuyao City	Jiang Dan
		Beijing Univ. of Civil Engineering and Architecture
		Ma Hongyan
		Beijing Univ. of Civil Engineering and Architecture
		10:55-11:10
		SunB03-4
		Real-time Modeling and Control of Indoor Thermal Environment Based on Mobile Robot

Yaze Shen	Jiangsu Univ.	Nonlinear PID Dead-Zone Compensation for High-Fidelity Wave-Motion Simulation in Marine Floating Photovoltaic Systems	
Guibin Chen	Jiangsu Univ.		
Jialu Shi	Jiangsu Univ.		
Binhan Shen	Jiangsu Univ.		
Kangji Li	Jiangsu Univ.	Feifu Hu	Nanjing Univ. of Posts and Telecommunications
		Qi Sun	State Power Investment Corporation Jiangsu Power Co., Ltd. Suzhou Branch
11:10-11:25	SunB03-5	Yongsheng Huang	State Power Investment Corporation Jiangsu Power Co., Ltd. Suzhou Branch
An Improved Droop Control Strategy Based on Adaptive Virtual Impedance for Islanded Microgrids		Liang Wang	State Power Investment Corporation Jiangsu Power Co., Ltd. Suzhou Branch
Zhen Chen	Beijing Univ. of Civil Engineering and Architecture	Yan Zhou	Nanjing Univ. of Posts and Telecommunications
Hongyan Ma	Beijing Univ. of Civil Engineering and Architecture		
Xiyao Feng	Beijing Univ. of Civil Engineering and Architecture	11:50-12:10	SunB04-6
		Equivalent Circuit Modeling of Low-Temperature Supercapacitors Considering Current-Temperature Coupling Effects	
11:25-11:40	SunB03-6	Yifei He	Key Laboratory of Measurement and Control of CSE, Ministry of Education Southeast Univ.
YOLO12-FS: A High-Precision Deep Learning Method for Forest Fire Detection		Qihang Wang	Key Laboratory of Measurement and Control of CSE, Ministry of Education Southeast Univ.
Xiyao Feng	Beijing Univ. of Civil Engineering and Architecture	Xiangrui He	Key Laboratory of Measurement and Control of CSE, Ministry of Education Southeast Univ.
Hongyan Ma	Beijing Univ. of Civil Engineering and Architecture	Kanjian Zhang	Key Laboratory of Measurement and Control of CSE, Ministry of Education Southeast Univ.
Zhen Chen	Beijing Univ. of Civil Engineering and Architecture	Shixiong Fang	Key Laboratory of Measurement and Control of CSE, Ministry of Education Southeast Univ.
11:40-11:55	SunB03-7	Haikun Wei	Key Laboratory of Measurement and Control of CSE, Ministry of Education Southeast Univ.
Load Forecasting and Energy-Saving Control for Air Conditioning Systems in Specially Controlled Environments Based on Data-Physics Hybrid Models			
Jian Wang	National Inst. of Metrology	SunB05	Room05
Fei Cai	Nanjing Bosen Technology Co., Ltd.	Educational reform and innovation on intelligent control disciplines (Special Session)	10:10-12:10
Wei Sheng	Nanjing Bosen Technology Co., Ltd.	Chairs: Feng Pan	Northeastern Univ.
Deyi Wang	Nanjing Bosen Technology Co., Ltd.	Qiuye Sun	Shenyang Univ. of Tech.
Shuhong Li	Southeast Univ.		
Jun Wu	National Inst. of Metrology	10:10-10:30	SunB05-1
Yang Liu	National Inst. of Metrology	Reform and Exploration of Computer Network Course Teaching Empowered by Artificial Intelligence	
SunB04	Room04	Weibei Fan	Nanjing Univ. of Posts and Telecommunications
New energy control and smart energy (2) (Special Session)	10:10-12:10	Biyun Sheng	Nanjing Univ. of Posts and Telecommunications
Chairs: Qiuye Sun	Shenyang Univ. of Tech.	Weifeng Lu	Nanjing Univ. of Posts and Telecommunications
Xuguang Hu	Northeastern Univ.		
10:10-10:30	SunB04-1	10:30-10:50	SunB05-2
Design-Oriented Active Damping for Grid-Following Inverters Based on Passivity Theory		AI-Assisted Teaching Design for the Automatic Control Principles Course under the Perspective of New Engineering Education	
Yan Xu	Zhejiang Univ.	Mengzhi Wang	Beijing Univ. of Chemical Tech.
Wenjing Liang	Inner Mongolia Daqingshan Laboratory Co., Ltd.	Yongming Han	Beijing Univ. of Chemical Tech.
Yutong Wang	Inner Mongolia Daqingshan Laboratory Co., Ltd.	Zhiqiang Gang	Beijing Univ. of Chemical Tech.
Zhihai Yan	Zhejiang Univ.		
Jiali Liu	Economic and Tech. Research Inst. of Inner Mongolia Power Group	10:50-11:10	SunB05-3
Ji Xiang	Zhejiang Univ.	Construction of Interdisciplinary Practical Teaching System for Robotics Oriented to Embodied Intelligence	
10:30-10:50	SunB04-2	Xiang Wu	Henan Univ. of Tech.
Adaptive Fast/Slow Internal Voltage Source Coordination for Transient Stability Enhancement of VSG-Controlled Grid-Forming Inverters		Shijie Zhang	Henan Univ. of Tech.
Songtao Huang	Huazhong Univ. of Science and Tech.	Hui Zhang	Henan Univ. of Tech.
Zhenxing Liu	Huazhong Univ. of Science and Tech.	Jilong Wang	Henan Univ. of Tech.
Ziao Ren	Huazhong Univ. of Science and Tech.	Jiajian Zhang	Henan Univ. of Tech.
Jie Ye	Huazhong Univ. of Science and Tech.	Yin Wang	Henan Univ. of Tech.
Jinbang Xu	Huazhong Univ. of Science and Tech.		
Anwen Shen	Huazhong Univ. of Science and Tech.	11:10-11:30	SunB05-4
10:50-11:10	SunB04-3	Research on Virtual Simulation Experiment for Nondestructive Testing of Aero-Engine Blades : Focusing on Ultrasonic and Borecope Inspection Technologies	
Curriculum-Enhanced Model-Free PPO Control for Boost Converters with Real-Time Validation		Hongyan Hua	Zhengzhou Univ. of Aeronautics
Yiwei Liu	Chongqing Key Laboratory of Nonlinear Circuits and Intelligent Information Processing Southwest Univ.	Ke Zhao	Zhengzhou Electric Power Tech. College
		Huachen Feng	Zhengzhou Univ. of Aeronautics
11:10-11:30	SunB04-4		Zhengzhou Electric Power Tech. College
Dynamic Health Index Construction and Early Anomaly Detection for Wind Turbines via LSTM Autoencoders		11:30-11:50	SunB05-5
Xiaomin Zhao	Key Laboratory of Transport Industry of Port Cargo Handling Tech., Ministry of Transport Wuhan Univ. of Tech.	Construction Concepts and Practical Exploration of Industrial Intelligence Laboratories under the New Engineering Education 2.0 Framework	
Lin Pan	Key Laboratory of Transport Industry of Port Cargo Handling Tech., Ministry of Transport Wuhan Univ. of Tech.	Wang Hongxiao	Northeastern Univ.
Shunfeng Dai	Key Laboratory of Transport Industry of Port Cargo Handling Tech., Ministry of Transport Wuhan Univ. of Tech.	Li Hongru	Northeastern Univ.
Keyun Peng	Key Laboratory of Transport Industry of Port Cargo Handling Tech., Ministry of Transport Wuhan Univ. of Tech.	Zhang Wei	Northeastern Univ.
		Qian Xiaolong	Northeastern Univ.
11:30-11:50	SunB04-5	Zhang Yu	Northeastern Univ.
		Zhang Dingsen	Northeastern Univ.
		11:50-12:10	SunB05-6
		An ISAC-Oriented Project-Based Curriculum for Intelligent Control Education: Framework Design and Teaching Practice	
		Chen Dai	Nanjing Univ. of Posts and Telecommunications
		Jingyu Ha	Nanjing Univ. of Posts and Telecommunications

SunB06	Room06
Disturbance estimation, compensation and network attack method for nonlinear systems (Invited Session)	10:10-11:30
Chairs: Chen Zhang Zhiliang Zhao	North Univ. of China North Univ. of China
10:10-10:30	SunB06-1
Vulnerability of Multi-Agent Systems under Stealthy False Data Injection Attacks	
Kaijing Jin Zhiliang Zhao Chen Zhang Ruixiang Deng Zhe Wang	North Univ. of China North Univ. of China North Univ. of China North Univ. of China Shenyang Aerospace Univ.
10:30-10:50	SunB06-2
Vehicle Platoon Control With Nonlinear Extended State Observer and Command Filtered Backstepping Method	
Longfei Han Zhiliang Zhao Chen Zhang	North Univ. of China North Univ. of China North Univ. of China
10:50-11:10	SunB06-3
Dynamic reference programming-based self-triggered model predictive tracking control for Markov jump systems	
Peng He Xiaoli Luan Chen Zhang Zhiliang Zhao	North Univ. of China Jiangnan Univ. North Univ. of China North Univ. of China
11:10-11:30	SunB06-4
Output Group Formation Tracking Control of One-sided Lipschitz Nonlinear Multi-Agent Systems	
Lihong Feng Zhiliang Zhao Jiaqi Tian Bibo Zheng Bonan Huang	North Univ. of China North Univ. of China Northeastern Univ. China Univ. of Mining and Tech. Northeastern Univ.
SunB07	Room07
Control theory and control technology (6)	10:10-12:10
Chair: Zhongyang Fei Co-Chair: Qing Yang	Dalian Univ. of Tech. Qingdao Univ.
10:10-10:30	SunB07-1
Set-membership Estimation for High-Dimensional Lipschitz Nonlinear Systems: a Zonotope-Based Method	
Fengyuan Zhang Ke Xu Xinyuan Lv Zhongyang Fei	Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech.
10:30-10:50	SunB07-2
Soft-event-triggered adaptive fuzzy output-constraints control for robot manipulator based on Boundary-TABLF	
Qing Yang Haisheng Yu Xiangxiang Meng Bingchang Lv Wenqian Yu	Qingdao Univ. Qingdao Univ. Qingdao Univ. Qingdao Univ. State Grid
10:50-11:10	SunB07-3
RPCA Algorithm Based on Weighted Truncated Schatten-p Norm	
Ziyang Chen Jiajun wang Peng Xie Yawen Mao	Jiangnan Univ. Univ. Paris-Saclay Jiangnan Univ. Jiangnan Univ.
11:10-11:30	SunB07-4
Formation control of multiple surface vessels with input saturation and collision avoidance	
Shaojun Xu Ting Yang Kairong Zhan Dianfeng Zhang Liqiang Yao	Yantai Univ. Yantai Univ. Yantai Univ. Yantai Univ. Yantai Univ.
11:30-11:50	SunB07-5
State of Charge Estimation for Lithium-Ion Batteries Using RNN with Robust FF-RLS Preprocessing	
Ruijing Zhang Han Xu Huitong Lu Jing Chen	Jiangnan Univ. Jiangnan Univ. Jiangnan Univ. Jiangnan Univ.
11:50-12:10	SunB07-6
Intelligent Control for Gantry Crane with Rigid-Flexible Coupling Characteristics Using Singular Perturbation Decomposition	
Yuqiang Yue Qiyong Wen	Harbin Inst. of Tech. Harbin Inst. of Tech.

Changbo Ma	Harbin Inst. of Tech.
Guangcheng Ma	Harbin Inst. of Tech.
Hongwei Xia	Harbin Inst. of Tech.
SunB08	Room08
Control theory and control technology (7)	10:10-12:10
Chair: Dun Ao Co-Chair: Binghe An	Beijing Univ. of Tech. Zhejiang Geely Holding Group Co., Ltd.
10:10-10:30	SunB08-1
Fixed Time Fault-Tolerant Obstacle Avoidance Formation Control for Multi-Quadcopters	
Dun Ao Xin Zhang Yao Xiao	Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech.
10:30-10:50	SunB08-2
Finite/Prescribed-Time Formation Tracking of Heterogeneous Multi-Agent Systems Under Switching Topologies	
Huili Shi Binghe An Nian Fu Wentao Tong	Wuhan Digital Engineering Research Inst. Zhejiang Geely Holding Group Co., Ltd. Wuhan Digital Engineering Research Inst. Wuhan Digital Engineering Research Inst.
10:50-11:10	SunB08-3
Hierarchical Safety-Priority Attitude Control with Control Barrier Function for Spacecraft Proximity Operations	
Hang Zhou Tao Meng Chengrui Shi Yuhang Zhang	Zhejiang Univ. Zhejiang Univ. Zhejiang Univ. Zhejiang Univ.
11:10-11:30	SunB08-4
Template Improved Model-Free Adaptive Control Based on Nonlinear Disturbance Observer	
Weiqiang Guan Xinyu Zhou Shilong Dai	Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
11:30-11:50	SunB08-5
UAV Robust Attitude Tracking Control Using Modified Active Disturbance Rejection Control with Parameter Optimization	
Mengchen Qiao Junmin Cheng Shaobo Zhai	Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ.
11:50-12:10	SunB08-6
Distributed Adaptive Formation Tracking Control for Quadrotor UAVs	
Linxing Xu Zekang Xu	Nanjing Univ. of Posts and Telecommunications Nanjing Normal Univ. Taizhou College
SunB09	Room09
Control theory and control technology (8)	10:10-12:10
Chair: Huifang Min Co-Chair: Yixuan Xue	Nanjing Univ. of Science and Tech. Inner Mongolia Univ.
10:10-10:30	SunB09-1
Position Servo Control Of Permanent Magnet Synchronous Motor Systems With Output Constraints	
Yihui Shen Shixin Xia Jiewen Yin Liji Wang Huifang Min	Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech.
10:30-10:50	SunB09-2
Barrier Function-based Adaptive Sliding Mode Preview Control for Linear System with Unknown Disturbance	
Yixuan Xue Qian Wang	Inner Mongolia Univ. Inner Mongolia Univ.
10:50-11:10	SunB09-3
Performance Analysis of LTI-Based Data-Driven Methods in Slow-Varying LTV Systems	
Zongyuan Sun Tuo Yang Zhisheng Duan	Peking Univ. Peking Univ. Peking Univ.
11:10-11:30	SunB09-4
Fixed-time Target Localization and Circumnavigation with Bearing-only Measurements	
Yihao Di Ke Chen	Qufu Normal Univ. Qufu Normal Univ.
11:30-11:50	SunB09-5
Consensus of Multi-agent Systems under Unknown Global Coupling via Neural Network Adaptive Control	
Jinhui Du Lijun Zhu	Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.

11:50-12:10	SunB09-6	A Decision-Level Fusion Localization Method Based on Modality Confidence Using WiFi and LoRa Ruilin Peng Jun Yang	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
Event-Triggered Secure Consensus of Multi-Agent Systems under Uncertain Markov Switching Topologies Tingting Guo Changqiang Jing Shuaishuai Chen Feng Zhao	Linyi Univ. Linyi Univ. Linyi Univ. Linyi Univ.		
SunB10	Room10	Intelligent perception, synergic decision-making, and security for robots and unmanned systems (3) Chair: Ziyu Hu Co-Chair: Ying Zhang	10:10-12:10 Yanshan Univ. Fuzhou Univ.
10:10-10:30	SatB10-1	An ASCF Path Planning Method for a Hybrid Robot in Coating Inspection Scenarios Junhao Hu Ziyu Hu Xinpeng Guo Haomin Yuan	Yanshan Univ. Yanshan Univ. Yanshan Univ. Yanshan Univ.
10:30-10:50	SatB10-2	Hierarchical DMPC-CLFs-CBFs of Nonholonomic Mobile Robots with Formation and Collision Avoidance Wenjing Hui Ying Zhang He Cai Youfeng Su	Fuzhou Univ. Fuzhou Univ. South China Univ. of Tech. Fuzhou Univ.
10:50-11:10	SatB10-3	MC3D: Hybrid Mamba and Convolutional Network for LiDAR 3D Object Detection Di Gao Zuotao Ning Shuai Cheng Wei Liu	Northeastern Univ. Neusoft Reach Automotive Tech. Neusoft Reach Automotive Tech. Northeastern Univ.
11:10-11:30	SatB10-4	Path Tracking Control for Unmanned Motorcycle Based on Deep Reinforcement Learning Yaping Fang Yanhong Liu Qiyu Guan Yulong Yan	Zhengzhou Univ. Zhengzhou Univ. Zhengzhou Univ. Zhengzhou Univ.
11:30-11:50	SatB10-5	A nonlinear gain sliding mode control method for large inertia unmanned vessel Minglu Shi Chunping Liu Yihao Zhang Chong Liu Yiming Fang Shuang Gao	Shaoxing Univ. Shaoxing Univ. Shaoxing Univ. Shaoxing Univ. Shaoxing Univ. Shaoxing Univ.
11:50-12:10	SatB10-6	Towards End-to-End Visual Navigation for a Salamander-Like Robot via Deep Reinforcement Learning Zhiang Liu Yongchun Fang	Nankai Univ. Nankai Univ.
SunB11	Room11	Advanced sensing and intelligent perception (2) Chair: Zhao-Han Liu CO-Chair: XueYan Han	10:10-12:10 Heilongjiang Univ. Shandong Aeronautical Univ.
10:10-10:30	SunB11-1	An Intelligent Detection Method for Drug Content Based on Global-Local Feature Information Collaboration Zhao-Han Liu Yang Liu Ye Tian	Heilongjiang Univ. Heilongjiang Univ. Heilongjiang Univ.
10:30-10:50	SunB11-2	Wideband Two-Dimensional Off-Grid Direction-of-Arrival Estimation Algorithm Based on Two Parallel Nested Arrays XueYan Han Kai Feng ShuangLe Guo	Shandong Aeronautical Univ. State Grid Shandong Electric Power Company Shandong Aeronautical Univ.
10:50-11:10	SunB11-3	Physics-informed neural networks for dual-rate system dynamic soft-sensor modeling Chenxin Ye Anjan Tula Xi Chen	Zhejiang Univ. Zhejiang Univ. Zhejiang Univ.
11:10-11:30	SunB11-4		
11:30-11:50	SunB11-5	A Hand-Eye Calibration Method Based on Composite Residual Analysis and Robust Optimization Mingyang Liu Tianfei Chen Lijun Sun Mingyang Gu Yiming Jing Shihao Xu	Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech.
11:50-12:10	SunB11-6	Real-Time Crankshaft 3D Metrology via Adaptive Boundary Extraction and Registration-Constrained Cylinder Fitting Yifan Sun Qingjia Kong Jinda Lei Zhe Zhang Long Cheng Lianzheng Ge	Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech.
SunB12	Room12	Fault diagnosis, prognosis and prediction maintenance (2) Chair: Xinpeng Liu Co-Chair: Zhuowen Zhang	10:10-12:10 Dalian Univ. of Tech. China Univ. of Petroleum (East China)
10:10-10:30	SunB12-1	Integrating Graph Neural Networks and Attention-Based LSTM for Aero-Engine Fault Diagnosis Fuxin Zhao Xinpeng Liu Ruyi Huang Chao Cai Xianqiang Yang	Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech. Harbin Inst. of Tech.
10:30-10:50	SunB12-2	Improved Convolution Attention Neural Networks for Fault Diagnosis of Plunger Pumps via Adaptive Clustering-Guided Subclass Reconstruction Zhuowen Zhang Yu-ping Cao Ping Wang Xiaogang Deng	China Univ. of Petroleum (East China) China Univ. of Petroleum (East China) China Univ. of Petroleum (East China) China Univ. of Petroleum (East China)
10:50-11:10	SunB12-3	Research on Fault Diagnosis Method for Axle Box Bearings Based on Deep CWT Feature Representation and Dual-Attention Network Yanjie Cui Xuefeng Li Weijiao Zhang Qi Wu Fei Lv Zhongkai Wang	China Academy of Railway Science China Academy of Railway Science Co., Ltd China Academy of Railway Science Co., Ltd Beijing Jiaotong Univ. China Academy of Railway Science Co., Ltd China Academy of Railway Science Co., Ltd
11:10-11:30	SunB12-4	Pump Fault Diagnosis Based on Information Fusion and Bayesian Optimization Guoquan Chen Shubin Tan Lijie Zhang	Northeastern Univ. Northeastern Univ. Ningxia Inst. of Science and Tech.
11:30-11:50	SunB12-5	A VAE-GAN Based Framework for Few-Shot Fault Diagnosis of Rolling Element Bearings Yao Gou Shubin Tan Lijie Zhang	Northeastern Univ. Northeastern Univ. Ningxia Inst. of Science and Tech.
11:50-12:10	SunB12-6	Research on Rotor Fault Diagnosis Method for Asynchronous Motor Transient Operation Based on Parameter-Optimized VMD-CWT-RepViT Zhengyi Liao Zhenxing Liu Qian Su	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
SunB13	Room13	Intelligent decision-making systems and applications (3) Chair: Zhihong Guan Co-Chair: Pengsong Guo	10:10-12:10 Huazhong Univ. of Science & Tech. Air Force Engineering Univ.
10:10-10:30	SunB13-1	A Multimodal LLM Framework Fusing EEG and Text for Personalized Depression Reporting Xiaolong Su	South China Univ. of Tech.

Bin Hu South China Univ. of Tech.
Zhihong Guan Huazhong Univ. of Science and Tech.

10:30-10:50 **SunB13-2**
Design of Intelligent Decision Agent for Air-ground Cooperative Air Defense WarGaming based on Deep Reinforcement Learning
Pengsong Guo Air Force Engineering Univ.
Xiaojian Hao Air Force Engineering Univ.
Haoran Sun Air Force Engineering Univ.
Changan Shang Air Force Engineering Univ.
Ning Li Air Force Engineering Univ.

10:50-11:10 **SunB13-3**
A Performance-Driven Graph Model for Structural Conflict Analysis in Networked Multi-Decision-Maker Systems
Kang Yan National Univ. of Defense Tech.
Bingfeng Ge National Univ. of Defense Tech.
Yuming Huang National Univ. of Defense Tech.
Zeqiang Hou National Univ. of Defense Tech.
Tianjiao Yang National Univ. of Defense Tech.
Kewei Yang National Univ. of Defense Tech.

11:10-11:30 **SunB13-4**
TS-TFCDP: Time-Frequency Cross-Domain Prediction for Time series self-supervised learning
Songbai Liu Northeastern Univ.
Hongru Li Northeastern Univ.
Shuang Wen Northeastern Univ.
Xing Feng Northeastern Univ.

11:30-11:50 **SunB13-5**
An Improved DQN-APF Algorithm for Path Planning of Amphibious Unmanned Vehicles
Jiajun Bai Harbin Engineering Univ.
Jing Xiang Harbin Engineering Univ.
Guihua Xia Harbin Engineering Univ.

11:50-12:10 **SunB13-6**
Modeling for Navigation Speed Prediction of Battery-powered Ships Based on ACSA-BPNN
Xiu Wu Wuhan Univ. of Science and Tech.
Chaoping Rao Wuhan Qingchuan Univ.
Junkai Zhang Wuhan Univ. of Science and Tech.
Liangli Zhang Engineering Research Center for Metallurgical Automation and Measurement Tech. of Ministry of Education

Ruhan Gong Engineering Research Center for Metallurgical Automation and Measurement Tech. of Ministry of Education

SunBIS **RoomPT**
Interactive Session **10:10-12:10**

SunBIS-01
Current Harmonics Analysis of DFIG Based Wind Turbine Integrated System With EEMD-HT
Junwei Ling Guangdong Power Grid Co., Ltd.
Jishun Zhu Nanjing Vocational Inst. of Transport Tech.
Jintao He Meizhou Power Supply Bureau of Guangdong Power Grid Co., Ltd.

SunBIS-02
Autonomous Power Allocation Method for Edge-Side Power Systems Guided by Limited Knowledge
Shubo Hu Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.
Xintong Ma Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.
Yangyang Ge Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.
Bing Xie Electric Power Research Institute of State Grid Liaoning Electric Power Co., Ltd.
Xuguang Hu Northeastern Univ.
Zhihong Zhang Northeastern Univ.

SunBIS-03
Distributed Secondary Control of DC Microgrids Via the Dynamic Average Tracking
Jingyu Yang Northeastern Univ.
Dazhong Ma Northeastern Univ.
Yetong Han Northeastern Univ.

SunBIS-04
Research and verify of equipment technology for ship electric propulsion system based on double-layer adaptive inertial control
Dong Lu China Waterborne Transport Reserach Inst.
Qingguo Liu China Waterborne Transport Research Inst.

SunBIS-05
Medium- and Short-Term Photovoltaic Power Forecasting Method Based on MDM-DDI-CrossLinear
Yang Pei Yunnan Univ.
Wei Huang Yunnan Electric Power Dispatching and Control Center
Peng Li Yunnan Univ.
YuanYuan Pu Yunnan Univ.
Shi Su Yunnan Power Grid Co., Ltd.
Wenxiao Yao Yunnan Univ.

SunBIS-06
Zero-Sequence Stability Analysis for Three-Phase Four-Leg VSG with Virtual Impedance Under Unbalanced Grid
Kenan Xi Shandong Univ.
Heng Guo Shandong Univ.
Luyao Miao Shandong Univ.
Yan Liu Shandong Univ.
Jinxiu Song Shandong Univ.
Bin Duan Shandong Univ.

SunBIS-07
Frequency-SOC Weighted Adaptive MPC-Based Primary Frequency Regulation Strategy for Hybrid Energy Storage Systems Integrating Lithium-Ion Batteries and Flywheels
Baidong Luo Xi'an Univ. of Tech.
Shangbin Jiao Xi'an Univ. of Tech.
Shuichao Kou Xi'an Thermal Power Research Inst. Co., Ltd.
Xiaoning Zhang Xi'an Xirui Electrical Engineering Tech. Co., Ltd.
Pengcheng Sun Xi'an Univ. of Tech.
Penghui Dang Xi'an Univ. of Tech.

SunBIS-08
Data-Driven State of Health Estimation for Lithium-Ion Batteries Using Gated Recurrent Unit and Mechanical Expansion Features
MAAB SALAH MOHAMEDLAMIN ALI Shandong Univ.
Miao Yu Shandong Univ.
Jinglun Li Shandong Univ.
Xiaoqiang Zhang Shandong Univ.
Xin Gu Shandong Univ.
Yunlong Shang Shandong Univ.

SunBIS-09
High-Precision SOH Estimation of Lithium-ion Batteries Based on CPO-Optimized Transformer-LSTM and Feature Reconstruction
Zhijun Gao Shenyang Jianzhu Univ.
Bowen Duan Shenyang Jianzhu Univ.
Xinlu Wang Shenyang Jianzhu Univ.
Yiyang Liu Shenyang Jianzhu Univ.

SunBIS-10
An ADRC-P&O Hybrid MPPT Strategy for Photovoltaic Power Generation Systems
Huan Pan Ningxia Univ.
Xuejuan Zhao Ningxia Univ.
Jiaxin Wu Ningxia Univ.

SunBIS-11
Research on Flexibility Enhancement and Synergistic Optimization Strategies for Hydrogen Energy Systems
Weijun Zhu Nanjing Univ. of posts and telecommunication
Minjian He Nanjing Univ. of posts and telecommunication
Tao Shi Nanjing Univ. of posts and telecommunication

SunBIS-12
Lithium-Ion Battery State of Health Prediction Based on a Novel Hybrid Neuron Network with Three-Stage Hidden Layers
Linjun Si PowerChina HuaDong Engineering Corporation Limited
Yuanhai Si PowerChina HuaDong Engineering Corporation Limited
Runyu Li Shenyang Univ. of Tech.
Wenge Yu PowerChina HuaDong Engineering Corporation Limited
Yu Xiao PowerChina HuaDong Engineering Corporation Limited
Yusheng Yang PowerChina HuaDong Engineering Corporation Limited
Jun Gui Shenyang Univ. of Tech.

SunBIS-13
Fault-Tolerant H_{∞} Consensus Control for Fractional-Order Multi-Agent Systems
Xue Dong Shenyang Aerospace Univ.
He Li Shenyang Aerospace Univ.
Guang-Lei Meng Shenyang Aerospace Univ.

SunBIS-14
State estimation for nonlinear fractional-order system with multi-sensor measurements considering the initial value problem

Chuang Yang	Northeastern Univ.	CK-DeepLab: Lightweight Crack-Aware Segmentation for	
Jianchang Liu	Northeastern Univ.	Electroluminescence Images	
Zhe Gao	Liaoning Univ.	Haiyong Chen	Hebei Univ. of Tech.
Honghai Wang	Northeastern Univ.	Jie Zhao	Hebei Univ. of Tech.
Peng Xu	Dalian Minzu Univ.	Shaoshuai Zhu	Hebei Univ. of Tech.
Wenhao Li		Wenhao Li	Hebei Univ. of Tech.
SunBIS-15		SunBIS-27	
Graph Attention Cognitive Weight Diagnosis Model based on Knowledge Graph and Cognitive Features		YOLO-GENet for Small Vehicle Detection in Remote Sensing Imagery	
Xiaoyu Yang	Southeast Univ.	Yinjie Miao	Panzhuhua Univ.
Junyang Li	Southeast Univ.	Mingjie Lyu	Panzhuhua Univ.
SunBIS-16		Hao Zhong	Panzhuhua Univ.
Data-Driven Education Reform for Prospective Control Engineering Students		Xinkun Song	Panzhuhua Univ.
Biyun Sheng	Nanjing Univ. of Posts and Telecommunications	SunBIS-28	
Hao Liu	Nanjing Univ. of Posts and Telecommunications	A Series-Connected IGBTs Inverters with Source-level EMI Suppression	
Weibei Fan	Nanjing Univ. of Posts and Telecommunications	Shuo Gao	Northeastern Univ.
YiZe Wang	Nanjing Univ. of Posts and Telecommunications	Xu Wang	Northeastern Univ.
SunBIS-17		Dan Yang	Northeastern Univ.
Reforming Graduate Education in Control Engineering for the Emerging Low-Altitude Economy		Bin Xu	Northeastern Univ.
Jun Wang	Beijing Univ. of Chemical Tech.	SunBIS-29	
Ran Huang	Beijing Univ. of Chemical Tech.	A Parameter-Tunable Framework for Comparing Beamforming Algorithms in Microphone Array Speech Enhancement: The Robust Frost beamformer with Diagonal Loading	
SunBIS-18		Lu Ban	Wuhan Univ. of Tech.
An Outcome-Oriented Education Model for IoT Courses in Intelligent Control Engineering		Jianyi Liang	Wuhan Univ. of Tech.
Zhengxin Guo	Nanjing Univ. of Posts and Telecommunications	Haoming Chen	Wuhan Univ. of Tech.
Ning Ye	Nanjing Univ. of Posts and Telecommunications	Jinran Tang	Wuhan Univ. of Tech.
SunBIS-19		Zhao Liang	Wuhan Univ. of Tech.
Exploration and Practice of School-Enterprise Collaborative Education Mode for Automation Major under Industry-Education Integration		Bo Li	Wuhan Univ. of Tech.
Jiaxin Jin	City Inst. Dalian Univ. of Tech.	SunBIS-30	
SunBIS-20		AppNets: An Efficient Multi-Task Fusion Network for Comprehensive Driving Perception	
Intelligent Detection and 3D Modeling of Urban Object Based on Satellite Remote Sensing Images		Yaohan Jia	Beijing Inst. of Tech.
Shenbo Zhu	Shandong Inst. of Space Electronic Tech.	Xuemei Chen	Beijing Inst. of Tech.
Liwei Qu	Shandong Inst. of Space Electronic Tech.	Pengfei Ren	Beijing Inst. of Tech.
Ning Yang	Shandong Inst. of Space Electronic Tech.	SunBIS-31	
Yunsen Wang	Shandong Inst. of Space Electronic Tech.	DefectPipeNet: A Few-Shot Surface Defect Segmentation Network for Rolled Steel Pipes	
Hongbin Lv	Shandong Inst. of Space Electronic Tech.	Shengxu Jin	State Key Laboratory of Deep Geothermal Resources
Yang Liu	Shandong Inst. of Space Electronic Tech.		China Univ. of Petroleum
SunBIS-21		Mao Sheng	State Key Laboratory of Deep Geothermal Resources
SR-VIO: A Stereo Robust Visual-Inertial Odometry towards Dynamic Scenes			China Univ. of Petroleum
Haoran Yan	Xiamen Univ.	Yuxi Liu	Offshore Oil Engineering Co. Ltd. (COOEC)
XiaoLi Zhang	Xiamen Univ.		China National Offshore Oil Corporation
SunBIS-22		Yang Zhong	Offshore Oil Engineering Co. Ltd. (COOEC)
RTD-SLAM: A Dynamic SLAM System Integrating Real-Time Object Detection and Epipolar Geometry			China National Offshore Oil Corporation
Ruilin Jiang	Xiamen Univ.	SunBIS-32	
Xiaoli Zhang	Xiamen Univ.	OptiSVDD: An Optical Neural Network Framework for One-Class Anomaly Detection	
SunBIS-23		Zongtao Chen	Huazhong Univ. of Science and Tech.
Stereoscopic High Dynamic Range Imaging Based on Intensity Mapping and Image Interpolation			National key lab of Multispectral Information Intelligent processing Tech.
Pinquan Huang	Wuhan Univ. of Science and Tech.	Na Wang	Huazhong Univ. of Science and Tech.
Zhangbiao Xu	Wuhan Univ. of Science and Tech.		Key Laboratory of Image Processing and Intelligent Control
Xiaowei Sun	Wuhan Univ. of Science and Tech.	Xinyu Zhang	Huazhong Univ. of Science and Tech.
Shiqian Wu	Wuhan Univ. of Science and Tech.		National key lab of Multispectral Information Intelligent processing Tech.
SunBIS-24		SunBIS-33	
Defect Segmentation Method for Photovoltaic Electroluminescence Images Based on Frequency-Domain Enhancement and Coarse Mask Guidance		Multimodal Image Registration via Contrastive Learning and Multi-Scale Progressive Deformation Estimation	
Haiyong Chen	Hebei Univ. of Tech.	Hengyu Shen	Beijing Inst. of Tech.
Wenhao Li	Hebei Univ. of Tech.	Jiajing Chen	Beijing Inst. of Tech.
Jie Zhao	Hebei Univ. of Tech.	Zhiqiang Zhou	Beijing Inst. of Tech.
Shaoshuai Zhu	Hebei Univ. of Tech.	SunBIS-34	
SunBIS-25		A Fast Fusion Algorithm for Multi-Target Tracking in Mobile Sensor Networks Using Grid-Based Divide and Conquer	
GLCF-DETR: Global-Local Context Fusion DETR for Defect Detection in Electroluminescence Images of Photovoltaic Cells		Jinhui Li	Flight Control Engineering Department
Haiyong Chen	Hebei Univ. of Tech.		DFH Satellite Co., Ltd.
Shaoshuai Zhu	Hebei Univ. of Tech.	Chunshi Fan	Flight Control Engineering Department
Wenhao Li	Hebei Univ. of Tech.		DFH Satellite Co., Ltd.
Jie Zhao	Hebei Univ. of Tech.	Xi Cai	Flight Control Engineering Department
SunBIS-26			DFH Satellite Co., Ltd.
		Song Xie	Flight Control Engineering Department
			DFH Satellite Co., Ltd.
		Zhiwen Wang	Flight Control Engineering Department
			DFH Satellite Co., Ltd.
		Minghu Li	Flight Control Engineering Department
			DFH Satellite Co., Ltd.

Xiongzi Chen Flight Control Engineering Department
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Linghui Yu Flight Control Engineering Department
DFH Satellite Co., Ltd.
Yue Liu Flight Control Engineering Department
DFH Satellite Co., Ltd.

Ke Ren Nanjing Univ. of Posts and Telecommunications
Yuexiu Xing Nanjing Univ. of Posts and Telecommunications
Zihan Wang Nanjing Univ. of Posts and Telecommunications
Mengting Chen Nanjing Univ. of Posts and Telecommunications

SunBIS-35
Interval State Estimation for Discrete-Time Takagi-Sugeno Fuzzy Systems with Random Cyber Attack and Bounded Disturbance
Jiyang Xie Shandong Univ. of Tech.
Shuqian Zhu Shandong Univ.

SunBIS-45
Radar-Guided EO Automatic Identification Method for Helicopter Target Search
Haotian Tan Northwestern Polytechnical Univ.
Sihan Yao Northwestern Polytechnical Univ.
Wenhao Bi Northwestern Polytechnical Univ.
An Zhang Northwestern Polytechnical Univ.

SunBIS-36
Drone Acoustic Signature Identification Using an Enhanced CAMplus Network
Bo Li Wuhan Univ. of Tech.
Caifeng Wang Wuhan Univ. of Tech.
Lu Ban Wuhan Univ. of Tech.
Jiangtao Lv Wuhan Dashengji Tech. Co., Ltd.
Peng Wen China Tobacco Hubei Industrial LLC

SunBIS-46
A Security and Early Warning System Based on Object Detection
Shuang Chen Space Engineering Univ.
Dongming Li Northeastern Univ.
Yibo Liu Space Engineering Univ.

SunBIS-37
Multi-Object Detection and Tracking Algorithm Based on Improved YOLO11n and ByteTrack
Yanbo Jiao Shenyang Jianzhu Univ.
Guoqi Liu Shenyang Jianzhu Univ.

SunBIS-47
Design of Firefighting Robot Guidance System Based on Stereo Vision and Deep Learning
Xinyu Chen Shenyang Aerospace Univ.
Chenglin Ni Shenyang Aerospace Univ.

SunBIS-38
Design of Bidirectional Scanning Linear Zero-Field for Magnetolectric Coupling Vascular Imaging
Zhaohun Wang Northeastern Univ.
Tianyi Wu Northeastern Univ.
Chao Wu Northeastern Univ.
Haotian Yun Northeastern Univ.
Dan Yang Northeastern Univ.
Jiliang Zhang Southeast Univ.

SunC01 Room01
Nonlinear systems control, optimization, and their applications (Invited Session) 13:30-14:50
Chairs: Zhenghong Jin Nanyang Technological Univ.
Yufeng Tian Chongqing Univ.
Xingjian Sun Nantong Univ.

SunBIS-39
Research on High-Precision Extraction Algorithm for Centerline of Structured Light Stripe in Rail Profile Measurement
Wei Ye Shenyang Jianzhu Univ.
Yuanyuan Zou Shenyang Jianzhu Univ.
Shilong Xu Shenyang Jianzhu Univ.

13:30-13:50 SunC01-1
Prescribed performance for switched nonlinear systems under DoS attacks: an adaptive neural network funnel secure control approach
Mingqi Chen Shenyang Univ. of Tech.
Jing Xie Shenyang Univ. of Tech.
Dong Yang Qufu Normal Univ.

SunBIS-40
Fluorescence-Based Environmental Detection of Multi-source Organic Mixtures Using Spectral Deconvolution and Feature-Level Line Fitting
Lei Zhang Zhejiang Univ.
Jie Yu Zhejiang Univ.
Lingke Zhang Zhejiang Univ.
Yuheng Tan Zhejiang Univ.
Hongjian Zhang Zhejiang Univ.

13:50-14:10 SunC01-2
Event-triggered filter design for positive T-S fuzzy systems
Xueqing Gao Shenyang Univ. of Tech.
Di Zhang Shenyang Univ. of Tech.

SunBIS-41
A Forest Fire and Smoke Detection Algorithm Based on Improved YOLOv8 for UAVs
Dingchang Zhao Xi'an Tech. Univ.
Tongwei Lu Wuhan Inst. of Tech.
Song Chen Fujian Key Laboratory of Special Intelligent Equipment Safety Measurement and Control
Fujian Special Equipment Inspection and Research Inst.

14:10-14:30 SunC01-3
Matched Asymptotic Analysis of a Reaction-Diffusion SIS Infectious Disease Model Based on Singular Perturbation Theory
Yi Zhang Shenyang Univ. of Tech.
Yue Zhu Shenyang Univ. of Tech.

Kun Yan Xi'an Tech. Univ.
Kai Cao Xi'an Tech. Univ.
Song Gao Xi'an Tech. Univ.

14:30-14:50 SunC01-4
Analysis and Control of a Generalized Stochastic Epidemic Model with Age Structure
Yi Zhang Shenyang Univ. of Tech.
Ruyu Wang Shenyang Univ. of Tech.

SunBIS-42
Research on a Ship Heave Motion Filtering Method Based on Neural ODE-UKF
Qin Zhang Shanghai Maritime Univ.
Qi Sun Shanghai Maritime Univ.
Zhitao Huang Shanghai Maritime Univ.
Xiong Hu Shanghai Maritime Univ.

SunC02 Room02
Intelligent perception, control, and decision-making for unmanned systems in complex environments (Invited Session) 13:30-15:30
Chair: Zhengrong Xiang Nanjing Univ. of Science and Tech.
Chair: Yueying Wang Tongji Univ.
Chair: Weixiang Zhou Shanghai Maritime Univ.

SunBIS-43
Road Defect Detection with Multi-Scale Routing Attention and Orientation-Consistent Bounding-Box Regression
Youyong Liu Chongqing Univ.
Southwest Univ. of Science and Tech.

13:30-13:50 SunC02-1
Enhanced Disturbance Rejection control of Euler-Lagrange Systems Considering System Damping
Zixuan Zhang Jiangnan Univ.
Kang Wu Jiangnan Univ.

Zihan Xia Chongqing Univ.
Su Xu Southwest Univ. of Science and Tech.
Maoyun Guo Chongqing Univ.
Chaowei Deng Chongqing Univ.

13:50-14:10 SunC02-2
Prescribed-Time Formation Control of Multiple Unmanned Surface Vessels via an Event-Triggered Strategy
Peng Nie Shanghai Maritime Univ.
Weixiang Zhou Shanghai Maritime Univ.

SunBIS-44
A Hybrid Channel-Temporal Attention CNN for Wearable-Based Gait Activity Recognition

14:10-14:30 SunC02-3
Multi-Agent Attention Transformer for Robust Encirclement under Communication Interference
Bingyu Ji Southeast Univ.
Haobei Wu Southeast Univ.
Ya Zhang Southeast Univ.

14:30-14:50 SunC02-4
Multi-Strategy Collision Prediction Mechanism-Based Flocking Control of Multiple agents
Yanmo Wang Shanghai Maritime Univ.
Weixiang Zhou Shanghai Maritime Univ.
Yayu Yang Univ. of Tennessee

14:50-15:10	SunC02-5	Rongwei Guo	Qilu Univ. of Tech. (Shandong Academy of Sciences)
Opponent Modeling-Integrated Reinforcement Learning for Proactive Defense in Swarm Cooperative Adversarial Combat			
Yingxuan Sun	Southeast Univ.		
Junyi Zhu	Southeast Univ.		
Ya Zhang	Southeast Univ.		
15:10-15:30	SunC02-6		
Fuzzy Zero-sum Game-Based Reconfigurable Unmanned System Approximate Optimal Control under Disturbance			
Zebin Ji	Changchun Univ. of Tech.		
Yi Qin	Aviation Univ. of Air Force		
Bing Ma	Changchun Univ. of Tech.		
Tianjiao An	Changchun Univ. of Tech.		
SunC03		Room03	
Logistics optimization and operations management 13:30-15:30			
Chair: Yonghong Cheng	Anhui Polytechnic Univ.		
Co-Chair: Yurong Song	Nanjing Univ. of Posts and Telecommunications		
13:30-13:50	SunC03-1		
Optimal Channel Selection for Remanufactured Products under Cap-and-Trade Regulation			
Yonghong Cheng	Anhui Polytechnic Univ.		
Yanfang Wu	Anhui Polytechnic Univ.		
Ren Yao Zhang	Anhui Polytechnic Univ.		
13:50-14:10	SunC03-2		
Highway Freight Logistics Demand Forecasting in the Core Yangtze River Delta Region Using Improved GCN-ATGRU Model			
Wei Qiang Wang	Nanjing Univ. of Posts and Telecommunications		
Ruqi Li	Nanjing Univ. of Posts and Telecommunications		
Yurong Song	Nanjing Univ. of Posts and Telecommunications		
Hui Zhang	Jiangsu Manyun Software Technology Co., Ltd.		
14:10-14:30	SunC03-3		
Model Predictive Control for Dynamic Resource Allocation in Multi-Class Customs Inspection Systems			
Rong Hu	Shanghai Customs Univ.		
Hanchi Sun	Shanghai Dianji Univ.		
Sen Liu	Shanghai Dianji Univ.		
14:30-14:50	SunC03-4		
Yardside and Landside Operations at Dry Bulk Terminals: A Literature Review			
Wei Wu	Northeastern Univ.		
Ruiyou Zhang	Northeastern Univ.		
14:50-15:10	SunC03-5		
Stable matching problem based on trip distance proximity in ride-sharing systems			
Chong Feng	Northeastern Univ.		
Ruiyou Zhang	Northeastern Univ.		
15:10-15:30	SunC03-6		
Optimization of Low-Carbon Cold Chain Logistics Distribution Path Based on Improved Chaos Genetic Algorithm			
Zhang Fangfei	Northeastern Univ.		
Fanli Mo	Northeastern Univ.		
Zhang Xiaoyu	Northeastern Univ.		
Shengbo Jin	Northeastern Univ.		
Tao Ren	Northeastern Univ.		
SunC04		Room04	
Operational performance assessment and self-optimization of systems 13:30-15:30			
Chairs: Yang Yang	Nanjing Univ. of Posts and Telecommunications		
Ruixue Li	Qilu Univ. of Tech. (Shandong Academy of Sciences)		
13:30-13:50	SunC04-1		
Dynamic Energy Efficiency Optimization of Electromagnetic Induction Systems via Transformer-based Guided Ranking Policy Optimization			
Niwei Ji	Nanjing Univ. of Posts and Telecommunications		
Xiaoya Sheng	Nanjing Univ. of Posts and Telecommunications		
Liyao Wu	Nanjing Univ. of Posts and Telecommunications		
Yang Yang	Nanjing Univ. of Posts and Telecommunications		
13:50-14:10	SunC04-2		
Stabilization of a novel 4D chaotic system via DE-based control method			
Ruixue Li	Qilu Univ. of Tech. (Shandong Academy of Sciences)		
14:10-14:30	SunC04-3		
Physics-Consistent PIV Dataset Generation via Bubble Semantic Segmentation and CFD Modeling			
YuTao Wang	Northeastern Univ.		
WeiFan Guo	Northeastern Univ.		
TiePeng Zou	Xiamen Univ. Tan Kah Kee College		
DaYang Wang	Northeastern Univ.		
Gang Yang	Northeastern Univ.		
ChuYun Zang	Northeastern Univ.		
14:30-14:50	SunC04-4		
Adaptive Timeslot Allocation Strategy for Lunar Communication Networks Oriented Toward Network Availability Evolution			
Maoqing Li	Beihang Univ.		
Jian Shi	Beihang Univ.		
Shaoping Wang	Beihang Univ.		
Rui Mu	Beihang Univ.		
Rentong Chen	Beihang Univ.		
Dong Liu	Inst. of Acoustics of the Chinese Academy of Sciences		
14:50-15:10	SunC04-5		
Adaptive Fusion Modeling for Rotational Speed Prediction of Permanent Magnet Synchronous Motor			
Jingxiang Liu	Dalian Maritime Univ.		
Junbo Yao	Dalian Maritime Univ.		
Weimin Zhu	Dalian Maritime Univ.		
15:10-15:30	SunC04-6		
Atmospheric Refraction Correction Method for Unmanned Aerial Vehicle RAE Positioning System Based on Mapping Functions			
Jinshi Yang	National Univ. of Defense Tech.		
Jiongqi Wang	National Univ. of Defense Tech.		
Fuke Wang	National Univ. of Defense Tech.		
Xuanying Zhou	National Univ. of Defense Tech.		
Haiyin Zhou	National Univ. of Defense Tech.		
SunC05		Room05	
Abnormality detection and self-healing control 13:30-15:30			
Chair: Wei Dai	Beijing Normal-Hong Kong Baptist Univ.		
CO-Chair: Jintao Niu	Sun Yat-sen Univ.		
13:30-13:50	SunC05-1		
A Statistical Clustering-Based Method for Outlier Detection			
Wei Dai	Beijing Normal-Hong Kong Baptist Univ.		
Qing-Guo Wang	Wuhan Univ. of Science and Tech.		
Wentao Fan	Beijing Normal-Hong Kong Baptist Univ.		
13:50-14:10	SunC05-2		
Adaptive Images Fusion Method Based on Polarization Enhancement			
Jintao Niu	Sun Yat-sen Univ.		
Yan Zhang	Sun Yat-sen Univ.		
Ziwen Sun	Sun Yat-sen Univ.		
14:10-14:30	SunC05-3		
State-Perception-Based Anomaly Detection Method for Blast Furnace with False Alarm Suppression			
Zihang Cao	Zhejiang Univ.		
Chunjie Yang	Zhejiang Univ.		
Zhi Li	CISDI Group Co. Ltd		
Siwei Lou	Zhejiang Univ.		
Xiaodong Sun	CISDI Information Technology (Chongqing) Co. Ltd		
14:30-14:50	SunC05-4		
An Audio Anomaly Detection Method Based on Improved GANomaly and Dual-Branch Feature Fusion			
Caifeng Wang	Wuhan Univ. of Tech.		
Bo Li	Wuhan Univ. of Tech.		
Jiangtao Lv	Wuhan Dashengji Tech. Co., Ltd.		
Peng Wen	China Tobacco Hubei Industrial LLC		
14:50-15:10	SunC05-5		
Research on the Recognition of Construction Workers' Safety Helmet Wearing Based on Improved Yolov11			
Guoqi Liu	Shenyang Jianzhu Univ.		
Guangyi Chen	Shenyang Jianzhu Univ.		
15:10-15:30	SunC05-6		
An Anomaly Detection Method and Application Based on Joint Time-Frequency Domain Inference with Pseudo-Normal Samples			
Yubin Tang	Central South Univ.		
Xiaofang Chen	Central South Univ.		
Zhaohui Zeng	Xiangtan Univ.		
Yongfang Xie	Central South Univ.		
Yalin Wang	Central South Univ.		
Kangle Fan	Central South Univ.		

SunC06	Room06	Liyu Wei	Wuhan Univ. of Science and Tech.
Advanced control and predictive control (1)	13:30-15:30	Ying Wu	Wuhan Univ. of Science and Tech.
Chair: Xiushan Cai	Zhejiang Normal Univ.	Xi Chen	Wuhan Univ. of Science and Tech.
Co-Chair: Xinyu Yan	Qingdao Univ.		
13:30-13:50	SunC06-1	14:50-15:10	SunC07-5
Control Design for A Class of Nonlinear Systems		Energy-Constrained Charging Scheduling Strategy of Camera Network for T-Timespan Dynamic Coverage	
Xiushan Cai	Zhejiang Normal Univ.	Keyou Shi	Wuhan Univ. of Science and Tech.
Yue Li	Purdue Univ.	Zike Lei	Wuhan Univ. of Science and Tech.
Yuhang Lin	North Carolina State Univ.	Xi Chen	Wuhan Univ. of Science and Tech.
Le Zhang	Xiamen Inst. of Tech.		
Changwu Ke	Xiamen Inst. of Tech.	15:10-15:30	SunC07-6
Lei Yang	Xiamen Inst. of Tech.	Event-Triggered Adaptive Control for 2×2 Hyperbolic PDEs with a Parameter Identifier	
		Fengyu Mao	Nanjing Univ. of Science
13:50-14:10	SunC06-2	SunC08	Room08
Equipment Spare Parts Allocation Method Based on FAHP and Target Planning		Control theory and control technology (10)	13:30-15:30
Xinyu Yan	Air Force Logistics Academy	Chair: Xiangbin Liu	Beijing Jiaotong Univ.
Ya Zhou	Air Force Logistics Academy	Co-Chair: Yongli Wei	Univ. of Zaozhuang
Changkai Xu	Air Force Logistics Academy		
14:10-14:30	SunC06-3	13:30-13:50	SunC08-1
Improving Dynamical Performance of Frequency Control in Islanded Microgrids by Combining PI with Distributed Model Predictive Control		The Hierarchical Control Scheme for Tracked Vehicles Operating under Split-μ Surface Conditions	
Jun Yang	Wuhan Inst. of Tech.	Dechao Gao	Beijing Jiaotong Univ.
XuSheng Zhuo	Wuhan Inst. of Tech.	Xiangbin Liu	Beijing Jiaotong Univ.
Zhen Song	Wuhan Inst. of Tech.	Yanxin Zhang	Beijing Jiaotong Univ.
XuFu Liu	Wuhan Inst. of Tech.	Wei Jiang	Beijing Jiaotong Univ.
		Xianhong Zhang	Beijing Jiaotong Univ.
		Ruiming Li	Beijing Jiaotong Univ.
14:30-14:50	SunC06-4	13:50-14:10	SunC08-2
Adaptive Lipschitz Network-Enhanced MPC with Active Disturbance Rejection for Quadrotors		Prescribed-Time Fault-Tolerant Tracking Control for Nonlinear Systems Based on Adaptive Fuzzy Control	
Yumeng Mu	Univ. of Science and Tech. of China	Yongli Wei	Univ. of Zaozhuang
Yijia Zhou	Univ. of Science and Tech. of China	Changqing Lv	Univ. of Zaozhuang
Haibo Ji	Univ. of Science and Tech. of China	Na Li	Univ. of Zaozhuang
		Yinzheng Sun	Univ. of Zaozhuang
		Hao Yan	Univ. of Zaozhuang
14:50-15:10	SunC06-5	14:10-14:30	SunC08-3
A multi-scale data-driven prediction framework for surface gathering pipeline pressure: Enhancing intelligent control and energy-efficient operation		Event-triggered adaptive-critic-based tracking control for nonlinear systems with input delay	
Tianao Deng	Beijing Univ. of Chemical Tech.	Xinrui Ma	Beijing Univ. of Tech.
Ning Xu	China Univ. of Petroleum-Beijing at Karamay	Yingyun He	Beijing Univ. of Tech.
Haonan Zou	China Univ. of Petroleum (Beijing)	Ao Liu	Beijing Univ. of Tech.
Lin Wang	China Univ. of Petroleum (Beijing)	Ding Wang	Beijing Univ. of Tech.
Fengyuan Yan	China Univ. of Petroleum (Beijing)		
Yongtu Liang	Beijing Univ. of Chemical Tech.		
15:10-15:30	SunC06-6	14:30-14:50	SunC08-4
Cartesian-Space Nonlinear Model Predictive Control for 5-DOF Boom Cranes		Stabilization of a three-dimensional chaotic system with external disturbances via an adaptive DE-based control method	
Zhimei Chen	Taiyuan Univ. of Science and Tech.	Lujia Li	Qilu Univ. of Tech.
Longlong Li	Taiyuan Univ. of Science and Tech.	Jingyang Zhao	Qilu Univ. of Tech.
Yuanhua Jia	Taiyuan Univ. of Science and Tech.	Rongwei Guo	Qilu Univ. of Tech.
Liangliang Zhou	Taiyuan Heavy Industry Co., LTD		
Xuejuan Shao	Taiyuan Univ. of Science and Tech.		
Zhicheng Zhao	Taiyuan Univ. of Science and Tech.		
SunC07	Room07	14:50-15:10	SunC08-5
Control theory and control technology (9)	13:30-15:30	Predefined-time path-following control incorporating anti-disturbance and geometric obstacle avoidance for unmanned surface vessels	
Chair: Qing-Guo Wang	Wuhan Univ. of Science and Tech.	Simeng Song	Harbin Engineering Univ.
Co-Chair: XiaoJin Zhang	Tianjin Univ.	Zhilin Liu	Harbin Engineering Univ.
		Shouzheng Yuan	Harbin Engineering Univ.
13:30-13:50	SunC07-1	Lin Yang	Harbin Engineering Univ.
Exact Parameter Estimation for Dynamical Systems with Finite Noisy Measurements		Yingkai Ma	Harbin Engineering Univ.
Liang Zhang	Beijing Normal-Hong Kong Baptist Univ.	Zhongxin Wang	Harbin Engineering Univ.
Qing-Guo Wang	Wuhan Univ. of Science and Tech.		
Wentao Fan	Beijing Normal-Hong Kong Baptist Univ.	15:10-15:30	SunC08-6
		Predefined-Time Anti-Saturation Formation Control for Unmanned Aerial Vehicles	
13:50-14:10	SunC07-2	Yuxin Han	National Univ. of Defense Tech.
A Hierarchical Flight Control Strategy for Quadrotor Based on Tube Model Predictive Control and Barrier Function Adaptive Super-Twisting Algorithm		Zhaowei Ma	National Univ. of Defense Tech.
XiaoJin Zhang	China Helicopter Research and Development Inst.	Aitong Ma	National Univ. of Defense Tech.
Zhengkang Zhang	China Helicopter Research and Development Inst.		
14:10-14:30	SunC07-3	SunC09	Room09
Adaptive Path Following Control for Unmanned Surface Vehicle with Obstacle Avoidance Based on Potential Function		Control theory and control technology (11)	13:30-15:30
Junshen Chen	Dalian Maritime Univ.	Chair: Tenglong Kang	Southwest Jiaotong Univ.
Junsheng Ren	Dalian Maritime Univ.	Co-Chair: Suifang Lin	Xi'an Univ. of Tech.
Huaheng Xu	Dalian Maritime Univ.		
Jie Li	Dalian Maritime Univ.	13:30-13:50	SunC09-1
Qingjie Sun	Dalian Maritime Univ.	From Attacker to Helper: A New Perspective in Fault Diagnosis Control of Internet of Things Systems	
		Wenrui Niu	Chengdu College of Arts and Sciences
		Tenglong Kang	Southwest Jiaotong Univ.
		Yuling Zhang	Xidian Univ.
		Ding Liu	Xidian Univ.
14:30-14:50	SunC07-4	13:50-14:10	SunC09-2
Fusing Deep Neural Network with Particle Filter for Robust State Estimation of Underactuated Surface Vessels under Dynamics Uncertainty		Lithium Battery Temperature Estimation based on Extended Kalman Filter and Soft Sensor of Impedance	

Huijun Guo Suifang Lin	Xi'an Univ. of Tech. Xi'an Univ. of Tech.	13:30-13:50	SunC11-1 <i>Movable Object Removal and Localization Accuracy Analysis of Three-Dimensional Dense Point Mapping in Dynamic Environment</i>
14:10-14:30	SunC09-3	Yang Li Zhongxing Hu Wenqian Wu Tianhua Li Xiaojun Long Shanping Wang	Shandong Agricultural Univ. Shandong Agricultural Univ. Shandong Huayu Univ. of Tech. Shandong Agricultural Univ. Shandong Agricultural Univ. Shandong Academy of Agricultural Sciences
14:30-14:50	SunC09-4	13:50-14:10	SunC11-2 <i>The Intelligent Extreme Seeking Algorithm for Formation Control of Multi-Agents</i>
<i>Safety-critical trajectory tracking of nonholonomic wheeled mobile robots via model predictive control</i>	Fengyu Kang Dianfeng Zhang Guangru Shao Liqiang Yao Zhaojing Wu	Yantai Univ. Yantai Univ. Yantai Univ. Yantai Univ. Yantai Univ.	Dezheng Zhu The 28th Research Inst. of China Electronics Tech. Group Corporation
14:50-15:10	SunC09-5	14:10-14:30	SunC11-3 <i>Research on PCB Defect Detection Algorithm Based on RT-DETR</i>
<i>Research on Fault-Tolerant and Intrusion-Resilient Control for Nonlinear ICPS under ADETCS with GRU-Based Compensation</i>	Yajie Li Chenjing Lu	Lanzhou Univ. of Tech. Lanzhou Univ. of Tech.	Yu Wang Lisheng Wei Li Qi Pinggai Zhang
15:10-15:30	SunC09-6	14:30-14:50	SunC11-4 <i>A Multi-Source Information Fusion and CNN-BiLSTM-Attention Based Method for Flotation Ash Content Detection</i>
<i>Robust Super-Twisting Sliding Mode Control for Rotary Hook Systems in Bridge Cranes</i>	Chendong Wei Biao Lu Shuhua Xing Yongchun Fang	Nankai Univ. Shenzhen Research Inst. of Nankai Univ. Xuzhou Heavy Machinery Co., Ltd. Nankai Univ.	Jianzhong Wang Lanhao Wang Jiahui Liu Hongyan Wang Wei Dai
SunC10	Room10	14:50-15:10	SunC11-5 <i>IMM-CVAE: A Motion-Semantic Dual-Channel Framework for Out-of-Distribution Detection in Target Tracking</i>
<i>Intelligent perception, synergic decision-making, and security for robots and unmanned systems (4)</i>	Chair: Yu Dai Co-Chair: Lixiong Lin	13:30-15:30	Jingwen Bai Gumin Jin Guangyao Wang Jianxun Li
13:30-13:50	SunC10-1	15:10-15:30	SunC11-6 <i>Real-time Parallel FPGA Implementation of MUSIC Algorithm for Intelligent DOA Sensing</i>
<i>A CNNs-LSTM Network Based on 'Voting' Mechanism for Cutting State Recognition of Bone Oscillating Saw Robot</i>	Rui Xi Sicheng Wang Jianwen Sun Yu Dai Jianxun Zhang	Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ.	Yuhan Zhang Naval Univ. of Engineering Huazhong Univ. of Science and Tech. Naval Univ. of Engineering Naval Univ. of Engineering
13:50-14:10	SunC10-2	SunC12	Room12 <i>Fault diagnosis, prognosis and prediction maintenance (3)</i>
<i>A Lightweight Cross-Scale Feature Fusion Network for UAV Landing Marker Detection</i>	Jiecan Huang Xu Zhiping Bomin Huang Jiachun Zheng Pengchao Yao Lixiong Lin	13:30-15:30	Chair: Wenyou Du Co-Chair: Songqi Zhou
14:10-14:30	SunC10-3	13:30-13:50	SunC12-1 <i>Aircraft Engine Fault Detection Based on Fine-Tuned Large Language Models</i>
<i>Multi-UAV Reinforcement Learning Tracking Strategy Guided by the Hungarian Algorithm</i>	Dixiang Wang Fabin Cheng Jingang Lai	Jingtao Du Wenyou Du	Jingtao Du Wenyou Du Shenyang Aerospace Univ. Shenyang Aerospace Univ.
14:30-14:50	SunC10-4	13:50-14:10	SunC12-2 <i>BatteryAgent: Synergizing Physics-Informed Interpretation with LLM Reasoning for Intelligent Battery Fault Diagnosis</i>
<i>Traffic Object Detection Algorithm Based on MSP-YOLOv8</i>	Juntao Zhao Weigang Li	Songqi Zhou Ruixue Liu Boman Su Jiazhou Wang Yixing Wang Benben Jiang	Tsinghua Univ. Tsinghua Univ. Tsinghua Univ. Tsinghua Univ. Tsinghua Univ. Tsinghua Univ.
14:50-15:10	SunC10-5	14:10-14:30	SunC12-3 <i>Research on Fault Prediction of Marine Diesel Engine Lubricating Oil System Based on TCN-BiLSTM-AM</i>
<i>Plateau forest fire identification and early warning system based on improved YOLOv8</i>	Ying Zhang Guisheng Tan ZhiQin Yang	Siyu Fei Shuxia Ye Zhe Tong Hao Ni	Jiangsu Univ. of Science and Tech. Jiangsu Univ. of Science and Tech. Jiangsu Univ. of Science and Tech. Jiangsu Univ. of Science and Tech.
15:10-15:30	SunC10-6	14:30-14:50	SunC12-4 <i>Research on Tri-modal Fault Diagnosis for Railway Switches Based on Physical Perception and Hierarchical Interaction</i>
<i>Adaptive Visual-Inertial Fusion for GNSS-Denied Environments Using Factor Graph Optimization</i>	Shichen Quan Xinyu Xie Jiawei Wu Bo Wang	Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech.	Jiayi Wang Shenghua Dai Beijing Jiaotong Univ. Beijing Jiaotong Univ.
SunC11	Room11	14:50-15:10	SunC12-5 <i>An Efficient and Deployable Neural Network for Motor Fault Diagnosis Using Semi-Physical Simulation Data</i>
<i>Advanced sensing and intelligent perception (3)</i>	Chair: Yang Li CO-Chair: Dezheng Zhu	Jiayu Chen Ningyun Lu Lexuan Shao	Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics

Bin Jiang	Nanjing Univ. of Aeronautics and Astronautics	Yujie Yuan	Harbin Engineering Univ.
15:10-15:30	SunC12-6	SunCIS-04	
Graph-Weighted Prototypical Networks for Few-Shot Fault Diagnosis of Hydraulic Systems with Multiscale Feature Extraction		SCP-Net: A Lightweight and Efficient Detector for Diverse Parcel Categories in Logistics	
Ningning Chen	Nanjing Univ. of Aeronautics and Astronautics	Longfei Pan	Anhui Univ.
Jianwei Liu	Nanjing Univ. of Aeronautics and Astronautics	Qionghua Wang	Anhui Univ.
Mengjie Zeng	Nanjing Univ. of Aeronautics and Astronautics	Pengtao Liu	Anhui Univ.
Shengrui Zhang	Nanjing Univ. of Aeronautics and Astronautics	Yuan Fan	Anhui Univ.
SunC13	Room13	SunCIS-05	
Intelligent decision-making systems and applications (4)13:30-15:30		Early Non-destructive detection of peanut mildew based on FT-NIR spectroscopy and ensemble learning strategy	
Chair: Xiaoxia Yang	Qingdao Univ. of Tech.	Yang Liu	Univ. of Jinan
Co-Chair: Weijie Ren	Harbin Engineering Univ.	Kang Zhao	Univ. of Jinan
13:30-13:50	SunC13-1	Jie Liu	Univ. of Jinan
An Effective Modelling Method for Predicting the Transit Time Along Stairs in Subway Stations		Qinjun Zhao	Univ. of Jinan
Xiaoxia Yang	Qingdao Univ. of Tech.	SunCIS-06	
Changlong li	Qingdao Univ. of Tech.	Resolving Multi-Solution Ambiguity in Unbalanced Mass Identification of Hemispherical Resonator Under Linear Vibration Excitation	
Shouxiang Huang	Qingdao Univ. of Tech.	Renle Li	Harbin Inst. of Tech.
Yao Lv	Qingdao Univ. of Tech.	Zhennan Wei	Harbin Inst. of Tech.
Lei Qu	Qingdao Univ. of Tech.	Ning Wang	Harbin Inst. of Tech.
13:50-14:10	SunC13-2	Peijie Ao	Harbin Inst. of Tech.
Multivariate Spatio-Temporal Causal Analysis Model Based on Neural Granger Causality		Guoxing Yi	Harbin Inst. of Tech.
Weijie Ren	Harbin Engineering Univ.	SunCIS-07	
Mingjian Gao	Harbin Engineering Univ.	Three-dimensional distribution mapping of the leaked natural gas based on TDLAS	
Yingyao Zhou	Harbin Engineering Univ.	Yang Wang	Civil Aviation Univ. of China
Yuan Shan	Dalian Univ. of Tech.	Zhuo Chen	Civil Aviation Univ. of China
	ACRE Coking & Refractory Engineering Consulting Corporation	Yuchu Ji	Civil Aviation Univ. of China
14:10-14:30	SunC13-3	SunCIS-08	
Research on collision-free motion planning method of citrus picking manipulator based on A-SAC		Semantically-Enhanced RGB-D 3D Reconstruction for Pavement Crack Digital Archiving	
Chengcheng Li	China Jiliang Univ.	Liang Zhao	Xi'an Univ. of Architecture and Tech.
Lina Wang	China Jiliang Univ.	Yutong Jiao	Xi'an Univ. of Architecture and Tech.
Ke Chen	China Jiliang Univ.	Shipeng Liu	Xi'an Univ. of Architecture and Tech.
Binrui Wang	China Jiliang Univ.	Dengfeng Chen	Xi'an Univ. of Architecture and Tech.
14:30-14:50	SunC13-4	Zhen Zhang	Xi'an Univ. of Architecture and Tech.
PhyZero: Physics-Grounded Zero-Shot Driving Agent		SunCIS-09	
Jiaheng Sun	Northeastern Univ.	Research on Peanut Mold Recognition Method Based on Multispectral Imaging and Improved ViT	
Hengyu Liu	Aalborg Univ.	Jie Liu	Univ. of Jinan
Tiancheng Zhang	Northeastern Univ.	Kang Zhao	Univ. of Jinan
14:50-15:10	SunC13-5	Yang Liu	Univ. of Jinan
Industrial Process Time Series Data Prediction Based on Improved LSTM		Qinjun Zhao	Univ. of Jinan
Haofu Guan	PLA 91977	Changlong Nie	Univ. of Jinan
Zhiwen Lin	PLA 91977	Tao Shen	Univ. of Jinan
Xiujia Chen	PLA 91977	SunCIS-10	
Chao Xu	PLA 91977	ELFM-Net: Enhanced Lightweight Feature Matching via Adaptive Spatial Fusion and Multi-scale Attention	
Jiayi Li	PLA 91977	YuHang Zhao	Wuhan Univ. of Science and Tech.
15:10-15:30	SunC13-6	WangMing Xu	Wuhan Univ. of Science and Tech.
Graph model for conflict resolution considering internal dissension under power asymmetry		ZhiPeng Lu	Wuhan Univ. of Science and Tech.
Sisi Luo	National Univ. of Defense Tech.	SunCIS-11	
Fuxin Xu	National Univ. of Defense Tech.	Research on Intelligent Control Method of Managed Pressure Drilling Based on DDPG-PID	
Yuming Huang	National Univ. of Defense Tech.	Zhiyuan Ma	China Univ. of Petroleum (East China)
Runxin Yang	National Univ. of Defense Tech.	Bao Liu	China Univ. of Petroleum (East China)
Tianjiao Yang	National Univ. of Defense Tech.	Longda Bing	China Univ. of Petroleum (East China)
Bingfeng Ge	National Univ. of Defense Tech.	Guangfu Liu	China Univ. of Petroleum (East China)
SunCIS	RoomPT	SunCIS-12	
Interactive Session	13:30-15:30	Uncertainty-Aware Industrial Defect Detection : A Unified Evaluation and Learning Framework	
SunCIS-01		Kun Liu	Hebei Univ. of Tech.
Dynamic Landslide Susceptibility Assessment by Integrating Ascending and Descending InSAR Deformation: A Case Study of Motuo County within the PRC's Administered Territory		Yuezhu Wang	Hebei Univ. of Tech.
Han Fu	China Univ. of Geosciences	Yuhang Li	Hebei Univ. of Tech.
SunCIS-02		SunCIS-13	
A Lightweight Space-Frequency Fusion and Semantic Correlation Network for Nuclear Fuel Rod Surface Defect Detection		VRAI: A Novel Appearance-Consistent Retrieval Augmented Framework with Cross-Domain Transfer for Few-Shot Steel Defect Recognition	
Shuaishuai Zang	Hebei Univ. of Tech.	Kun Liu	Hebei Univ. of Tech.
Haiyong Chen	Hebei Univ. of Tech.	Chenyu Huang	Hebei Univ. of Tech.
Xiaogang Zhang	China North Nuclear Fuel Co., Ltd. Inner Mongolia Key Laboratory of Nuclear Fuel Element Harbin Engineering Univ.	Siyuan Huang	Hebei Univ. of Tech.
SunCIS-03		SunCIS-14	
Research on Adaptive Integrated Navigation Method Based on Improved Sage-Husa Algorithm		An Efficient Mamba-based BEV Framework with Predictive-Corrective Temporal Fusion	
Lanyong Zhang	Harbin Engineering Univ.	Zezhong Duan	Shanghai Jiao Tong Univ. National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis

	Key Laboratory of System Control and Information Processing Shanghai Jiao Tong Univ.	Boxin Zhao Wenjun Xie	Air Force Engineering Univ. Air Force Engineering Univ.
Junguo Lu	National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing Shanghai Jiao Tong Univ.	SunCIS-22 <i>Fixed Time Composite Control for Trajectory Tracking of Omnidirectional Mobile Robots</i>	
Zhen Zhu	National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing Shanghai Jiao Tong Univ.	Nan Zuo Guoping Jiang Yingjiang Zhou Xingyu Zhou	Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
Qinghao Zhang	National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing Shanghai Jiao Tong Univ.	SunCIS-23 <i>Relative Localization and Mapping of Unmanned Aerial Vehicles based on RGB-D Cameras and Ultra-Wideband</i>	
Jianhui Lv Donghao Liu Guowei Dong	East Lake Laboratory East Lake Laboratory State Grid Xuancheng Electric Power Supply Company	Yu Gui Zaiyue Yang	Southern Univ. of Science and Tech. Southern Univ. of Science and Tech.
Xiaofan Ye	State Grid Xuancheng Electric Power Supply Company	SunCIS-24 <i>Global Adaptive Neural Network Fault-Tolerant Control of Nonlinear Systems with Unknown Time-Varying Coefficients and Model Uncertainties</i>	
Yan Cao	State Grid Xuancheng Electric Power Supply Company	Zhenwei Ma Baile An Binrui Wang	China Jiliang Univ. China Jiliang Univ. China Jiliang Univ.
SunCIS-15 <i>Sim-to-Real Domain Adaptation for Image Segmentation of In-Orbit Spacecraft</i>		SunCIS-25 <i>Circumnavigation Control for USV with Unknown Targets Using NMPC and RBF Neural Network Compensation</i>	
Cheng Yang Ming Chen Yi Han Shushi Liu Jun Sun Zhihui Li	Beijing Aerospace Control Center Beijing Aerospace Control Center Beijing Aerospace Control Center Beijing Aerospace Control Center Beijing Aerospace Control Center Hypervelocity Aerodynamics Inst. China Aerodynamics Research and Development Center	Cangsen Li Weixiang Zhou Yayu Yang	Shanghai Maritime Univ. Shanghai Maritime Univ. Univ. of Tennessee
SunCIS-16 <i>Research on Vehicle Body Surface Defect Detection System Based on Deep Learning</i>		SunCIS-26 <i>Dynamic-Quantity Multi-Agent Autonomous Defense Method Based on Hierarchical MAPPO</i>	
Kun Luo Chuangfeng Huai	East China Jiaotong Univ. Key Laboratory of Transportation Intelligent Operation and Maintenance Tech. and Equipment East China Jiaotong Univ.	Junhui Huang Yan Guo Jianyu Wei Jiawei Yi Xinliang Chen Ruizheng Chen	Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA
Shaoliang Li Mingfa Xu	Group Huahai Engineering Co., Ltd. China Railway Shanghai Engineering Group Suzhou Rail Transit Science and Tech. Research Institute Co., Ltd.	SunCIS-27 <i>A Novel Iterative Framework for Visible-Infrared Image Fusion in Foggy Weather Object Detection</i>	
Baoming Fan	China Railway Shanghai Engineering Group Suzhou Rail Transit Science and Tech. Research Institute Co., Ltd.	Lan Luo Zhiyuan Zhang Kexin Huang Qijun Sun Chengyan Guo Junpeng Shi	National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech.
SunCIS-17 <i>Research on Wearable Health Monitoring Devices for the Elderly: A Review</i>		SunCIS-28 <i>A Safe Motion Planning Framework for Mobile Robots Based on Homotopy Topology and FRS/BRS Spatiotemporal Corridors</i>	
Qinfangjin Zhao	Northeastern Univ.	Siyuan Wang Bo Liu Qinghua Li Zhenhuan Wang	Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech.
SunCIS-18 <i>Design, calibration and physical consistency verification of self-assembled six-dimensional force sensor under high-torque conditions</i>		SunCIS-29 <i>DB-HPPO Based Complete Coverage Path Planning for Autonomous Underwater Vehicles</i>	
Chenghong Xu Naimeng Cang	Hangzhou Inst. for Advanced Study Univ. of Chinese Academy of Sciences Hangzhou Inst. for Advanced Study Univ. of Chinese Academy of Sciences	Hui Ma Zhimin Yang Qianyu Chen Yuxiao Gao Hongyu Zhang	Ocean Univ. of China Ocean Univ. of China Ocean Univ. of China Ocean Univ. of China Ocean Univ. of China
Shuai Li Yuhua Zheng	Hangzhou Inst. for Advanced Study Univ. of Chinese Academy of Sciences Hangzhou Inst. for Advanced Study Univ. of Chinese Academy of Sciences		
SunCIS-19 <i>Design of a Real-Time Multi-Channel Industrial Monitoring Video Stitching System</i>		SunCIS-30 <i>Path Planning and Obstacle Avoidance for Unmanned Surface Vehicles: An Approach Based on an Improved Soft Actor-Critic Algorithm</i>	
Yue Wang Yidi Lin Siyi Dang Aimin Zhang	Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ.	Hui Ma Qianyu Chen Zhimin Yang Yuxiao Gao Hongyu Zhang	Ocean Univ. of China Ocean Univ. of China Ocean Univ. of China Ocean Univ. of China Ocean Univ. of China
SunCIS-20 <i>Hybrid Strategy to Improve RRT-Connect Algorithm for Path Planning of Robotic Manipulator</i>		SunCIS-31 <i>Exact Controllability of Game-Based Multi-Agent Systems: A Dynamic Strategy Equivalence Partitioning Approach</i>	
Fengchi Li Jiahua Ma Jianyong Yao Zhikai Yao	Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech.	Taotao Zhao Zhijian Ji	Qingdao Univ. Qingdao Univ.
SunCIS-21 <i>Research on UAV target sensing and tracking algorithm based on deep reinforcement learning</i>		SunCIS-32 <i>Lyapunov-Guided Actor-Critic: Energy-Variation Prioritized Replay and Stability-Shaped Rewards</i>	
Chong Yu	Air Force Engineering Univ.	Jinlong Liu YanXin Zhang	Beijing Jiaotong Univ. Beijing Jiaotong Univ.

Chenkun Yin Xiangbin Liu Zhiqing Huang	Beijing Jiaotong Univ. Beijing Jiaotong Univ. Beijing Univ. of Tech.	SunCIS-41 Vector Field-Based Visual Guidance of UAVs for Wind Turbine Inspection Haocheng Wu Biao Wang Chaoying Tang	Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics
SunCIS-33 Multi-UAV Cooperative Task Allocation for Mountain Fire Monitoring: An Optimization Method Constrained by Maximum Flight Range Guicai Song Yifei Zhang Zhaoxia Duan Qian Zhao Ronghao Wang Zhe Wu	Hohai Univ. Hohai Univ. Hohai Univ. Guodian Nanjing Automation Co., Ltd Army Engineering Univ. of PLA Beijing Aerospace Changfeng Co., Ltd.	SunCIS-42 Robust 3D Gaussian Reconstruction in Low-Parallax Indoor Corridors via Sliding-Window Optimization and Incremental Fusion Chao Tang Daoxiong Gong	Beijing Univ. of Tech. Beijing Univ. of Tech. The Beijing Key Laboratory of Computational Intelligence and Intelligent Systems
SunCIS-34 Lightweight Underwater Object Detection via Pruned and Knowledge-Distilled YOLOv8 Guanghao Liao Zheng Liu Liyuan Cao Yonghui Yang Qi Li	Univ. of Science and Tech. Liaoning Univ. of Science and Tech. Liaoning Univ. of Science and Tech. Liaoning Univ. of Science and Tech. Liaoning Univ. of Science and Tech. Liaoning	SunCIS-43 Structure-Aware Hierarchical Path Planning for Multi-UAV Aircraft Inspection Jiawei Gou Congqing Wang Chuanyao Zheng Qiang Zeng Zhan Li	Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics AVIC Guizhou Co., Ltd. AVIC Guizhou Co., Ltd.
SunCIS-35 A Lightweight Multi-scale Hierarchical Network for Multi-modal Trajectory Prediction in Autonomous Driving Zihan Zhu Chao Lu Xuemei Chen	Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech.	SunCIS-44 Navigation Sensors Fault Detection and Isolation for Compound-Wing UAVs Based on Kalman Filtering Sijie Yao Zheng Wu Yiyun Zhao Fanbiao Li	Central South Univ. Central South Univ. Central South Univ. Central South Univ.
SunCIS-36 Optimized Dueling Double DQN with Gaussian Noise policy for 3D Mountainous UGV Path Planning Gengchen Liu Song Gao Jiahao Wu Junheng Jiang	Chengdu Univ. of Tech. Chengdu Univ. of Tech. Chengdu Univ. of Tech. Chengdu Univ. of Tech.	SunCIS-45 CCR-YOLO: A Small Object Detection Algorithm for Aerial Imagery via Dilated Residuals and 3D Attention Yuheng Ding Xitai Na Yusen Nie Xinyang Zhu Jinshuo Shi Yue Shen	Inner Mongolia Univ. Inner Mongolia Univ. Inner Mongolia Univ. Inner Mongolia Univ. Inner Mongolia Univ. Inner Mongolia Univ.
SunCIS-37 Semantic-Constrained SLAM for Subway Tunnels Haonan Fang	Huazhong Univ. of Science and Tech. Autonomous Intelligent Unmanned System Engineering Research Center	SunCIS-46 Edge-Efficient Multi-Agent Cooperative Decision-Making via Selective Quantization of Diffusion Models Zehao Zhu Xueqiang Gu	National Univ. of Defense Tech. National Univ. of Defense Tech.
Zixuan Zhang	Huazhong Univ. of Science and Tech. Autonomous Intelligent Unmanned System Engineering Research Center	SunCIS-47 FECF-DETR: Frequency-Enhanced Context Fusion for Real-Time Small Object Detection in UAV Imagery Tianhao Zhu Wei Hu Yumei Yue Peng Gong Shude Ji Qi Song	Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ.
Haibo Tang	Huazhong Univ. of Science and Tech. Autonomous Intelligent Unmanned System Engineering Research Center	SunD01 Room01 Coordination and security analysis of networked systems (Invited Session) Chairs: Fangzhou Liu Weijia Yao Chencheng Zhang Shaoxuan Cui	Harbin Inst. of Tech. Hunan Univ. Nanjing Univ. of Aeronautics and Astronautics Univ. of Groningen
Li Xiao	Huazhong Univ. of Science and Tech. Autonomous Intelligent Unmanned System Engineering Research Center	15:50-16:10 SunD01-1 Modeling and Analysis of Continuous-Time Consensus Protocols on Hypergraphs Chen Cheng Zhang Shaoxuan Cui	Nanjing Univ. of Aeronautics and Astronautics Univ. of Groningen
Zhigang Sun	Huazhong Univ. of Science and Tech. Autonomous Intelligent Unmanned System Engineering Research Center	16:10-16:30 SunD01-2 Predictive Vulnerability Assessment in Networked Systems: A Spectrum-Entropy Approach Yacun Guan Hao Yang Bin Jiang	Hangzhou Dianzi Univ. Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics
SunCIS-38 Path Planning for Unmanned Surface Vehicles Based on Improved WOA and Artificial Potential Field Method Zian Chen	Shanghai Univ. Shanghai Key Laboratory of Power Station Automation Tech.	16:30-16:50 SunD01-3 Dynamic majority rules on hypergraphs Cheng Zhang Shaoxuan Cui Chen Cheng Zhang Xin Wan	Independent Scholar Univ. of Groningen Nanjing Univ. of Aeronautics and Astronautics Independent Scholar
Yu Su	Shanghai Univ. Shanghai Key Laboratory of Power Station Automation Tech.	16:50-17:10 SunD01-4 A UAV Task Allocation Method Based on Distributed Consensus Filtering and Winner-Takes-All Strategy	
Yulong Wang	Shanghai Univ. Shanghai Key Laboratory of Power Station Automation Tech.		
SunCIS-39 Reinforcement Learning-Based Collaborative Path Planning of UAV Swarms in Material Delivery Rui Ding Ying Zhang	Northwestern Polytechnical Univ. Shenzhen Research Inst. Northwestern Polytechnical Univ.		
Xianguang Liang Hanqi Feng Yunhang Wang Wangze Cai	Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ. Northwestern Polytechnical Univ.		
SunCIS-40 Three-Dimensional Path Planning for UAVs Based on an Improved Multi-objective Evolutionary Algorithm Peng Yao Jingzhuo Li Xiaoxi Yang Qizhen Zhou Xuewei Zhang Ronghao Wang	Army Engineering Univ. Army Engineering Univ. Army Engineering Univ. Army Engineering Univ. Army Engineering Univ. Army Engineering Univ.		

Ningbo Li China Aerodynamics Research and Development Center
Qi Zhao Qingdao Univ. of Science and Tech.
Chencheng Zhang Nanjing Univ. of Aeronautics and Astronautics
Xutao Nie China Aerodynamics Research and Development Center
Xiqiang Yan China Aerodynamics Research and Development Center
Shuaishuai Guo Qingdao Univ. of Science and Tech.

17:10-17:30 SunD01-5
Self-Triggered Nash Equilibrium Seeking for Multi-Player Linear Quadratic Differential Games
Tianhao Fei Univ. of Science and Tech. Beijing
Yongliang Yang Univ. of Science and Tech. Beijing

SunD02 Room02
Intelligent sensing and control of complex systems (Invited Session) **15:50-17:30**
Chairs: Yueyuan Zhang Soochow Univ.
 Yuan Sun Soochow Univ.
 Jun Huang Soochow Univ.

15:50-16:10 SunD02-1
Event-triggered observer-based state-feedback control design for nonlinear Lur'e differential-inclusion systems
Yikai Wang Soochow Univ.
Deyuan Ma Soochow Univ.
Jun Huang Soochow Univ.

16:10-16:30 SunD02-2
Deep Reinforcement Learning-based Navigation Framework for Unmanned Surface Vessels: Integrating Extended Kalman Filter and Velocity Obstacle Method for Enhanced Safety
Mingyang Zhong Hohai Univ.
Hua Chen Hohai Univ.

16:30-16:50 SunD02-3
Stochastic Stability and Stabilization Analysis of Fuzzy Nonhomogeneous Semi-Markov Systems
Qinglei Meng Soochow Univ.
Yueyuan Zhang Soochow Univ.
Tengfei Hua Soochow Univ.
Jun Huang Soochow Univ.

16:50-17:10 SunD02-4
Coordinated Frequency Control of Power Systems with Hybrid Energy Storage
Yahui Gao Xi'an Jiaotong Univ.
Bo Fan Xi'an Jiaotong Univ.
Chengshuai Wu Xi'an Jiaotong Univ.
Meng Zhang Xi'an Jiaotong Univ.

17:10-17:30 SunD02-5
Research on Dynamic Detection of Surface Flatness and Adaptive Parameter Optimization for Curved Film Laminating Based on Machine Vision
Han Xie Soochow Univ.
Rundong Qian Soochow Univ.
Xiaolan Guo Soochow Univ.
Ning Jiang Soochow Univ.

SunD03 Room03
Industrial digital twins and smart factories **15:50-17:50**
Chair: Pan Zhang Civil Aviation Univ. of China
CO-Chair: Shuaishuai Han Beijing Univ. of Chemical Tech.

15:50-16:10 SunD03-1
Stacking System of Aviation Baggage Handling Robot Based on Digital Twin Model
Wei Zhang Civil Aviation Univ. of China
Shumin Fang Civil Aviation Univ. of China
Pan Zhang Civil Aviation Univ. of China
Zhiqi Liu Civil Aviation Univ. of China
Jinwang Liu Civil Aviation Univ. of China
Yani Cai Civil Aviation Univ. of China

16:10-16:30 SunD03-2
A Physics-Informed Neural Network (PINN)-based Steady-State Modeling Method for Light and Heavy Gasoline Splitters
Shuaishuai Han Beijing Univ. of Chemical Tech.
Mingzhang Wang Beijing Univ. of Chemical Tech.
Yang Yuan Beijing Univ. of Chemical Tech.
Xing Qian Beijing Univ. of Chemical Tech.
Haisheng Chen Beijing Univ. of Chemical Tech.
Tao Xia Beijing Univ. of Chemical Tech.
Juan Chen Beijing Univ. of Chemical Tech.
Kejin Huang Beijing Univ. of Chemical Tech.

16:30-16:50 SunD03-3

Lightweight Loading Framework for Digital Twin Visualization Model
Jianfeng Wu Army Engineering Univ. of PLA
Qiliang Yang Army Engineering Univ. of PLA
Rongwei Zou Army Engineering Univ. of PLA
Chao Mou Army Engineering Univ. of PLA
Zhiwei Zhang Army Engineering Univ. of PLA
Yong Wu Army Engineering Univ. of PLA

16:50-17:10 SunD03-4
Digital Twin Modeling of a Ball Mill in Cement Combined Grinding
Xuming Zhai Electrical Engineering Univ. of Jinan
Qiang Zhang Electrical Engineering Univ. of Jinan
Yize Liu Electrical Engineering Univ. of Jinan
Cunrui Lu Electrical Engineering Univ. of Jinan
Jinyu Cai Electrical Engineering Univ. of Jinan
Xin Wang Electrical Engineering Univ. of Jinan

17:10-17:30 SunD03-5
Design of a Digital Twin-based Virtual Simulation System for Oscilloscope Metrology Verification
Han Yang Sichuan Univ. of Science & Engineering
Liu Pan The 10th Research Inst. of China Electronics Tech. Group Corporatio
Jingxi Zhang The 10th Research Inst. of China Electronics Tech. Group Corporatio
Jun Zhao Sichuan Univ. of Science & Engineering

17:30-17:50 SunD03-6
Design of Digital Twin System for Intelligent Industrial Glue Dispensing Robots
Yunfei Hu Huaibei Inst. of Tech.
Shuguang Liu Huaibei Inst. of Tech.
Liangyuan Nie Huaibei Inst. of Tech.
Peng Zhang Huaibei Inst. of Tech.
Yujia Du Huaibei Inst. of Tech.
Yingxue Li Huaibei Inst. of Tech.

SunD04 Room04
Integration of production planning, scheduling, and control **15:50-17:50**
Chairs: Longyan Ding Dalian Maritime Univ.
 Shilu Di Shanghai Univ.

15:50-16:10 SunD04-1
Study of an Event-Driven Rescheduling Approach for Carrier-Based Equipment
Longyan Ding Dalian Maritime Univ.
Jian Yin Dalian Maritime Univ.
Zhan Shi Dalian Maritime Univ.
Yun-sheng Fan Dalian Maritime Univ.
Li-ran Shen Dalian Maritime Univ.

16:10-16:30 SunD04-2
Distributed No-Wait Flowshop Group Scheduling with Group Due Dates in Silicon-Based OLED Micro-Display Manufacturing
Shilu Di Shanghai Univ.
Yuan Ji Shanghai Univ.
Huan Liu Univ. of Shanghai for Science and Tech.
Xuan He Shanghai Maritime Univ.

16:30-16:50 SunD04-3
Adaptive Genetic Algorithm with Q-learning and Dynamic Catastrophe for Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes
Lishi Huang Kunming Univ. of Science and Tech.
Ning Guo Kunming Univ. of Science and Tech.
Bin Qian Kunming Univ. of Science and Tech.

16:50-17:10 SunD04-4
Crude Oil Blending and Scheduling Optimization for Blended Oil Composition and Property Stability
Lin Feng China Univ. of Petroleum(Beijing)
Xiaoyong Gao China Univ. of Petroleum(Beijing)
Dexian Huang Tsinghua Univ.

17:10-17:30 SunD04-5
FiLM-Conditioned Cross-Attention Multi-Objective Reinforcement Learning Algorithm for Dynamic Seru Production System Reconfiguration
Zihan Lan Beijing Inst. of Tech.
Yaixin Zhang Beijing Inst. of Tech.
Hongbo Jin Beijing Inst. of Tech.
Dongni Li Beijing Inst. of Tech.

17:30-17:50 SunD04-6
A Hybrid SATS-EA Algorithm for Green and Efficient Multi-Objective No-Wait Scheduling in Aluminum Extrusion Workshop
Yali Wu Xi'an Univ. of Tech.
Yang Li Xi'an Univ. of Tech.
Jiangtao Wei Xi'an Univ. of Tech.

Lipeng Qiu	Xi'an Univ. of Tech.	Hui Luo	Huazhong Univ. of Science and Tech.
Yin Quan		Yin Quan	Huazhong Univ. of Science and Tech.
SunD05	Room05	17:30-17:50	SunD06-6
Operational optimization and decision-making (1)	15:50-17:50	Cascaded Dual Cost Functions Model Predictive Control for PMSM with Dynamic Switching	
Chair: Wentao Zhao	Xiamen Univ. of Tech.	Siqi Wang	Huazhong Univ. of Science and Tech.
Co-Chair: Jiachen Shi	Nanjing Univ. of Posts and Telecommunications	Shanmei Cheng	Huazhong Univ. of Science and Tech.
15:50-16:10	SunD05-1	SunD07	Room07
A PSO-Enhanced Grey Wolf Optimizer for High-Precision ADRC Parameter Tuning in Quadrotor UAV Attitude Control		Control theory and control technology (12)	15:50-17:50
Kun Li	Liaoning Technical Univ.	Chair: Wenyou Du	Shenyang Aerospace Univ.
MingYang Lv	Liaoning Technical Univ.	Co-Chair: Jian Chen	Qingdao Univ. of Tech.
16:10-16:30	SunD05-2	15:50-16:10	SunD07-1
ESG Investment Strategies in a Supply Chain		Adaptive Dynamic System Excitation Methods Leveraging System Response Characteristics	
Jiaxuan Fang	Nanjing Univ. of Posts and Telecommunications	Xiaocheng Zhang	Shenyang Aerospace Univ.
Guangye Xu	Nanjing Univ. of Posts and Telecommunications	Wenyou Du	Shenyang Aerospace Univ.
16:30-16:50	SunD05-3	16:10-16:30	SunD07-2
Wireless Voltage-Stabilized Charging Using ISMC-SCN Controller		Dynamic event-triggered scaled consensus control for multi-agent systems	
Kun Li	Liaoning Technical Univ.	Fan Su	Qingdao Univ. of Tech.
Zhipeng Shen	Liaoning Technical Univ.	Jian Chen	Qingdao Univ. of Tech.
16:50-17:10	SunD05-4	Jian Chen	Qingdao Univ. of Tech.
Multi-strategy Enhanced Particle Swarm Optimization Algorithm for Numerical and Engineering Optimization		Chengxing Lv	Qingdao Univ. of Tech.
Zicong Han	Univ. of Science and Tech. Liaoning	Jinhai Li	Qingdao Univ. of Tech.
Yukun Wang	Univ. of Science and Tech. Liaoning	Guangzheng Huang	Qingdao Univ. of Tech.
Zhongfeng Li	Yingkou Institute of Tech.	16:30-16:50	SunD07-3
17:10-17:30	SunD05-5	Predefined-Time Distributed Consensus of Multi-Agent Systems via Intermittent Control	
A Reinforcement Learning-Driven Dual-Archive Algorithm for Dynamic Multi-Objective Optimization		Qiong Wu	Taiyuan Univ. of Science and Tech.
Wentao Zhao	Xiamen Univ. of Tech.	Jianan wang	Taiyuan Univ. of Science and Tech.
Yong Li	Xiamen Univ. of Tech.	Zhiming Qiao	Taiyuan Univ. of Science and Tech.
Yingbin lv	Xiamen Univ. of Tech.	16:50-17:10	SunD07-4
Yongkuan Yang	Northeastern Univ.	Sensorless control of permanent magnet synchronous motors based on fuzzy sliding mode variable structure	
17:30-17:50	SunD05-6	Jiacong Luo	Wuhan Univ. of Science and Tech.
Optimal Sales Model Choice in Agricultural Live Streaming E-commerce with Social Preferences		Liangli Zhang	Wuhan Univ. of Science and Tech.
Jiachen Shi	Nanjing Univ. of Posts and Telecommunications	Chunbing Zhu	Wuhan Qingchuan Univ.
Guangye Xu	Nanjing Univ. of Posts and Telecommunications	17:10-17:30	SunD07-5
SunD06	Room06	Centralized Active Disturbance Rejection Control for 4-DOF Tower Cranes	
Advanced control and predictive control (2)	15:50-17:50	Wenqiang Qi	Taiyuan Univ. of Science and Tech.
Chair: Cheng Hu	Shanghai Univ.	Xuejuan Shao	Taiyuan Univ. of Science and Tech.
Co-Chair: Ziyang Han	Dalian Univ. of Tech.	Zhimei Chen	Taiyuan Univ. of Science and Tech.
15:50-16:10	SunD06-1	17:30-17:50	SunD07-6
Relaxed stability conditions for machine learning-based predictive control of hybrid systems		Modeling and Nonlinear Control of a Coaxial-Rotor UAV with Dual-Servo Tilting Mechanism	
Chun Tan	Shanghai Univ.	Yuye Li	Huazhong Univ. of Science and Tech.
Can Yang	Shanghai Univ.	Jing Li	System Design Inst. of Hubei Aerospace Tech. Academy
Cheng Hu	Shanghai Univ.	Yongran Zhi	Huazhong Univ. of Science and Tech.
16:10-16:30	SunD06-2	Lei Liu	Huazhong Univ. of Science and Tech.
Data-Driven Multivariable Predictive Control via Segmented Trajectories: Application to TurboshiftEngine Speed Regulation		SunD08	Room08
Ziyang Han	Dalian Univ. of Tech.	Control theory and control technology (13)	15:50-17:50
Kunzhi Liu	Dalian Univ. of Tech.	Chair: Cui Wei	Nanjing Tech. Univ.
Mingsui Yang	Dalian Univ. of Tech.	Co-Chair: Xinde Zhou	Northeast Forestry Univ.
16:30-16:50	SunD06-3	15:50-16:10	SunD08-1
Compact Models and Predictive Control of Air-Conditioning Systems in Electric Vehicles Leveraging Limited Measurement Signals		Linear Algebra Based Speed Control of a PMSM	
Zhen Cheng	Jilin Univ.	Pedro Albertos	Univ. Politecnica de Valencia
Jieyu Wang	Tsinghua Univ.	Cui Wei	Nanjing Tech Univ.
Xiangli Dong	FAW Bestune	16:10-16:30	SunD08-2
Zifei Nie	Jilin Univ.	Self-Triggered Connectivity Maintenance of Teleoperated Multi-Agent System With Input Saturation	
Zilin Guo	Jilin Univ.	Liu Yang	Northeast Forestry Univ.
Xun Gong	Jilin Univ.	Xinde Zhou	Northeast Forestry Univ.
16:50-17:10	SunD06-4	Zhixin Yan	Northeast Forestry Univ.
Dynamic Coordinated Control Strategy for Aircraft Hybrid-Electric Propulsion Systems Based on Hybrid Data-Driven Methods		16:30-16:50	SunD08-3
Chongbing Zhang	Beijing Inst. of Tech.	An Improved AKF based Visual Navigation Method for Quadrotor UAV Landing on a Dynamic Platform	
Yue Ma	Beijing Inst. of Tech.	Zilin Mo	Chonqing Univ. of Posts and Telecommunications
Feixiang Zhang	Beijing Inst. of Tech.	Longwang Huang	Chonqing Univ. of Posts and Telecommunications
Anzhi Duan	Beijing Inst. of Tech.	Yongfu Li	Chonqing Univ. of Posts and Telecommunications
Ningkang Yang	Beijing Inst. of Tech.	16:50-17:10	SunD08-4
Liang Liu	Beijing Inst. of Tech.	An Asymmetric Constraint Control Approach with Nonlinear Command Filtering for Voice Coil Valves	
17:10-17:30	SunD06-5	Jichun Chen	Nanjing Univ. of Science and Tech.
Efficiency Optimization Control of Electrolytic-Capacitor-Less Permanent Magnet Synchronous Motor Based On Fixed-Step Search Algorithm			
ShuChang Pan	Huazhong Univ. of Science and Tech.		

Pengfei Li Xiaowei Yang Jianyong Yao	Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech.	Hongda Li Linlin Zhu Jiaxun Li	Shenyang Aerospace Univ. Shenyang Aerospace Univ. Shenyang Aerospace Univ.
17:10-17:30	SunD08-5	16:30-16:50	SunD10-3
Output Regulation for a One-Dimensional Heat Equation with Non-Colocated Sensing and Actuation		Event-Triggered Dual-Screening for Robust Visual-Inertial Odometry in Dynamic Environments	
Jia-Yi Zhang Yan-Na Jia Jun-Jun Liu	Taiyuan Univ. of Tech. Taiyuan Normal Univ. Taiyuan Univ. of Tech.	Chen Gong Zhiwen Wang	Lanzhou Univ. of Tech. Lanzhou Univ. of Tech.
17:30-17:50	SunD08-6	16:50-17:10	SunD10-4
Resonance-Preserving Spectrum Fusion for Lightly Damped Systems via Adaptive Regularization		Real-Time Path Planning and Path Following of Unmanned Surface Vehicles Based on Horizon-Constrained Hybrid A*	
Gending Zhang Jieying Lu Weizhou Su	South China Univ. of Tech. South China Univ. of Tech. South China Univ. of Tech.	Zhong Yang Xiao-Feng Ma Yu-Long Wang	Shanghai Univ. Shanghai Univ. Shanghai Univ.
SunD09	Room09	17:10-17:30	SunD10-5
Control theory and control technology (14)	15:50-17:50	A Vision-Language Retrieval Framework for Autonomous UAV Decision-Making in Target Search and Tracking	
Chair: Li Wang Co-Chair: Zihao Xie	Hubei Normal Univ. Central South Univ.	Jianping Zong Qi Chen Hongpeng Wang Hui Miao Yang Liu Xiuxiu Qi	Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ.
15:50-16:10	SunD09-1	17:30-17:50	SunD10-6
Privacy-Preserving Consensus for Multiagent Systems under the Dynamic Event-Triggered Mechanism		Design of Human-Computer Interaction System Based on Dynamic 3D Hand Trajectory Input and Adaptive Nonlinear MPC	
HaoZhou Xu Li Wang Lingli Cheng Xisheng Zhan	Hubei Normal Univ. Hubei Normal Univ. Hubei Normal Univ. Hubei Normal Univ.	Jiajian Zhang Yin Wang Xiang Wu Jun Wang Chang Xu Canyang Zhao	Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech.
16:10-16:30	SunD09-2	SunD11	Room11
Sliding Mode Control of Permanent Magnet Synchronous Motor Based on an Improved Reaching Law		Advanced sensing and intelligent perception (4)	15:50-17:50
Zihao Xie Senlin chen Tengda Wang Yiyun Zhao Fanbiao Li	Central South Univ. Central South Univ. Central South Univ. Central South Univ. Central South Univ.	Chair: Gang Peng CO-Chair: Peiyong Gong	Huazhong Univ. of Science and Tech. Dalian Maritime Univ.
16:30-16:50	SunD09-3	15:50-16:10	SunD11-1
A Robust Interval Observation Approach for Discrete-Time Systems with Markov Jump Parameters and Bounded Disturbance Input		SDRGs: Prior-Guided Shadow and Depth Regularization for Few-Shot 3D Gaussian Splatting	
Jiyang Xie Shuqian Zhu	Shandong Univ. of Tech. Shandong Univ.	Chuangye Li Gang Peng Mingjun Cong Bingchuan Yang Jiaqi Yang	Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.
16:50-17:10	SunD09-4	16:10-16:30	SunD11-2
Incremental Learning-based Non-affine Control for A Type of Coaxial Dual-Rotor Unmanned Autonomous Vehicle		Spatial Relationship Constrained Binocular Object Matching and Localization Algorithm	
Ziang Li Xinhua Wang Xiaoyun Sun Huajun Gong	Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics	Peiyong Gong Kai Zheng Ting Liu Yi Jiang Huixuan Zhao	Dalian Maritime Univ. Dalian Maritime Univ. Dalian Maritime Univ. Dalian Maritime Univ. Dalian Maritime Univ.
17:10-17:30	SunD09-5	16:30-16:50	SunD11-3
Dynamic Surface-Based Prescribed-Time Robust Adaptive Control of Hydraulic Manipulators		Multi-Filtering Framework for Occlusion Elimination in LiDAR-Panorama Fusion	
Tianyu Gao Xiaowei Yang Xianglong Liang Gaoyang Zhao Weilin Zhu Jianyong Yao	Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Forestry Univ. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech. Nanjing Univ. of Science and Tech.	Jiayin Cao Cong Luo Yuanyu Cao Linyan Xing Yingjiang Zhou Qiang Wang	Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
17:30-17:50	SunD09-6	16:50-17:10	SunD11-4
A Rapid and Robust Iterative Feedback Tuning Method for Precision Motion Stage		CAFNet-CD: A Context-Guided Adaptive Fusion Network for Remote Sensing Change Detection	
Tao Liu Kaiming Yang Shaowei Zhan Sen Lu Yu Zhu	Tsinghua Univ. Tsinghua Univ. Tsinghua Univ. Tsinghua Univ. Tsinghua Univ.	Anhang Li Yi Yang Pengbo Mi Jincheng Xiang Qilin Yang Jinjie Yu	Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ. Xi'an Jiaotong Univ.
SunD10	Room10	17:10-17:30	SunD11-5
Intelligent perception, synergic decision-making, and security for robots and unmanned systems (5)	15:50-17:50	Research on Railway Foreign Object Intrusion Detection Based on Improved YOLOv8s	
Chair: Tao Zuo Co-Chair: Hongda Li	Wuhan Univ. of Science and Tech. Shenyang Aerospace Univ.	Mengchao Dong Shenghua Dai	Beijing Jiaotong Univ. Beijing Jiaotong Univ.
15:50-16:10	SunD10-1	17:30-17:50	SunD11-6
A Long-Term High-Consistency Visual SLAM System for Unstructured Environments		Multi-session Gaussian Splatting Reconstruction via LIVO Trajectory Alignment	
Wenling He Tao Zuo Kunkun Yang Yuxin Zhang	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.	Zihan Zhang	Southeast Univ.
16:10-16:30	SunD10-2		
A Tightly Coupled Optimization Method for LiDAR-Inertial Odometry in Dynamic Environments			

Yun Zhang Tong Shi Kun Qian	Southeast Univ. Southeast Univ. Southeast Univ.	17:10-17:30	SunD13-5 <i>LongCoT-Transfer: Transferring Complex Reasoning from Large to Small LLMs for Sequential Decision-Making</i>	
SunD12 Fault diagnosis, prognosis and prediction maintenance (4) Chair: Lin Liu	Room12 Heilongjiang Uni. of Science and Tech. Southeast Univ.	15:50-17:50	Hui Wu Zongyuan Li Huanyu Li Yongchun Fang Xian Guo	Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ.
Co-Chair: Jingxin Zhang			17:30-17:50	SunD13-6 <i>Process Simulation of Dynamic Feeding Process for Rare Earth Extraction Based on Hybrid Modeling</i>
15:50-16:10			Rongxiu Lu Siqi Zheng Hui Yang	East China Jiaotong Univ. East China Jiaotong Univ. East China Jiaotong Univ.
<i>Improved EMD and CA-Conformer-ViT for fault diagnosis of bearings</i> Lin Liu Yafeng Zhang Yuyang Li Yue Sun Xiaoqing Jiang Shijian Dong	Heilongjiang Uni. of Science and Tech. No.3 Middle School of Tangqi Town China Univ. of Mining and Tech. Queensland Univ. of Tech. Northeastern Univ. Northeastern Univ.		SunDIS Interactive Session	RoomPT 15:50-17:50
16:10-16:30			SunDIS-01 <i>Predicting Indoor Occupancy Dynamics by Modeling Human-Environment Interactions Using an Adaptive GNN</i>	
<i>Adaptive Multimode Process Monitoring via Dirichlet Process Mixture Modeling and Dynamic Slow Feature Analysis</i> Yuying Cao Zhaoyun Li Jingxin Zhang	Southeast Univ. Southeast Univ. Southeast Univ.		Siyuan Liu Qiliang Yang Ronghao Wang Haining Jia Yong Wu Qizhen Zhou	Engineering University of PLA Engineering University of PLA Engineering University of PLA Engineering University of PLA Engineering University of PLA Engineering University of PLA
16:30-16:50			SunDIS-02 <i>A continual reinforcement learning method for HVAC system optimization in dynamic building environments</i>	
<i>Bearing Remaining Life Prediction Based on Multi-Scale Dual-Attention Transformer Model</i> Shengqi Zhang	Wuhan Univ. of Tech.		Bowei Feng Qiliang Yang Jianchun Xing Ronghao Wang Zhongkai Deng Siyuan Liu Qizhen Zhou	Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA
16:50-17:10			SunDIS-03 <i>Improved APF-Based Obstacle Avoidance with Monocular Depth Estimation</i>	
<i>A CEEMDAN-GAF and Cross-Attention-Based Multimodal Fault Diagnosis Method for Ball Screws</i> Youjin Cheng Pin Wang Xuan Dong Hongjin Chen	Southeast Univ. Southeast Univ. Southeast Univ. Southeast Univ.		Bingheng Zhou	Southeast Univ. Key Laboratory of Measurement and Control of CSE
17:10-17:30			Jinya Su	Southeast Univ. Key Laboratory of Measurement and Control of CSE
<i>Research on Fault Localization of Track Circuit Compensation Capacitors Based on Convolutional Vision Transformer</i> Tianren Liu Shenghua Dai	Beijing Jiaotong Univ. Beijing Jiaotong Univ.		Jun Yang	Inst. of Intelligent Unmanned Systems Loughborough Univ.
17:30-17:50			SunDIS-04 <i>SOAR: A Lightweight Star-Map Obstacle Detection Algorithm for Reliable Spaceborne Perception</i>	
<i>Fault Diagnosis for Rotating Machinery via Parallel Spatiotemporal Decoupling and Cross-Attention</i> Yali Wu Danwen Li Jianwen Wu	Xi'an Univ. of Tech. Xi'an Univ. of Tech. BaoTi Equipment Tech. Co., Ltd		Zihan Xu Cheng Feng Ke Gan	Chongqing Univ. Beijing Inst. Of Spacecraft System Engineering Sichuan Provincial Machinery Research & Design Inst.
SunD13 Intelligent decision-making systems and applications (5) Chair: Lei Cheng Co-Chair: Min Zhou	Room13 Wuhan Univ. of Science and Tech. Beijing Jiaotong Univ.	15:50-17:50	Youyu Wang Hehe Guo Kai Wang	Beijing Inst. Of Spacecraft System Engineering Beijing Inst. Of Spacecraft System Engineering Chongqing Univ.
15:50-16:10			SunDIS-05 <i>A Novel Robust FGO-Based Multi-Sensor Fusion System for GNSS-Visual-Inertial Localization</i>	
<i>Gas Source Localization via Adaptive Entrotaxis Driven by the Whale Optimization Algorithm</i> Miaozhou Gong Lei Cheng	Wuhan Univ. of Science and Tech. Wuhan Univ. of science and Tech.		Haozhong Zou	Shanghai Jiao Tong Univ. National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing
16:10-16:30			Junguo Lu	Shanghai Jiao Tong Univ. National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing
<i>Rail-SpeechGPT: Intelligent Speech-Assisted Railway Dispatching Using Large Language Model</i> Jinrui Yang Min Zhou Changqing Liu Bo Yang Zhuo Zhang	Beijing Jiaotong Univ. Beijing Jiaotong Univ. China Railway Beijing Group Company, Ltd. China Railway Beijing Group Company, Ltd. Zhengzhou Xinda Advanced Tech. Research Institute		Zhen Zhu	Shanghai Jiao Tong Univ. National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing
Hairong Dong	Beijing Jiaotong Univ.		Qinghao Zhang	Shanghai Jiao Tong Univ. National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Key Laboratory of System Control and Information Processing
16:30-16:50			SunDIS-06 <i>Attitude Control of Carrier-Based Aircraft Based on Prescribed Performance Control</i>	
<i>Fisher Information Driven Frequency Selection for Multi-Parameter Eddy Current Testing</i> Changli Yan Jun Bao Xin Xiong	Kunming Univ. of Science and Tech. Kunming Univ. of Science and Tech. Kunming Univ. of Science and Tech.		Xv Wang Shaoping Shen Yeerjiang Bolaxiake Zhibin Li	Xiamen Univ. Xiamen Univ. Xiamen Univ. Shandong Univ. of Science and Tech.
16:50-17:10				

Yize Liu	Univ. of JiNan	Zhangling Wang	National Univ of Defense Tech.
Qiang Zhang	Univ. of JiNan	Xueqiang Gu	National Univ of Defense Tech.
Xin Wang	Univ. of JiNan	SunDIS-16	
Jinyu Cai	Univ. of JiNan	<i>IBBO-UAV: An Improved Beaver Behavior Optimization for Three-Dimensional UAV Path Planning</i>	
Xuming Zhai	Univ. of JiNan	Jingyu Wang	Northeast Forestry Univ.
Jiyuan Zhang	POWERCHINA SEPCO1 ELECTRIC POWER CONSTRUCTION CO., LTD.	Liangkuan Zhu	Northeast Forestry Univ.
SunDIS-07		Hongyang Zhao	Northeast Forestry Univ.
<i>Integrated A* and model predictive control for multi-UAV cooperative path planning in 3D unknown environments</i>		Ke Zhang	Northeast Forestry Univ.
Yuehai Wang	North China Univ. of Tech. Beijing Open Univ.	SunDIS-17	
Xuying Tang	North China Univ. of Tech.	<i>Real-time 3D Object Detection Algorithm Based on the Fusion of Image and Point Cloud</i>	
Na Xing	North China Univ. of Tech.	Wenzhe Shan	Beijing Inst. of Tech.
Jing Ren	North China Univ. of Tech.	Xuemei Chen	Beijing Inst. of Tech.
Anke Shi	North China Univ. of Tech.	Zeyuan Xu	Beijing Inst. of Tech.
SunDIS-08		SunDIS-18	
<i>Time-Weighted Dynamic Window Approach for Robot Local Path Planning</i>		<i>Output Dependent Switching Law for Quadratic Stabilization of Switched Uncertain Nonlinear Systems</i>	
Changjian Lin	China Univ. of Mining and Tech.	Yufang Chang	Hubei Univ. of Tech.
Yuhao Liu	China Univ. of Mining and Tech.	Guisheng Zhai	Shibaura Inst. of Tech.
Linchen Zhou	China Univ. of Mining and Tech.	Ziyi He	Dalian Univ. of Tech.
Sitao Tian	China Univ. of Mining and Tech.	Wencong Huang	Hubei Univ. of Tech.
SunDIS-09		SunDIS-19	
<i>Belief-State Continuous Control for Train Virtual Coupling in Partially Observable Environments</i>		<i>Adaptive Dissipative Sliding Mode Control for Uncertain Singular Markov Jump Systems</i>	
Yiling Wu	Beijing Jiaotong Univ.	Yuqi Guo	Tianjin Modern Vocational Tech. College
Fei Yan	Beijing Jiaotong Univ.	Shiyu Li	Shenyang Inst. of science and Tech.
SunDIS-10		Xuefei Chen	Tianjin Modern Vocational Tech. College
<i>HAPPO Based Trajectory Planning and Task Assignment for Heterogeneous-UAV-Enabled Front Jammer Swarm</i>		SunDIS-20	
Heng Chen	Hefei Univ. of Tech.	<i>Only Generalized State Feedback Control But Not the Existing State Feedback Control Can Have its Critical Robust Properties Realized Generally</i>	
Canghua Jiang	Hefei Univ. of Tech.	ChiaChi Tsui	National Taiwan Univ. of Science and Tech.
Bin Li	Sichuan Univ.	SunDIS-21	
SunDIS-11		<i>Predefined-time fault-tolerant synchronization control for drive-response coupled competitive neural networks with multiple weights</i>	
<i>ESKF-based Path Following Control of Underactuated AUVs under Multiple Disturbances</i>		Yanli Huang	Tiangong Univ.
Yanyun Wang	Guangdong Polytechnic Normal Univ.	Ziyi Wang	Tiangong Univ.
Jianming Miao	Sun Yat-Sen Univ.	Wenjng Duan	Tiangong Univ.
Yong Yang	Guangdong Polytechnic Normal Univ.	Quang Dan Le	Univ. of Derby
Zhanyuan Wang	Guangzhou Maritime Univ.	SunDIS-22	
Huixuan Hu	Guangdong Polytechnic Normal Univ.	<i>A Review of Flight Delay Prediction and Error Analysis</i>	
Hao Li	Guangdong Polytechnic Normal Univ.	Ziyang Tian	Civil Aviation Univ. of China
SunDIS-12		Zhen Zhao	Civil Aviation Univ. of China
<i>ADE-ALA: An Adaptive Differential Evolution Artificial Lemming Algorithm for 3D UAV Path Planning</i>		Jun Zhang	Civil Aviation Univ. of China
Zhenhan Hu	Harbin Inst. of Tech. Chongqing Jianshe Industry (Group) Co., Ltd.	SunDIS-23	
Junbao Li	Harbin Inst. of Tech.	<i>Unscented Kalman Filter for Nonlinear Singular Systems</i>	
Maqiang Zhai	Chongqing Jianshe Industry (Group) Co., Ltd.	Shibo Wang	Heilongjiang Univ.
Huanbei Ren	Chongqing Jianshe Industry (Group) Co., Ltd.	Chenjian Ran	Heilongjiang Univ.
Han Liu	North Univ. of China Chongqing Jianshe Industry (Group) Co., Ltd.	SunDIS-24	
Wenke Huang	Beijing Inst. of Tech. Chongqing Jianshe Industry (Group) Co., Ltd.	<i>Feature Enhanced Soft Actor-Critic based Control of Melt Spinning Process</i>	
SunDIS-13		Yitao Yuan	Donghua Univ.
<i>A VSLAM Feature Matching Method Based on Topological Feature Constraints</i>		Jie Qi	Donghua Univ.
Wenze Song	Chongqing Univ. of Posts and Telecommunications	SunDIS-25	
Qiuji Chen	Chongqing Univ. of Posts and Telecommunications	<i>Optimal Transport-Integrated Lie Algebra Method for Robust Robot Hand-Eye Calibration</i>	
Ming Cen	Chongqing Univ. of Posts and Telecommunications	Yun-tao Zhao	Wuhan Univ. of Science and Tech.
SunDIS-14		Wei-tao Li	Wuhan Univ. of Science and Tech.
<i>Super-twisting sliding mode control for UAV and UGV systems based on differential flatness</i>		Xin-fei Gong	Wuhan Baoju Carbon Materials Co, Ltd
Jiankai Hu	Jiangsu Normal Univ.	SunDIS-26	
Na Duan	Jiangsu Normal Univ.	<i>Probabilistic robust control of microgravity hybrid vibration isolation system with parametric uncertainties</i>	
Feiyu Hou	Jiangsu Normal Univ.	Weijia Chen	Xi'an Univ. of Tech.
Hao Sun	Jiangsu Normal Univ.	Fucaai Qian	Xi'an Univ. of Tech.
SunDIS-15		Yan Guo	Xi'an Univ. of Tech.
<i>Coupling Prediction for Multi-Agent Reinforcement Learning in Information-Asymmetric Adversarial Environments</i>		SunDIS-27	
Junfan Zhu	National Univ of Defense Tech.	<i>Trajectory Tracking Control of Underactuated Autonomous Underwater Vehicles Based on the High-Order Fully Actuated Method</i>	
		Hanyu Wang	Harbin Engineering Univ.
		Yongxu He	Harbin Univ. of Science and Tech.
		Yuxin Zhao	Harbin Engineering Univ.
		Deng Xiong	Harbin Engineering Univ.
		SunDIS-28	

Improved MRAS Permanent Magnet Synchronous Motor Current Prediction Control Without Beat

Weikang Song Anhui Polytechnic Univ.
Kai Xin Anhui Polytechnic Univ.

SunDIS-29

Research on Hybrid Robot Control Algorithms Based on Heuristic Inverse Solutions

Xin Sun Nanjing Univ. of Posts and Telecommunications
Chuanhang Jin Nanjing Univ. of Posts and Telecommunications
Sheng Chen Nanjing Univ. of Posts and Telecommunications
Zhou Rong Nanjing Univ. of Posts and Telecommunications

SunDIS-30

Model-Free Adaptive Control of a Quadrotor Tail-sitter UAV

Zhiyao Li Huazhong Univ. of Science and Tech.
Zhaowei Liang Wuhan Second Ship Design & Research Inst.
Yongran Zhi Huazhong Univ. of Science and Tech.
Lei Liu Huazhong Univ. of Science and Tech.

SunDIS-31

Tracking Control Based on Improved Second-order Disturbance Observer for Rigid Satellite Attitude System

Zekai Lin Nanjing Univ. of Aeronautics and Astronautics
Min Wan Nanjing Univ. of Aeronautics and Astronautics
Tao Li Nanjing Univ. of Aeronautics and Astronautics
Yongkang Guo Nanjing Univ. of Aeronautics and Astronautics

SunDIS-32

Unified Pairwise-Constrained Projection and Clustering with Direct Constraint Optimization

Jianyong Zhu East China Jiaotong Univ.
Kun Chen East China Jiaotong Univ.
Hui Yang East China Jiaotong Univ.
Feiping Nie Northwestern Polytechnical Univ.

SunDIS-33

Stability Analysis of Discrete-Time Modified Active Disturbance Rejection Control

Feiqi Li Zhengzhou Univ.
Zhenlong Wu Zhengzhou Univ.
Yanhong Liu Zhengzhou Univ.
Donghai Li Tsinghua Univ.

SunDIS-34

Data-Driven Design of Steady-State Kalman Gain with Stability Guarantees

Jianyin Fang Zhongyuan Univ. of Tech.
Yongzheng Liu Zhongyuan Univ. of Tech.
Lijie You Zhongyuan Univ. of Tech.
Daolin Wen Zhongyuan Univ. of Tech.

SunDIS-35

Adaptive Integral-Type Bipartite Event-Triggered Output Consensus for Heterogeneous Linear Multi-Agent Systems

AoJie Zhu Nanjing Univ. of Posts and Telecommunications
Hong Li Nanjing Univ. of Posts and Telecommunications
Shihao Yang Nanjing Univ. of Posts and Telecommunications

SunDIS-36

Design of Deceleration Scheme for Trans-media Vehicle Before Entering Water

Ziyi Zhao China Academy of Launch Vehicle Tech.
AoJia Ma China Academy of Launch Vehicle Tech.

SunDIS-37

Distributed cooperative passive tracking control method for bearing-only UAV formation

Zhan Chen National Univ. of Defense Tech.
Wei Zhang National Univ. of Defense Tech.
Hong Zhang National Univ. of Defense Tech.
Haowen Gao National Univ. of Defense Tech.
Weiqi Sun National Univ. of Defense Tech.
Yifeng Niu National Univ. of Defense Tech.

SunDIS-38

Adaptive Practical Prescribed-Time Output Tracking Consensus of High-Order Nonlinear Multi-Agent Systems: Based on RBF NN Observer

Huadong Liang Inner Mongolia Univ.
Liangzhuo Li Inner Mongolia Univ.
Zhaohui Wang Inner Mongolia Univ.
Fei Gao Inner Mongolia Univ.

SunDIS-39

Deep Reinforcement Learning-Based Trajectory Planning for Unmanned Aerial Vehicles

Chaofan Zhang Aviation System Engineering Inst. of China
Kanghua Zhang Aviation System Engineering Inst. of China

SunDIS-40

Integral Backstepping Enhanced Active Disturbance Rejection Control for Piezoelectric Stick-Slip Nanopositioning Stage

Jiarui Li Changchun Univ. of Tech.
Shuai Yu Jilin Engineering Normal Univ.
Piao Fan Changchun Univ. of Tech.
Zhenguo Zhang Changchun Univ. of Tech.
Zengpeng Lu Changchun Univ. of Tech.

SunDIS-41

Research on Free Space Optical Communication Tracking System Based on Feedforward Fuzzy Sliding Mode Control

Yuanwen Zheng Dongguan Univ. of Tech.
Fang Guo Dongguan Univ. of Tech.
Yue Lai Dongguan Univ. of Tech.

SunDIS-42

Parameter Identification of Two-Inertia System and Controller Design of Lead Network based on Linear Quadratic Regulator

Chenyue Zhang South China Univ. of Tech.
Lutao Luo South China Univ. of Tech.
Jieying Lu South China Univ. of Tech.
Weizhou Su South China Univ. of Tech.

SunDIS-43

Switching Dynamic Event-Triggered Control for Networked Switched Systems Under DoS Attacks

Jia-Kun Hu Bohai Univ.
Tai-Fang Li Bohai Univ.

SunDIS-44

Continuous-Time Distributed Time-Varying Optimization Based Affine Formation Control of Second-order Multi-Agent Systems

Jinyang Li Jiangsu Univ. of Science and Tech.
Jianzhen Li Jiangsu Univ. of Science and Tech.
Jiangbing Hu Jiangsu Univ. of Science and Tech.

SunDIS-45

Research on Precise Current Control Method Based on Switching Model of Buck Converter

Jinjun Yu Wuhan Univ. of Science and Tech.

SunDIS-46

Design of Load Suppression Control Law Based on Maneuvering Optimization Allocation Strategy

Xiang Li China Helicopter Research and Development Inst.
Shanyong Zhao China Helicopter Research and Development Inst.
Yujie Ma China Helicopter Research and Development Inst.

SunDIS-47

Non-Singular Terminal Sliding Mode Anti-Swing Control for Double Boom Cranes

Zhimei Chen Taiyuan Univ. of Science and Tech.
Yuqi Niu Taiyuan Univ. of Science and Tech.
Xuejuan Shao Taiyuan Univ. of Science and Tech.
Liangliang Zhou Taiyuan Heavy Industry Co., Ltd.
Zhicheng Zhao Taiyuan Univ. of Science and Tech.
Jinggang Zhang Taiyuan Univ. of Science and Tech.

Monday, 18 May, 2026

MonA01 Room01

Industrial big data and industrial artificial intelligence (1) 08:00-10:00

Chair: Di Fan Northeastern Univ.
Co-Chair: Jianguyue Liu Northeast Petroleum Univ.

08:00-08:20 MonA01-1

LLDNoC: A Low-Latency Dual-NoC Architecture Enhanced with Linked-List-Based Broadcasting Protocol for AI Accelerators

Jiaxin Ma Southeast Univ.
Dan Niu Southeast Univ.
Huatao Zhao Beijing Inst. of Open Source Chip
Junhong Ma Beijing Inst. of Open Source Chip
Shuai Yuan Southeast Univ.
Yanlan Yang Southeast Univ.

08:20-08:40 MonA01-2

Production Forecasting for Water-Flooding Oilfields Based on MR-STGormer

Jianguyue Liu Northeast Petroleum Univ.
Yanchun Li Northeast Petroleum Univ.
Suling Wang Northeast Petroleum Univ.
Kangxing Dong Northeast Petroleum Univ.
Ruyi Qu Northeast Petroleum Univ.
Mengyang Zhang Northeast Petroleum Univ.

08:40-09:00 MonA01-3

FFD-YOLO: Towards Lightweight and Accurate Flame Detection in Petrochemical Scenarios with an Enhanced YOLOv8n

Yuhang Guo Shanghai Jiao Tong Univ.
 Wenqing Gao China Petroleum and Chemical Corp.
 Yuanlong Li Shanghai Jiao Tong Univ.

09:00-09:20

MonA01-4

Wall Thickness Prediction of Rotary Kilns Using a Hybrid Improved TabNet and Mechanism Model

Yuntao Zhao Wuhan Univ. of Science and Tech.
 Gang Li Wuhan Univ. of Science and Tech.

09:20-09:40

MonA01-5

PCB Defect Detection Based on YOLOv10 with Dual Attention Mechanism

Ying Liu Shenyang Inst. of Computing Tech.,
 Chinese Academy of Sciences
 Univ. of Chinese Academy of Sciences
 Shenyang Inst. of Tech.
 Liaomo Zheng Shenyang Inst. of Computing Tech., Chinese
 Academy of Sciences
 Univ. of Chinese Academy of Sciences
 Shenyang Inst. of Computing Tech.,
 Chinese Academy of Sciences
 Zhipeng Zhang Univ. of Chinese Academy of Sciences

09:40-10:00

MonA01-6

Skillful Electricity Theft Detection of Massive Customers via Fusing Spatio-Temporal Information

Mengyuan Zhang Huazhong Univ. of Science and Tech.
 Zixuan Chen Huazhong Univ. of Science and Tech.
 Jiang-Wen Xiao Huazhong Univ. of Science and Tech.
 Yan-Wu Wang Huazhong Univ. of Science and Tech.
 Pengcheng Li Huazhong Univ. of Science and Tech.

MonA02

Room02

Industrial big data and industrial artificial intelligence (2)

08:00-10:00

Chair: Anqi Fu Beijing Univ. of Tech.
 Co-Chair: Wen Shi Nanjing Univ. of Aeronautics and Astronautics

08:00-08:20

MonA02-1

A Lightweight Period-Trend Decomposition Dual-Branch Anomaly Detection Method for Water Supply Network

Anqi Fu Beijing Univ. of Tech.
 Yongkun Wang Beijing Univ. of Tech.
 Junfei Qiao Beijing Univ. of Tech.

08:20-08:40

MonA02-2

AFIG-Based Structural Similarity Framework for Unsupervised Time Series Anomaly Detection

Pengfei Zhang Zhejiang Univ.
 Nanjing Engineering Inst. of Aircraft Systems, AVIC
 Wen Shi Nanjing Univ. of Aeronautics and Astronautics
 Nanjing Engineering Inst. of Aircraft Systems, AVIC
 Lingyun Sun Aviation Key Laboratory of Science and Tech.
 on Aero Electromechanical System Integration

08:40-09:00

MonA02-3

QminRNN: A Parallelizable Quantum Minimal Recurrent Neural Network for Accurate and Efficient Wind Speed Forecasting

Yuxin Wang Univ. of Science and Tech. of China
 Shuang Cong Univ. of Science and Tech. of China

09:00-09:20

MonA02-4

View Quality-Guided Graph Fusion for Deep Multi-View Clustering

Wenxu Zhang Northwest Minzu Univ.
 Di Hu Northwest Minzu Univ.
 Ruixin Sun Northwest Minzu Univ.
 Mingbo Liu Northwest Minzu Univ.
 Shiqiang Du Northwest Minzu Univ.

09:20-09:40

MonA02-5

Ultra-Short-Term Photovoltaic Power Forecasting Using Ground-Based Cloud Maps with Improved ConvLSTM and U-Net Models

Zhenyu Liang Southeast Univ.
 Kai Wang Southeast Univ.
 Haikun Wei Southeast Univ.
 Jingxin Zhang Southeast Univ.

09:40-10:00

MonA02-6

TLLM: A topological large language model for interpretable classification of 3D workpieces

Xinyao Zhang Hubei Univ. of Automotive Tech.
 Dongsheng Ye Hubei Univ. of Automotive Tech.
 Xinghong Wu Hubei Univ. of Automotive Tech.
 Ruimin Zhang Hubei Univ. of Automotive Tech.
 Haibo Huang Hubei Univ. of Automotive Tech.

MonA03

Room03

Control, optimization, and security of complex networks and systems (1)

08:00-10:00

Chair: Chunshan Yang Guilin Univ. of Aerospace Tech.

08:00-08:20

MonA03-1

Robust centralized fusion Kalman predictors for system with mixed uncertainties of noise variances and multiple networked inducements

Ying Zhao Guilin Univ. of Aerospace Tech.
 Benqin Jing Guilin Univ. of Aerospace Tech.
 Chunshan Yang Guilin Univ. of Aerospace Tech.

08:20-08:40

MonA03-2

Solving Systems of Unconstrained Nonlinear Equations via a Homotopy Algorithm

Hongyu Ji Nanjing Univ. of Posts and
 Telecommunications
 Xiaona Fan Nanjing Univ. of Posts and
 Telecommunications
 Qinglun Yan Nanjing Univ. of Posts and
 Telecommunications
 Min Zeng Nanjing Univ. of Posts and
 Telecommunications

08:40-09:00

MonA03-3

Set-Membership State Estimation for State-Dependent Neural Networks under Quantization and Multi-Channel Round-Robin Protocol

Zhang Yucheng Southwest Univ.
 Haibo Bao Southwest Univ.

09:00-09:20

MonA03-4

General decay H^∞ anti-synchronization of coupled delayed memristive neural networks with hybrid coupling

Yanli Huang Tiangong Univ.
 Wenjing Li Tiangong Univ.
 Aobo Li Tiangong Univ.
 Tse Chiu Wong Univ. of Strathclyde

09:20-09:40

MonA03-5

Binary Code Similarity Detection Based on Semantically Enhanced Abstract Syntax Trees and Attention Mechanisms

Zhou Zhou Southeast Univ.
 Tiejun Wu Southeast Univ.
 Ya Zhang Southeast Univ.

09:40-10:00

MonA03-6

Resilient Consensus Control of Multi-Agent Systems Under Multiple Attacks

Junxia Wu Southeast Univ.
 Haofei Meng Southeast Univ.

MonA04

Room04

Control, optimization, and security of complex networks and systems (2)

08:00-10:00

Chair: Lei Wang Beihang Univ.
 Co-Chair: Jiajia Li Xi'an Univ. of Architecture and Tech.

08:00-08:20

MonA04-1

Automated Synthesis of Lyapunov Functions for Multi-Agent Systems under Jointly Connected Topology

Shuyuan Zhang UCLouvain
 Lei Wang Beihang Univ.
 Guo Wang Wuhan Univ. of Science and Tech.

08:20-08:40

MonA04-2

Motor Decision State Recognition in Simulated Driving Based on High-Order Network Dynamics

Xin Liu Xi'an Univ. of Architecture and Tech.
 Fan Li Xi'an Univ. of Architecture and Tech.
 Jiajia Li Xi'an Univ. of Architecture and Tech.

08:40-09:00

MonA04-3

Effects of Spatial Scale on EEG-Based Perceptual Dynamics: A Complex Network and LSTM-MLP Hybrid Model Study

Tian Guo Xi'an Univ. of Architecture and Tech.
 Wuyun Pan Xi'an Univ. of Architecture and Tech.
 Jiajia Li Xi'an Univ. of Architecture and Tech.

09:00-09:20

MonA04-4

Study on Flickering Light-Assisted Simulated Driving State Recognition Based on High-Order Brain Network and LSTM

Fan Li Xi'an Univ. of Architecture and Tech.
 inxia Liu Xi'an Univ. of Architecture and Tech.
 Jiajia Li Xi'an Univ. of Architecture and Tech.

09:20-09:40

MonA04-5

Hybrid-Domain Set Stabilization of State-Triggered Impulsive Logical Control Networks with Input Constraints

Jia Ye	Nanchang Univ.	Robust Model Predictive Control of Furnace Temperature in Municipal Solid Waste Incineration Process	
Rongpei Zhou	Nanchang Univ.	Xin Liu	Beijing Univ. of Tech.
		Aijun Yan	Beijing Univ. of Tech.
09:40-10:00	MonA04-6	08:40-09:00	MonA06-3
Event-triggered Data-Driven Iterative Learning Safety Control for Nonlinear Networked Systems With Communication Delays		Ship Automatic Berthing Control Using Heuristic Dynamic Programming with Parameterized Trajectory	
Jiayin Fang	Zhongyuan Univ. of Tech.	Huaheng Xu	Dalian Maritime Univ.
Yifei wang	Zhongyuan Univ. of Tech.	Junsheng Ren	Dalian Maritime Univ.
Lijie You	Zhongyuan Univ. of Tech.	Junshen Chen	Dalian Maritime Univ.
Daolin Wen	Zhongyuan Univ. of Tech.	Jie Li	Dalian Maritime Univ.
Yongzheng Liu	Zhongyuan Univ. of Tech.	Qingjie Sun	Dalian Maritime Univ.
MonA05	Room05	09:00-09:20	MonA06-4
Operational optimization and decision-making (2)	08:00-10:00	An Improved Hippopotamus Optimization Based Fuzzy IMC-PID Temperature Control Algorithm	
Chair: Dongdong Mu	Dalian Maritime Univ.	Hao Luan	Shanghai Univ.
Co-Chair: Zhi-ming Chen	HuiZhou Univ.	Minrui Fei	Shanghai Univ.
08:00-08:20	MonA05-1	Yonghui Chen	Shanghai Univ.
Cluster Analysis and Application of Intelligent Heating Users Based on K-Means Algorithm		09:20-09:40	MonA06-5
Yaxuan Wang	Dalian Maritime Univ.	PMSM Position Sensorless Control Based on Improved Active Disturbance Rejection Control with Parallel Adaptive Harmonic Filters	
Yilin Han	Dalian Clean Energy Group	Guanghao Chen	Huazhong Univ. of Science and Tech.
Ruchang Yin	Shandong Purui Machinery Technology Co., Ltd.	Yin Quan	Huazhong Univ. of Science and Tech.
Yongwei Lin	Tianjin Hongtu Aviation Technology Group Co., Ltd	09:40-10:00	MonA06-6
Dongdong Mu	Dalian Maritime Univ.	Experimental Comparison of LQR and Predictive Control for a Networked Double Inverted Pendulum	
Jin Huang	Dalian Maritime Univ.	Mengkang Wang	Beijing Univ. of Chemical Tech.
08:20-08:40	MonA05-2	Xuzheng Chen	Beijing Univ. of Chemical Tech.
Optimization Algorithm for PCB Assembly Based on Improved Genetic Algorithm		Yukun Shi	Beijing Univ. of Chemical Tech.
Fuheng Cheng	HuiZhou Univ.	Youqing Wang	Beijing Univ. of Chemical Tech.
Zhen Tan	HuiZhou Univ.	MonA07	Room07
Zhi-ming Chen	HuiZhou Univ.	Control theory and control technology (15)	08:00-10:00
08:40-09:00	MonA05-3	Chair: Wei Liu	South China Univ. of Tech.
Mission Planning for Super-Agile Satellite Imaging of Area Targets Based on Optimal Strip Partitioning		Co-Chair: Manli Zhang	Wuhan Univ. of Science and Tech.
Xiongzi Chen	DFH Satellite Co., Ltd., China Academy of Space Tech.	08:00-08:20	MonA07-1
Hongtao Cui	DFH Satellite Co., Ltd., China Academy of Space Tech.	Output Voltage Tracking for DC-DC Buck Converters via Sampled-Data Control	
Qiang Wang	DFH Satellite Co., Ltd., China Academy of Space Tech.	Di Guo	South China Univ. of Tech.
Xiaohan Sun	DFH Satellite Co., Ltd., China Academy of Space Tech.	Wei Liu	South China Univ. of Tech.
Lipeng Chai	DFH Satellite Co., Ltd., China Academy of Space Tech.	08:20-08:40	MonA07-2
Yue Liu	DFH Satellite Co., Ltd., China Academy of Space Tech.	Position tracking control of PMSM: Adaptive modified repetitive control with cogging torque compensation	
09:00-09:20	MonA05-4	Chenxi Jia	Wuhan Univ. of Science and Tech.
Research on an Intelligent Optimization Method for the Cement Clinker Calcination Process Based on IGWO		Manli Zhang	Wuhan Univ. of Science and Tech.
Rongfeng Zhang	Univ. of Jinan	Shaowu Lu	Wuhan Univ. of Science and Tech.
Hongliang Yu	Univ. of Jinan	08:40-09:00	MonA07-3
Xiaohong Wang	Univ. of Jinan	Leader-following Output-consensus of Heterogeneous Discrete-time Descriptor Multi-agent Systems	
Jinguo Sang	Shandong Jinruan Science and Tech. Co., Ltd	Shuai Su	Jiangnan Univ.
09:20-09:40	MonA05-5	Cheng-Lin Liu	Jiangnan Univ.
Capacity Expansion Planning with Flexible Large-Scale Load Scheduling		09:00-09:20	MonA07-4
Mr Abdullah	Southeast Univ.	A Deep Neural Network-Based Secure Neighbor-Consensus Time Synchronization Protocol for Wireless Sensor Networks	
Yuting Mou	Southeast Univ.	Pinggeng Tan	Shenyang Univ. of Tech.
09:40-10:00	MonA05-6	Hui Zhao	Shenyang Univ. of Tech.
An Enhanced Ant Colony Algorithm for Prioritized Inspection Path Planning in Obstacle Environments and Its Validation		Jun Lu	Northeastern Univ.
Le He	Civil Aviation Flight Univ. of China	Tianqi Yang	CRRC Dalian R&D Co., Ltd.
Xijun Liu	Civil Aviation Flight Univ. of China	Yuan Zhao	Dalian Univ.
Zixian Liu	Civil Aviation Flight Univ. of China	Xuewu Dai	Northumbria Univ.
Zhaoyang Li	Civil Aviation Flight Univ. of China	09:20-09:40	MonA07-5
Zelin Chen	Civil Aviation Flight Univ. of China	Course tracking and simulation of unmanned amphibious platform based on adaptive fuzzy sliding mode control	
Yiwen Zhang	Civil Aviation Flight Univ. of China	Lilong Gao	Army Arms Univ. of PLA
MonA06	Room06	Wenfeng Jiang	Army Arms Univ. of PLA
Advanced control and predictive control (3)	08:00-10:00	Xianghe Jing	Army Arms Univ. of PLA
Chair: Shigen Gao	Beijing Jiaotong Univ.	Bin Zhao	Army Arms Univ. of PLA
Co-Chair: Xin Liu	Beijing Univ. of Tech.	Zhuo Zhang	Army Arms Univ. of PLA
08:00-08:20	MonA06-1	Lingcun Meng	Army Arms Univ. of PLA
Entropy-Driven Adaptive Control With Mode Switching for Heavy-Haul Train Systems		09:40-10:00	MonA07-6
Kexing Yan	Beijing Jiaotong Univ.	Path Planning and Trajectory Tracking Control for Fixed-Wing UAV in Multi-Phase Missions	
Shigen Gao	Beijing Jiaotong Univ.	Chen Sun	Yantai Univ.
Zhao Sheng	Beijing Jiaotong Univ.	Likang Feng	Yantai Univ.
Jidong lv	Beijing Jiaotong Univ.	Zhaojing Wu	Yantai Univ.
Hongwei Wang	Beijing Jiaotong Univ.	MonA08	Room08
08:20-08:40	MonA06-2	Control theory and control technology (16)	08:00-10:00
		Chair: Zhenwei Liu	Northeastern Univ.

Co-Chair: Qiang Li	Univ. of Science and Tech. Beijing	Canyu Jin	Beihang Univ.
		Zewei Zheng	Beihang Univ.
		Tianyu Feng	Beihang Univ.
08:00-08:20	MonA08-1	09:40-10:00	MonA09-6
Weak state synchronization of homogeneous multi-agent systems with adaptive protocols		Anti-Disturbance Control for SGCMG Servo Systems Based on Discrete Adaptive Integral Sliding Mode Control	
Anton A. Stoorvogel	Univ. of Twente	Xingyu Zhou	Nanjing Univ. of Posts and Telecommunication
Ali Saberi	Washington State Univ.	Yingjiang Zhou	Nanjing Univ. of Posts and Telecommunication
Zhenwei Liu	Northeastern Univ.	Guoping Jiang	Nanjing Univ. of Posts and Telecommunication
Tayaba Yeasmin	Washington State Univ.	Fengyu Xu	Nanjing Univ. of Posts and Telecommunication
08:20-08:40	MonA08-2	Ming Lu	Beijing Inst. of Control Engineering
Finite-time synchronization of Cohen-Grossberg neural networks with unknown parameters base on fault-tolerant control		MonA10	Room10
Qiang Li	Tianjin College, Univ. of Science and Tech. Beijing	Intelligent perception, synergic decision-making, and security for robots and unmanned systems (6)	08:00-10:00
Yuejiao Zhang	Tianjin College, Univ. of Science and Tech. Beijing	Chair: Peng Ji	Northeastern Univ.
08:40-09:00	MonA08-3	Co-Chair: Lizuo JIN	Southeast Univ.
Adaptive Neural Network Based Prescribed Performance Sliding Mode Control for UAV Attitude Dynamics		08:00-08:20	MonA10-1
Han Zhang	Bohai Univ.	Instance-Based Semantic Map Registration for Multi-Robot Systems	
Jiaxing Yang	Harbin Inst. of Tech.	Yuze Liu	Northeastern Univ.
Xiaolong Zheng	Harbin Inst. of Tech.	Peng Ji	Northeastern Univ.
Xuebo Yang	Harbin Inst. of Tech.	Yunhe Wang	Northeastern Univ.
09:00-09:20	MonA08-4	Liuyang Song	Northeastern Univ.
Adaptive Dynamic Programming Optimal Control Based on Prescribed Performance		08:20-08:40	MonA10-2
Mengying Shi	Bohai Univ.	UAV-ByteTrack: A Hybrid Matching Strategy for Robust Multi-Object Tracking in UAV Videos	
Jiaxing Yang	Harbin Inst. of Tech.	Zixuan Xu	Southeast Univ.
Xiaolong Zheng	Harbin Inst. of Tech.	Lizuo Jin	Southeast Univ.
Xuebo Yang	Harbin Inst. of Tech.	08:40-09:00	MonA10-3
09:20-09:40	MonA08-5	Key Object Detection Algorithm in Subway Tunnels Based on YOLOv8n-HAF Model	
Gaussian Kalman Filter based on SoD Event-triggered Mechanism under Hybrid Cyber Attacks		Chuxuan Yuan	Huazhong Univ. of Science and Tech.
Zhiwei Liu	Heilongjiang Univ.	Gao Longfei	Huazhong Univ. of Science and Tech.
Runheng Zhang	Heilongjiang Univ.	Zhigang Sun	Huazhong Univ. of Science and Tech.
Xuenan Zhang	Heilongjiang Univ.	Li Xiao	Huazhong Univ. of Science and Tech.
Wenbin Yang	Heilongjiang Univ.	09:00-09:20	MonA10-4
Mingyue Li	Heilongjiang Univ.	A Simulated Multi-Sensor SLAM Dataset for Robotic Exploration in Planetary-Like Environments	
Yuan Gao	Heilongjiang Univ.	Haosong Yue	Beihang Univ.
09:40-10:00	MonA08-6	Qingyuan Xu	Beihang Univ.
A Distributed Prescribed-Time Consensus Protocol with Prescribed Performance for Multi-Agent Systems		Haonan Liu	Beihang Univ.
Xiaochen Li	Taiyuan Univ. of Science and Tech.	Jing Zhang	Beihang Univ.
Jianan Wang	Taiyuan Univ. of Science and Tech.	Zhong Liu	Beihang Univ.
MonA09	Room09	Weihai Chen	Beihang Univ.
Control theory and control technology (17)	08:00-10:00	09:20-09:40	MonA10-5
Chair: Yuan Tan	Hubei Normal Univ.	Embedded-based multimodal motion perception and real-time data acquisition system for unmanned motorcycle	
Co-Chair: Donghui Wu	Dalian Univ. of Tech.	Qiyu Guan	Zhengzhou Univ.
08:00-08:20	MonA09-1	Yulong Yan	Zhengzhou Univ.
Distributionally Robust Model Predictive Control with Survival-Probability-Based Control Barrier Functions		Yaping Fang	Zhengzhou Univ.
Yuan Tan	Hubei Normal Univ.	Yanhong Liu	Zhengzhou Univ.
Xisheng Zhan	Hubei Normal Univ.	09:40-10:00	MonA10-6
Tao Han	Hubei Normal Univ.	PPO-Based 3D Continuous Policy Learning for an Unmanned Helicopter	
Jinhao Liu	China Univ. of Mining and Tech.	Hengzhi Wei	Nanjing Univ. of Aeronautics and Astronautic
Jun Yang	Loughborough Univ.	Ke Zhang	Nanjing Univ. of Aeronautics and Astronautic
Shihua Li	Southeast Univ.	Bin Jiang	Nanjing Univ. of Aeronautics and Astronautic
08:20-08:40	MonA09-2	MonA11	Room11
State Constrained Optimal Tracking Control Under Zero-Sum Game for Multi-Agent Systems		Intelligent perception, synergic decision-making, and security for robots and unmanned systems (7)	08:00-10:00
Jingjing Yang	Hangzhou Turbine Power Group	Chair: Xiaojun Long	Shandong Agricultura Univ.
Donghui Wu	Dalian Univ. of Tech.	Co-Chair: Yulong Huang	Harbin Engineering Univ.
Kunzhi Liu	Dalian Univ. of Tech.	08:00-08:20	MonA11-1
08:40-09:00	MonA09-3	Optimal Cutting Positioning and Quantitative Slicing Micromanipulation of Wheat Seeds Based on 3D-Phenotypic Feature Estimation	
Linear Active Disturbance Rejection Controller Parameter Tuning Via a Brain-Motivated Adaptive Particle Swarm Optimization Algorithm		Yang Li	Shandong Agricultural Univ.
Shilong Han	Northwestern Polytechnical Univ.	Yunfei Chen	Shandong Agricultural Univ.
Shaobo Zhai	Northwestern Polytechnical Univ.	Rui Xi	Shandong Agricultural Univ.
09:00-09:20	MonA09-4	Xiaojun Long	Shandong Agricultural Univ.
Reinforcement learning Active Defense Guidance in Multi-agent Target-Attacker-Defender Confrontation		08:20-08:40	MonA11-2
Qiang Qi	National Univ. of Defence Tech.	A Robust Gaussian-Student's t Mixture Distribution-Based Relative Navigation Method	
Mingjie Zhang	National Univ. of Defence Tech.	Junyi Ren	Harbin Engineering Univ.
Taideng Zhan	National Univ. of Defence Tech.	Jianqiang Zhang	Harbin Engineering Univ.
Danpeng Huang	National Univ. of Defence Tech.	Fengchi Zhu	Harbin Engineering Univ.
Yu Guo	National Univ. of Defence Tech.	Yulong Huang	Harbin Engineering Univ.
Jianjun Ma	National Univ. of Defence Tech.	08:40-09:00	MonA11-3
09:20-09:40	MonA09-5		
Nonlinear Disturbance-Estimated Anti-Saturation Adaptive Tracking Control for VTOL Aircraft			

Dynamic Adaptive Task Planning for Multi-Robot Collaborative System

Renluan Hou Beihang Univ.
 Ningbo Gu Beihang Univ.
 Kun Tong Beihang Univ.
 Shengjie Li Beihang Univ.
 Bing Han Beihang Univ.
 Hao Chen Beihang Univ.

09:00-09:20 **MonA11-4**

Enhanced MOTR with Mamba Temporal Modeling and Mask-Guided Appearance Memory

Jianguo Dong Southeast Univ.
 Qingling Wang Southeast Univ.

09:20-09:40 **MonA11-5**

Multi-Instance Active Learning with Spatial-Aware Attention for UAVs Object Detection

Xiuxiu Qi Nankai Univ.
 Hong Kong Polytechnic Univ.
 Hongpeng Wang Nankai Univ.
 Jianping Zong Nankai Univ.
 Hanqian Luo Nankai Univ.

09:40-10:00 **MonA11-6**

Dynamic Cooperative Tracking and Decision-Making Method for Multiple UUVs Based on a Hybrid Strategy

Jinran Tang Wuhan Univ. of Tech.
 Wei Chu China Tobacco Hubei Industrial LLC
 Haoming Chen Wuhan Univ. of Tech.
 Kaidong Xu Wuhan Univ. of Tech.

MonA12 Room12 Intelligent perception, synergic decision-making, and security for robots and unmanned systems (8) 08:00-10:00

Chair: Haochen Zhang Lanzhou Univ. of Tech.
 Co-Chair: Xianghui Cao Southeast Univ.

08:00-08:20 **MonA12-1**

Research on Back-stepping Control of Mobile Robot in Variable Terrain

Bozhi Tian Lanzhou Univ. of Tech.
 Haochen Zhang Lanzhou Univ. of Tech.
 ZhuoYue Zheng Lanzhou Univ. of Tech.
 Jiangning Wen Lanzhou Univ. of Tech.
 JinYan Li Lanzhou Univ. of Tech.
 Weirong Liu Lanzhou Univ. of Tech.
 HaoYang Zhang Lanzhou Univ. of Tech.

08:20-08:40 **MonA12-2**

A Dueling-DDQN-based Joint Path and Speed Control Algorithm for UAV-Assisted Delay-Sensitive Data Collection

Zhicheng Zhou Southeast Univ.
 Xianghui Cao Southeast Univ.

08:40-09:00 **MonA12-3**

PanoDINO: Self-Supervised Boundary-Aware Panoptic Segmentation via Hierarchical and Uncertainty Fusion

Xiao'ang Liu Southeast Univ.
 Lizuo Jin Southeast Univ.

09:00-09:20 **MonA12-4**

ToDeep: A Topology-Factor-Assisted Routing based on Distributed Deep Reinforcement Learning for WANETs

Shiteng Fan Southeast Univ.
 Xianghui Cao Southeast Univ.

09:20-09:40 **MonA12-5**

Contrastive Dual-Level Communication Optimization for Multi-Agent Systems

Qilin Yan National Univ. of Defense Tech.
 Yu Zhang National Univ. of Defense Tech.
 Le Hao National Univ. of Defense Tech.
 Xiaoguang Chen National Univ. of Defense Tech.
 Keyu Zhao National Univ. of Defense Tech.

09:40-10:00 **MonA12-6**

A Network for Depth Completion and Grasping of Transparent Objects Based on Partial Convolution and Attention Mechanisms

Ruian Xia Wuhan Univ. of Science and Tec.
 Tao Zuo Wuhan Univ. of Science and Tec.
 Haoyang Li Wuhan Univ. of Science and Tec.

MonA13 Room13 Advanced sensing and intelligent perception (5) 08:00-10:00

Chair: Zhiming Liu China Railway Siyuan Survey And Design Group Co., LTD
 CO-Chair: Zishuang Pan Naval Aviation Univ.

08:00-08:20 **MonA13-1**

A Direction-Guided Clustering Approach to Extract Structural Planes from Tunnel Face Point Clouds

Zhiming Liu China Railway Siyuan Survey And Design Group Co., LTD
 Xinyu Song China Railway Siyuan Survey And Design Group Co., LTD
 Youyan Bian China Railway Siyuan Survey And Design Group Co., LTD
 Yafei Wang China Railway Siyuan Survey And Design Group Co., LTD
 Qinghui Liu China Railway Siyuan Survey And Design Group Co., LTD

08:20-08:40 **MonA13-2**

Autonomous Guidance Method Based on Proportional Navigation and Visual-Inertial UKF State Estimation

Bing Wan Naval Aviation Univ.
 Zishuang Pan Naval Aviation Univ.
 Shansong Song Naval Aviation Univ.
 Wei Han Naval Aviation Univ.
 Xiangyu Liu Naval Aviation Univ.
 Jie Wang Naval Aviation Univ.

08:40-09:00 **MonA13-3**

Point Cloud Segmentation of Building Doors and Windows Based on Transformer-PointNet++

Duqing Zhao Wuhan Univ. of Science and Tech.
 Funian Li Wuhan Univ. of Science and Tech.
 Zhiming Liu China Railway Siyuan Survey And Design Group Co., LTD
 Xinyu Song China Railway Siyuan Survey And Design Group Co., LTD
 Jiezen Guo Huazhong Univ. of Science and Tech.

09:00-09:20 **MonA13-4**

TWR-Pose3D: Through-Wall Radar Based 3D Human Pose Estimation with Dual-Stage Temporal and View Fusion

Ailing Kong Nanjing Univ. of Posts and Telecommunications
 Hengyu Gu Nanjing Univ. of Posts and Telecommunications
 Xueya Yan Nanjing Univ. of Posts and Telecommunications
 Jian Guo Nanjing Univ. of Posts and Telecommunications

09:20-09:40 **MonA13-5**

A Chinese Medical Speech Recognition and Intelligent Error Correction System for Obstetrics and Gynecology Clinical Scenarios

Jiajie Pang Ningxia Inst. of Science and Tech.
 Shunqing Jiang Ningxia Inst. of Science and Tech.
 Yixiang Ding Northeastern Univ.
 Xiaopeng Zhang Northeastern Univ.
 Hexiao Li Northeastern Univ.
 Tong Wang Northeastern Univ.
 Qinghua Liu Northeastern Univ.
 Shang Gao Northeastern Univ.

09:40-10:00 **MonA13-6**

FreqFusion: A Model-Agnostic Adversarial Detector for Speaker Recognition via Dual-Frequency Attention

Zhenpeng Li Fudan Univ.
 Jingwei Bian Shanghai FuhuixingTechnology Co. Ltd
 Peng Zhai Fudan Univ.
 Mingyang Sun Fudan Univ.
 Wei Li Fudan Univ.
 Lihua Zhang Fudan Univ.

MonA14 Room14 Security and intelligence of cyber-physical systems (1) 08:00-10:00

Chair: Heng Wang Univ. of Science and Tech. Beijing
 Co-Chair: Tengfei Li Foshan Univ.

08:00-08:20 **MonA14-1**

Fixed-Time Formation Control for Multi-Robot Systems with Actuator Faults

Zixuan Zhao Univ. of Science and Tech. Beijing
 Yize Rui Univ. of Science and Tech. Beijing
 Ke Yan Univ. of Science and Tech. Beijing
 Jiayi Lei Univ. of Science and Tech. Beijing
 Heng Wang Univ. of Science and Tech. Beijing

08:20-08:40 **MonA14-2**

Security Control for Parabolic PDE Cyber-Physical Systems Under Stealthy FDI Attacks

Jingzhao Chen SIAS Univ.
 Yicai Liu Wuhan Univ. of Science and Tech.
 Tengfei Li Wuhan Business Univ.
 Jiahuan Xue Foshan Univ.
 SIAS Univ.

08:40-09:00 **MonA14-3**

The optimal collaborative multi-attack strategy in cyber-physical systems with multiple channels under energy constraints

Jing Bai Shenyang Univ. of Tech.
Yigang Li Shenyang Univ. of Tech.
Xuan Liu Shenyang Univ. of Tech.

09:00-09:20 MonA14-4

A Framework for Automated Cyber Threat Intelligence Extraction Based on Knowledge Graph

Xinyu Liu Sichuan Police College
Ying Tian Sichuan Police College
Liu Tang Guangyuan Public Security Bureau
Shouyuan Zeng Guangyuan Public Security Bureau

09:20-09:40 MonA14-5

Low-Computation Secure Control of Networked Control Systems Under Random Deception Attacks: An ET-AD Scheme

Jiahui Li Qufu Normal Univ.
Weiwei Sun Qufu Normal Univ.
Zhuangzhuang Luan Qufu Normal Univ.

09:40-10:00 MonA14-6

Fault and Attack Collaborative Detection in Cyber-Physical Systems With Deceptive Attacks

Geng Li Information Support Force Engineering Univ.
Xiangyu Ding Information Support Force Engineering Univ.
Huangqing Chen Information Support Force Engineering Univ.

MonA15 Room15
Intelligent decision-making systems and applications (6)08:00-10:00

Chair: Hongzhi Sun Liaoning Earthquake Agency
Co-Chair: Ji Luo China Telecom Digital Intelligence Tech. Co., Ltd.

08:00-08:20 MonA15-1

An Intelligent Power Supply System for Seismic Stations Based on Energy-Saving Techniques and Battery State Detection

Hongzhi Sun Liaoning Earthquake Agency
Yimei Sun Liaoning Earthquake Agency
Qingqin Dai Liaoning Earthquake Agency
Fei Luo Liaoning Earthquake Agency
Lei Zhao Liaoning Earthquake Agency
Qiao Wang Liaoning Province Data Center
Qi Wang Northeastern Univ.
Fei Gong Tianyuan TimesAutomation Instrumentation C O.Ltd

08:20-08:40 MonA15-2

An Intelligent Control Method for Rehabilitation Diagnosis and Treatment Processes Based on Large Language Models and ICF

Ji Luo China Telecom Digital Intelligence Tech. Co., Ltd.
Sitong Tao China Telecom Digital Intelligence Tech. Co., Ltd.
Haibin Zhi China Telecom Digital Intelligence Tech. Co., Ltd.
Chuxi Xie CITIC Aibank Corporation Limited

08:40-09:00 MonA15-3

Multi-Objective Voltage Optimization via Deep Reinforcement Learning Based Load Control in New Energy Distribution Networks

Feng Yu Wuhan Univ. of Science and Tech.
Peng Wang Wuhan Univ. of Science and Tech.
Zeyi Lu Wuhan Univ. of Science and Tech.
Cong Liu Wuhan Univ. of Science and Tech.

09:00-09:20 MonA15-4

Offline Goal-Conditioned RL with Analytical-Learning Synergy

Yifei Xia Dalian Maritime Univ.
Kai Zheng Dalian Maritime Univ.
Fengbei Guo Dalian Maritime Univ.
Yi Jiang Dalian Maritime Univ.
Jinqi liu Dalian Maritime Univ.

09:20-09:40 MonA15-5

Competitive Multi-Task Algorithm Based on Dynamic Resource Allocation for Solving Car Side Impact Design Problems

Kunru Guo Xi'an Univ. of Posts and Telecommunications
Hongye Li Xi'an Univ. of Posts and Telecommunications

09:40-10:00 MonA15-6

Isolation-based Aggregation Method with Detecting the Majority Anomaly Evidence

Changhong Huo CNPC Project Management Company Tianjin Inst.
Le Chang Nanjing Univ.
Ting Yu CNPC Project Management Company Tianjin Inst.
Sheng Zhong CNPC Project Management Company Tianjin Inst.

MonAIS Interactive Session Room PT 08:00-10:00

MonAIS-01

Event-Triggered Explicit Time Attitude Control for Formation Consensus of Quadrotor UAVs

Shihao Xu Nanjing Univ. of Posts and Telecommunications
Yingjiang Zhou Nanjing Univ. of Posts and Telecommunications
Ming Lu Beijing Inst. of Control Engineering
Zhihui Liu Nanjing Univ. of Posts and Telecommunications

MonAIS-02

Model Predictive Trajectory Tracking Control for an Omnidirectional Walking Rehabilitation Robot Based on Laguerre Function Parameterization

Yiling Zhu Shenyang Univ. of Tech.
Hongbin Chang Shenyang Univ. of Tech.
Yan Wang Shenyang Univ. of Tech.

MonAIS-03

Research on the Control System of Fault Repair Robots for Transmission Line

Yanmei Liu Shenyang Aerospace Univ.
Yingbo Wang Shenyang Aerospace Univ.
Zhen Chen Liaoning Power Transmission and Transformation Engineering Co., Ltd.

MonAIS-04

Control Allocation for a Class of High-speed Aircraft Based on Improved Cuckoo Search Algorithm

Yao Lu National Key Laboratory of Science and Tech. on Aerospace Intelligence Control
Tianpeng Lan Beijing Aerospace Automatic Control Inst. National Key Laboratory of Science and Tech. on Aerospace Intelligence Control
Xiaodong Liu Beijing Aerospace Automatic Control Inst. National Key Laboratory of Science and Tech. on Aerospace Intelligence Control
Dizhi Long Beijing Aerospace Automatic Control Inst. National Key Laboratory of Science and Tech. on Aerospace Intelligence Control
Jingyuan Li Beijing Aerospace Automatic Control Inst. National Key Laboratory of Science and Tech. on Aerospace Intelligence Control
Beijing Aerospace Automatic Control Inst.

MonAIS-05

Gait Planning and Hybrid Control in Stair Ascent of a Wheeled Quadraped Humanoid Robot

Xiyuan Li Yantai Univ.
Chunhua Feng Yantai Univ.
Kun Li Yantai Univ.
Yunsong Li Beijing Univ. of Tech.

MonAIS-06

Adaptive Integral Sliding Mode Consensus Control for Multi-Agent Systems with Matched Disturbances and Markov Switching Topology

Xuedong Wen Lanzhou Univ. of Tech.
Zhiwen Wang Lanzhou Univ. of Tech.

MonAIS-07

A Homotopy Method for Discrete-time Linear System LQR Control Based on Policy Iteration

Lu Guo Shandong Normal Univ.
Zhongmei Wang Shandong Normal Univ.
Zhenhua Wang Shandong Normal Univ.

MonAIS-08

Optimal Strategies for the Moving Target Defense Problem with Superior Attacker

Jingyu Wang Beijing Inst. of Electronic System Engineering
Yiqun Zhang Beijing Inst. of Electronic System Engineering

MonAIS-09

Output Interval Estimation Method for N-TS Fuzzy Model With MFD L Performance

Xueyuan Zhang North Minzu Univ.
Juntao Pan North Minzu Univ.
Xiangyuan Bian North Minzu Univ.

MonAIS-10

Design of H_∞ Controller for DC microgrid based on event triggered time delay and uncertainty

YiMing Zhou Hunan Univ. of Tech.
Shenping Xiao Hunan Univ. of Tech.
Xiangming Zheng Changsha Univ. of Science and Tech. Hunan Univ. of Tech.
Bowie Ye Hunan Univ. of Tech.
Ling Meng Changsha Univ. of Science and Tech.

<p>MonAIS-11 <i>Event-Triggered Fault-Tolerant Control and Disturbance Rejection for Impulsive Switched Systems with Periodic Faults</i> Jiran Yang Owen Oteng Ranko Chulin Hu Weiling Yang Guochen Pang</p>	<p>Linyi Univ. Linyi Univ. Linyi Univ. Linyi Univ. Linyi Univ.</p>	<p>MonAIS-23 <i>Comprehensive Evaluation of Total Factor Productivity in Water Resource Utilization of the Guangdong-Fujian-Zhejiang Urban Agglomeration and Its Optimization Strategies</i> Yuan Hu Jinliang Huang</p>	<p>Xiamen Univ. Xiamen Univ.</p>
<p>MonAIS-12 <i>Self-Tuning Kalman Fusion Filter for Multi-Sensor Discrete Generalized Systems</i> Xu Chen Ying Shi</p>	<p>Heilongjiang Univ. Heilongjiang Univ.</p>	<p>MonAIS-24 <i>Flexible Load Regulation for Non-Industrial Users Based on Multi-Agent Reinforcement Learning</i> Wei Li Long Chen Zicheng Li Hou-Neng Wang</p>	<p>Wuhan Inst. of Tech. Wuhan Inst. of Tech. Wuhan Inst. of Tech. Wuhan Inst. of Tech.</p>
<p>MonAIS-13 <i>Event-Triggered-Based Disturbance Rejection Distributed Secondary Control for DC Microgrids</i> Yiwei Feng Ruochen He</p>	<p>Lanzhou Univ. of Tech. Lanzhou Univ. of Tech.</p>	<p>MonAIS-25 <i>Coverage Domain and Intersection Judgment Analysis of Charged Particle Beam Delivery in Geomagnetic Field</i> Ang Li Yuan-wen Zhang Huan Huang Zhouning Chen Yangzhong Xu</p>	<p>National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech.</p>
<p>MonAIS-14 <i>Optimizing Broad Learning System with Chaotic Evolution for Electrocardiogram Signal Classification</i> Qirui Wei Jiejie Chen Ping Jiang Yihe Zhu Zhiwei Xiao Bin Wei</p>	<p>Hubei Normal Univ. Hubei Normal Univ. Hubei Polytechnic Univ. Hubei Normal Univ. Hubei Normal Univ. Hubei Normal Univ.</p>	<p>MonAIS-26 <i>Optimal Deployment of Radar Networks for Countering UAVs in Complex Terrain</i> Rui Guo Yiwen Cao Jianming Guo Xuezhu Shi Weizong Li Zhenghu Liang</p>	<p>Taiyuan Satellite Launch Center Taiyuan Satellite Launch Center Taiyuan Satellite Launch Center Taiyuan Satellite Launch Center Taiyuan Satellite Launch Center Taiyuan Satellite Launch Center</p>
<p>MonAIS-15 <i>Research on Online Trajectory Optimization and Tracking Guidance Methods for Formation Phase of Reentry Vehicles</i> GongRong Ma Huabin Li Ling Li Yichuan Zhu</p>	<p>Beijing Aerospace Automatic Control Inst. Beijing Aerospace Automatic Control Inst. Beijing Aerospace Automatic Control Inst. Beijing Aerospace Automatic Control Inst.</p>	<p>MonAIS-27 <i>Data-Driven Adaptive Swing-Up Control for Robotic Manipulators with Low Structural Stiffness and Inertial Uncertainties</i> Yaofa Wei Wanyu Gao He Zhang Yongli Zhang</p>	<p>Tianjin Univ. of Tech. and Education Tianjin Univ. of Tech. and Education Tianjin Univ. of Tech. and Education Tianjin Univ. of Tech. and Education</p>
<p>MonAIS-16 <i>Adaptive Neural Network Prescribed Performance Attitude Control for Servicing Spacecraft under Actuator Saturation</i> Chen Xu Xinghui Zhai Shan Lu</p>	<p>Shanghai Aerospace Control Tech. Inst. Shanghai Aerospace Control Tech. Inst. Shanghai Aerospace Control Tech. Inst.</p>	<p>MonAIS-28 <i>Finite-Dimensional Observer-Based Sampled-Data Intermittent Boundary Control for Parabolic DPSS</i> Yuhang Chang Jie Lian Renzhi Zhang</p>	<p>Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech.</p>
<p>MonAIS-17 <i>Deadbeat Predictive Control Based on Integral Quasi-sliding Mode for LC-filtered Voltage Source Inverters</i> Zhao-Xin Ge Cheng-Lin Liu</p>	<p>Jiangnan Univ. Jiangnan Univ.</p>	<p>MonAIS-29 <i>Optimal Control of Discrete-Time Switched Systems Based on Input-Output Data Using Adaptive Dynamic Programming</i> Zhanghong Xu Jie Lian Peilin Jia Renzhi Zhang</p>	<p>Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech.</p>
<p>MonAIS-18 <i>Distributed fusion filter for systems with random parameter matrices and time-correlated measurement noises</i> Jing Chen Fengtao Hu Yufei Wang Jing Ma</p>	<p>Heilongjiang Univ. Heilongjiang Univ. Heilongjiang Univ. Heilongjiang Univ.</p>	<p>MonAIS-30 <i>Stabilization of Discrete-Time Infinite Markov Jump Systems with Indefinite Cost Weights</i> Mengping Sun Yuyeing Liu Wang Zhen Xiangyun Lin</p>	<p>Shandong Univ. of Science and Tech. Shandong Univ. of Science and Tech. Shandong Univ. of Science and Tech. Shandong Univ. of Science and Tech.</p>
<p>MonAIS-19 <i>Research on Collaborative Strategies of Cold Region Energy Supply Chains Based on Evolutionary Game Theory</i> Taiguang Gao Yaohan Chen Xiaoxiao Jin Yukun Wang</p>	<p>Heilongjiang Univ. of Science and Tech. Heilongjiang Univ. of Science and Tech. Heilongjiang Univ. of Science and Tech. Heilongjiang Univ. of Science and Tech.</p>	<p>MonAIS-31 <i>Cascade Linear Active Disturbance Rejection Trajectory Tracking Control of Fixed-Wing Aircraft</i> Hanlin Pi Jiao-Yang Zhang Bo Wang Huijin Fan Lei Liu</p>	<p>Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.</p>
<p>MonAIS-20 <i>A Three-Layer Operations Optimization Framework for O2O Catering Merchants</i> Xuwang Zhang Bingzhen Jiang Qize Li</p>	<p>Hangzhou Dianzi Univ. Hangzhou Dianzi Univ. Hangzhou Dianzi Univ.</p>	<p>MonAIS-32 <i>PI-DeepONet-based Backstepping Controller for the Reaction-Diffusion Equation</i> Zhibo Zheng Jiaqi Zhong</p>	<p>Chongqing Univ. of Posts and Telecommunications Chongqing Univ. of Posts and Telecommunications</p>
<p>MonAIS-21 <i>Decision-Making Method of Equipment Scheduling Based on Graph Model for Conflict Resolution</i> Zihui Liu Zhichao Feng Zhijie Zhou Bingfeng Ge</p>	<p>Rocket Force Univ. of Engineering Rocket Force Univ. of Engineering Rocket Force Univ. of Engineering National Univ. of Defense Tech.</p>	<p>MonAIS-33 <i>Robust Motion Control of Unmanned Surface Vehicles via Smooth Disturbance Compensation</i> Teng Cao Yujie Wang Fengqin Liu Baodi Guo Yongyuan Xu</p>	<p>Qufu Normal Univ. Qufu Normal Univ. Qufu Normal Univ. Qufu Normal Univ. The Chinese Univ. of Hong Kong</p>
<p>MonAIS-22 <i>Integrated Optimization Design of Flight Test Missions</i> Haowei Wang Haimin Chen Yao Sun Yahui Hu Huiting Wang Heming Dang</p>	<p>Chinese Flight Test Establishment Chinese Test Pilot School Chinese Flight Test Establishment Chinese Flight Test Establishment Chinese Flight Test Establishment Chinese Flight Test Establishment</p>	<p>MonAIS-34</p>	

Smooth Transitional Switched Fuzzy Attitude Control for Quadrotor with a Maneuverable Manipulator

Zhixiang Sun Northeast Forestry Univ.
 Tianhao Yuan Northeast Forestry Univ.
 Jiawei Zhang Northeast Forestry Univ.
 Qngdi Chen Northeast Forestry Univ.
 Liu Yang Northeast Forestry Univ.
 Ye Liang Northeast Forestry Univ.

MonAIS-35

Global feedback regulation of uncertain nonholonomic systems subject to actuator faults via integral control

Kailong Wang Qilu Univ. of Tech. (Shandong Academy of Sciences)
 Xiandong Chen Qilu Univ. of Tech. (Shandong Academy of Sciences)
 Jinbao Li Qilu Univ. of Tech. (Shandong Academy of Sciences)

MonAIS-36

Visual Tracking Control Based on Depth Estimation Model and Adaptive Dynamic Programming of UAV

Jingcheng Du National Univ. of Defense Tech.
 Guang He National Univ. of Defense Tech.
 Xiangke Wang National Univ. of Defense Tech.

MonAIS-37

Prescribed-time Secondary Control for DC Microgrids: A Node-based Adaptive

Yiwen Teng Xinjiang Univ.
 Haijun Jiang Xinjiang Univ.
 Zhiyong Yu Xinjiang Univ.
 Xuening Xu Xinjiang Univ.
 Hang Zhou Xinjiang Univ.

MonAIS-38

Integrated Inner - Outer Loop Control Architecture Design for High-speed Vehicles

Wentian Nie Beijing Aerospace Tech. Inst.
 Sen Yang Harbin Inst. of Tech.
 JiaBao Li Harbin Inst. of Tech.
 Qiang Wang Harbin Inst. of Tech.
 Baiyang Zhu Beijing Aerospace Tech. Inst.
 Zhenhua Wang Harbin Inst. of Tech.

MonAIS-39

Funnel Control based Optimal Impedance Matching Tracking for WPT System

Jiaming Zhao Univ. of Jinan
 Xudong Gao Nanjing Univ. of Information Science and Tech.
 Lei Wang Shandong Zhuoyue Intelligent Tech.
 Yang Cao Univ. of Jinan
 Shuhui Bi Univ. of Jinan

MonAIS-40

Integrated Attitude and Position Control of Spacecraft Using Control Lyapunov Function

Sirui Jia Harbin Inst. of Tech.
 Tingting Zhang Shanghai Inst. of Space Power-Sources
 Zhenhua Wang Harbin Inst. of Tech.

MonAIS-41

Robust stabilizing control of underactuated bridge crane system based on optimal LQG method

Xiaoyu Wu Linyi Univ.
 Shuli Gong Linyi Univ.
 Junyao Yu Linyi Univ.
 Ancai Zhang Linyi Univ.

MonAIS-42

An Internal Model-Based Robust Tracking Control of Quadrotors with Uncertain Reference Trajectories

He Bu Univ. of Science and Tech. of China
 Xinghu Wang Univ. of Science and Tech. of China

MonAIS-43

Predefined-Time Stabilization of Planar Nonlinear Systems With Time-Varying Output Constraint and Unknown Powers

You Wu Qufu Normal Univ.
 Xue-Jun Xie Qufu Normal Univ.

MonAIS-44

The Interval Banzhaf value for Bicooperative Games

Zhiqiang Li Henan Univ. of Economics and Law
 Sige Chang Henan Univ. of Economics and Law
 Chunguang Wang Henan Univ. of Economics and Law
 Jinli Song Henan Univ. of Economics and Law

MonAIS-45

Energy-Efficient Jumping Trajectory Planning with Soft-Landing Variable Impedance Virtual Model Control for a Wheeled Biped Robot

Xiyuan Li Yantai Univ.
 Tonglin Xu Yantai Univ.
 Yihao Wei Yantai Univ.
 Shengkun Xu Univ. of New South Wales

MonAIS-46

Adaptive event-triggered consensus control of multi-agent systems under false data injection attacks

Manman Yuan Henan Polytechnic Univ.
 Mengmeng Zhang Henan Polytechnic Univ.

MonAIS-47

Nonsingular Terminal Sliding Mode Control for Hybrid Energy Storage System in DC Microgrids Based on High-Order Sliding Mode Observer

ZhaoZhuo Chai Nanjing Univ. of Posts and Telecommunications
 Yuefei Wu Nanjing Univ. of Posts and Telecommunications

MonB01 Room01

Industrial big data and industrial artificial intelligence (3) 10:10-12:10

Chair: Wenting Zha China Univ. of Mining and Tech.
 Co-Chair: Xuejiao Zhang Northeastern Univ.

10:10-10:30 MonB01-1

Research on User Daily Typical Load Profiles Extraction Based on Hybrid Distance

Wenting Zha China Univ. of Mining and Tech. (Beijing)
 Yaqi Shi China Univ. of Mining and Tech. (Beijing)

10:30-10:50 MonB01-2

A lightweight network based on multi-attention mechanisms for metal surface defect detection

Yang Jiang Northeastern Univ.
 Xuejiao Zhang Northeastern Univ.

10:50-11:10 MonB01-3

An Improved RT-DETR for Real-Time Object Detection on Highway Scenes

Zhanyuan Gao Southeast Univ.
 Junyong Zhai Southeast Univ.

11:10-11:30 MonB01-4

Federated Structured Sparse PCA for Anomaly Detection in IoT Networks

Chenyi Huang Shanghai Univ.
 Xianchao Xiu Shanghai Univ.

11:30-11:50 MonB01-5

MambaFace: Mamba-based 3D Face Reconstruction with Feature Fusion and Outlier Segmentation

Yang Jiang Beijing Univ. of Chemical Tech.
 Haijiang Zhu Beijing Univ. of Chemical Tech.

11:50-12:10 MonB01-6

Classification Study of Copper Flotation Ore Attributes based on the multi-modal fusion and multi-scale CNN

Jiasheng Dai North China Univ. of Science and Tech.
 Enchang Dong North China Univ. of Science and Tech.
 Shuai He North China Univ. of Science and Tech.
 Jiaxing Liu North China Univ. of Science and Tech.
 Zheng Yao North China Univ. of Science and Tech.
 Zhiqiang Wang North China Univ. of Science and Tech.

MonB02 Room02

Industrial big data and industrial artificial intelligence (4) 10:10-12:10

Chair: Mengzhi Wang Beijing Univ. of Chemical Tech.
 Co-Chair: Xinguo Wang Southeast Univ.

10:10-10:30 MonB02-1

CDR-KAN: Adaptive Multi-Scale Kolmogorov-Arnold Networks with Meta-Cognitive Routing for Industrial Time-Series Forecasting

Changshun Du Beijing Univ. of Chemical Tech.
 Qingtao Xia Beijing Univ. of Chemical Tech.
 Mengzhi Wang Beijing Univ. of Chemical Tech.
 Yongming Han Beijing Univ. of Chemical Tech.
 Zhiqiang Geng Beijing Univ. of Chemical Tech.

10:30-10:50 MonB02-2

A Dual-Channel Vision-Based Method for Real-Time Load Swing Detection and Anti-Sway Control of Overhead Cranes

Xinguo Wang Southeast Univ.
 Yi Zhang Nanjing Sciyou Wisdom Tech. Group Co., Ltd.
 Dan Niu Southeast Univ.
 Qi Li Southeast Univ.

Minghao Liu Minghan Da Jinjing Tu	Nanjing Sciyou Wisdom Tech. Group Co., Ltd. Southeast Univ. Southeast Univ.	10:30-10:50	MonB04-2
		<i>Stabilization of four-dimensional chaotic systems based on adaptive DE-based control method</i>	
10:50-11:10		Wencheng Liu	Qilu Univ. of Tech. Shandong Academy of Sciences Qilu Univ. of Tech.
<i>PIDAgent: PID Tuning via LLM Agents and RAG</i>		Rongwei Guo	
Yitao Chen Hongye Su Yang Zhu	Zhejiang Univ. Zhejiang Univ. Zhejiang Univ.	10:50-11:10	MonB04-3
		<i>Fault-Diagnosis-Based Multiplex Networks Practical Prescribed-Time Intra-Layer Synchronization Control</i>	
11:10-11:30		Boxiao Liao	Huazhong Univ. of Science and Tech.
<i>DAF-UNet: Dual Domain Attention Guided Adaptive Feature Fusion U-Net for Medical Image Segmentation</i>		Liang Feng	Southern Univ. of Science and Tech.
Zhiyuan Han	Beijing Univ. of Tech.	Haodong Cui	Xinjiang Univ.
Xiaoli Li	Beijing Univ. of Tech.	Mingyu Ma	Xinjiang Univ.
Kang Wang	Beijing Univ. of Tech.	Zhigang Zeng	Huazhong Univ. of Science and Tech.
Guoju Zhang	Beijing Univ. of Tech.		
Zhaohui Liu	Beijing Tongren Hospital	11:10-11:30	MonB04-4
		<i>The Stability Criterion for Security Controller Design for Cyber-Physical Systems against Denial-of-Service Attacks</i>	
11:30-11:50		Jiyanin Fang	Zhongyuan Univ. of Tech.
<i>Multi-Scale Awareness Based 6-DoF Grasp Detection Network in Cluttered Scenes</i>		Yue Hua	Zhongyuan Univ. of Tech.
Wenhao Chen	Fuzhou Univ.	Lijie You	Zhongyuan Univ. of Tech.
Dan Chen	Fuzhou Univ.	Daolin Wen	Zhongyuan Univ. of Tech.
Ruixiang Feng	Fuzhou Univ.		
11:50-12:10		11:30-11:50	MonB04-5
<i>GoPrune: Efficient Structured Pruning with $\ell_{2,p}$-Norm Optimization</i>		<i>Initial-and-Final-State Opacity Verification for Bounded Labeled Petri Nets</i>	
Xu Li	Shanghai Univ.	Yibin Zhang	Xiamen Univ.
Xianchao Xiu	Shanghai Univ.	Aiwen Lai	Xiamen Univ.
		Weiyao Lan	Xiamen Univ.
MonB03	Room03	11:50-12:10	MonB04-6
Control, optimization, and security of complex networks and systems (3)		<i>Resilient Consensus Control of UAV Swarm Against False Data Injection Attacks via Local Observations</i>	
Chair: Zhihai Rong	Donghua Univ.	Huiquan Wang	Nanjing Univ. of Aeronautics and Astronautics
Co-Chair: Zhanjie Li	Northeastern Univ.	Yiru Tang	China Mobile (Hangzhou) Information Tech. Co., Ltd.
10:10-10:30		Zhi Lian	Nanjing Univ. of Aeronautics and Astronautics
<i>A Multi-dimensional Directed Graph Analysis of the Ethereum Transaction Network</i>		MonB05	Room05
Tianxun Liang	Donghua Univ.	Operational optimization and decision-making (3)	
Zhihai Rong	Donghua Univ.	Chair: Ke-Zhen Han	Univ. of Jinan
		Co-Chair: Lipeng Wang	Harbin Engineering Univ.
10:30-10:50		10:10-10:30	MonB05-1
<i>Event-triggered control via command filter for USVs under saturation nonlinearity</i>		<i>A coordinated planning method for shared energy storage capacity optimization in building integrated energy systems considering thermal demand response</i>	
Jia heng Huang	Nanjing Univ. of Posts and Telecommunications	Liang Cen	State Grid Zhejiang Electric Power Company Limited
Chen Xiaoxing	Jiang Su Yi Tong High-tech Co., Ltd.	Xiaobin Shen	State Grid Zhejiang Electric Power Company Limited
Dengyin Zhang	Nanjing Univ. of Posts and Telecommunications	Songsong Zheng	the Science and Technology Project of Huzhou Power Supply Company of State Grid Zhejiang Electric Power Co.
Yajing Ma	Nanjing Univ. of Posts and Telecommunications	Xiaozhe Pan	State Grid Zhejiang Electric Power Company Limited
Zhanjie Li	Nanjing Univ. of Posts and Telecommunications	Yan Wu	State Grid Zhejiang Electric Power Company Limited
		Ke-Zhen Han	Univ. of Jinan
10:50-11:10		10:30-10:50	MonB05-2
<i>Safety-Critical Trajectory Projection Tracking Control for Nonlinear Systems</i>		<i>Dynamic Ship Route Planning Based on Fusion of Improved A-star and Rolling Window Methods</i>	
Jiankui Huang	Fuzhou Univ.	Kungan Ma	Harbin Engineering Univ.
Youfeng Su	Fuzhou Univ.	Lipeng Wang	Harbin Engineering Univ.
		Miao Yu	Harbin Engineering Univ.
11:10-11:30		10:50-11:10	MonB05-3
<i>Improved Slope-Parametrized Hybrid Strategy for Constrained Dynamic Optimization</i>		<i>Discrete Interval Binary Sequence Optimization for PEMFC Impedance Testing Considering Electrochemical Noise</i>	
Zhongyan Ye	Bohai Univ.	Weiming Chen	Huazhong Univ. of Science and Tech.
Tai-Fang Li	Bohai Univ.	Zhu Wu	Huazhong Univ. of Science and Tech.
		Chuang Sheng	Huazhong Univ. of Science and Tech.
11:30-11:50		Zhuo Wang	Huazhong Univ. of Science and Tech.
<i>Event-Triggered Max-Consensus with Stochastic Attention for Second-Order Multi-Agent Systems</i>		Tianhao Liu	Huazhong Univ. of Science and Tech.
Jia Lu	Jiangxi Science and Tech. Normal Univ.	Xi Li	Huazhong Univ. of Science and Tech.
Xiujuan Zhao	Jiangxi Science and Tech. Normal Univ.		
11:50-12:10		11:10-11:30	MonB05-4
<i>Distributed fusion filtering for multi-rate multi-sensor systems with stochastic communication protocol and network attacks</i>		<i>Fixed-wing UAV Low-altitude Penetration Path Planning in Mountainous Terrain</i>	
Tian Tian	Heilongjiang Univ.	Yiwen Cao	Taiyuan Satellite Launch Center
Sen Yang	Heilongjiang Univ.	Rui Guo	Taiyuan Satellite Launch Center
		Jianming Guo	Taiyuan Satellite Launch Center
MonB04	Room04	Runjie Zhang	Taiyuan Satellite Launch Center
Control, optimization, and security of complex networks and systems (4)		ZhengHu Liang	Taiyuan Satellite Launch Center
Chair: Xiaoying Song	Wuhan Univ. of Science and Tech.	Weizong Li	Taiyuan Satellite Launch Center
Co-Chair: Wencheng Liu	Qilu Univ. of Tech. Shandong Academy of Sciences		
10:10-10:30		11:30-11:50	MonB05-5
<i>Classification of Alzheimer's Disease Based on Multi-Density Graph Fusion</i>			
Xiaoying Song	Wuhan Univ. of Science and Tech.		
Sitian Zhang	Wuhan Univ. of Science and Tech.		

An Adaptive Batch-ParEGO Algorithm with Reward Mechanism for Expensive Multi-Objective Optimization

Xiangyu Zeng Nangjing Tech. Univ.
Guo Yu Nangjing Tech. Univ.
Quanling Zhang Nangjing Tech. Univ.
Cuimei Bo Nangjing Tech. Univ.

Shanghai KeLiang Information Tech. Co
Dalian Maritime Univ.
Shanghai KeLiang Information Tech. Co
Shanghai KeLiang Information Tech. Co
Shanghai KeLiang Information Tech. Co
Dalian Maritime Univ.
Dalian Maritime Univ.

11:50-12:10 MonB05-6

Two-Step Robust Optimization Scheduling for Integrated Energy Systems Considering Energy Storage Planning and Demand Response

Jingjie Wang State Grid Anhui Electric Power Research Inst.
Shenglong Zhu State Grid Anhui Electric Power Research Inst.
Zhenning Chen State Grid Anhui Electric Power Research Inst.
Yuxiang Zuo State Grid Anhui Electric Power Research Inst.
Yujie Hu State Grid Anhui Electric Power Research Inst.
Wei Lou State Grid Anhui Electric Power Research Inst.

Xiang Ye
Hongbiao Li
Linlong Shi
Dongdong Mu
Yunsheng Fan

10:50-11:10 MonB07-3

Enhanced Transition Control for Tail-Sitter UAVs: An Integrated NDI-ADRC Approach

Fengqing Xian Beijing Inst. of Tech.
Qingbo Geng Beijing Inst. of Tech.
Kui Liu Beijing Inst. of Tech.

11:10-11:30 MonB07-4

Asynchronous Dynamic Output Feedback Control for Singular Markov Jump Systems under Hybrid Cyber-Attacks Subject to Actuator Saturation

Wantong Sun Shandong Univ.
Huiqing Zhou Shandong Univ.
Shuping Ma Shandong Univ.

MonB06 Room06

Advanced control and predictive control (4) 10:10-12:10

Chair: Fenfen Wang Chinese Flight Test Establishment
Co-Chair: Hongru Wang Peking Univ.

10:10-10:30 MonB06-1

Research on Pilot Workload Predictive Control Technology Based on Task Complexity

Fenfen Wang Chinese Flight Test Establishment
Zhao Liu Chinese Flight Test Establishment
Haiming Tian Chinese Flight Test Establishment

11:30-11:50 MonB07-5

Homology Decomposition Based Two-phase Privacy-Preserving Finite-time Average Consensus: Application to Power Allocation

Han Wu Wuhan Univ. of Science and Tech.
Wenbo Zhao Wuhan Univ. of Science and Tech.
Zhenhua Zhu Wuhan Univ. of Science and Tech.
Mingkang Long Nanyang Technological Univ.

10:30-10:50 MonB06-2

Switching Distributed Model Predictive Consensus Control for Linear Multiagent System under Intermittent Communication

Hongru Wang Peking Univ.
Jinzhi Wang Peking Univ.

11:50-12:10 MonB07-6

World Model-based Safe Reinforcement Learning for Station-Keeping Control of a Stratospheric Airship

Yuxuan Zou Beihang Univ.
Zewei Zheng Beihang Univ.
Wenyuan Pei Beihang Univ.
Yuchong Ye Beihang Univ.

10:50-11:10 MonB06-3

MPC with Contact-Triggered Steady-State Set Update for Safe Admittance Control

Chenming Li Southeast Univ.
Jiyun Tan Southeast Univ.
Dingkun Zhu Southeast Univ.
Shihua Li Southeast Univ.
Yunda Yan Univ. College London

MonB08 Room08

Control theory and control technology (19) 10:10-12:10

Chair: Lipeng Wang Harbin Engineering Univ.
Co-Chair: Shaohua Yang Qufu normal Univ.

11:10-11:30 MonB06-4

Lie Group Fuzzy Predictive Trajectory Tracking Control for Dual-Propulsion Unmanned Surface Vehicle Based on RBF Neural Network

Xiping Ding Wuhan Univ. of Tech.
Zhirong Tan Wuhan Univ. of Tech.

10:10-10:30 MonB08-1

Ship Motion Attitude Prediction Algorithm Based on DLMD and NOA Optimization

Yanfeng Zhang Harbin Engineering Univ.
Lipeng Wang Harbin Engineering Univ.
Miao Yu Harbin Engineering Univ.

11:30-11:50 MonB06-5

A Braking Torque Control Framework with Driver Intention Recognition for Single Pedal Mode of Electric Vehicle

Ye Teng Hefei Univ. of Tech.
Qin Shi Hefei Univ. of Tech.
Wenyu Zhao Hefei Univ. of Tech.
Yiming Li Anhui Vocational and Technical College
Zejia He Hefei Univ. of Tech.

10:30-10:50 MonB08-2

Output feedback tracking control for a class of uncertain MIMO nonlinear systems with external disturbances

Xia Li Qufu Normal Univ.
Shaohua Yang Qufu Normal Univ.

11:50-12:10 MonB06-6

Intelligent Control of Cross-Media Vehicles Based on Adaptive LSTM and Tube MPC

Xiangqian Xing Harbin Engineering Univ.
ChuanLin Rao Harbin Engineering Univ.
Jiawen Zhu Harbin Engineering Univ.
Qingling Chang Northeast Agricultural Univ.
Qi Guo Harbin Engineering Univ.
Wei zhang Harbin Engineering Univ.

10:50-11:10 MonB08-3

Adaptive Nash Equilibrium MPC with Neural Network Optimization in Underwater Manipulator

Yawei Zheng Jiangxi Univ. of Science and Tech.
Zikang Xu Jiangxi Univ. of Science and Tech.
Lei Zhou Jiangxi Univ. of Science and Tech.
An Zhu Jiangxi Univ. of Science and Tech.
Haiping Ai Jiangxi Univ. of Science and Tech.

MonB07 Room07

Control theory and control technology (18) 10:10-12:10

Chair: Jing Luo Jingchu Univ. of Tech.
Co-Chair: Kaiwen Guan Dalian Maritime Univ.

11:10-11:30 MonB08-4

The SOC Fusion Estimation for Lithium-Ion Batteries Using AEKF-LSTM Based on a Second-Order RC Equivalent Circuit Model

Qingyun Wang Dalian Univ. of Tech.
Jixiang Chen Dalian Maritime Univ.
Xian Du Dalian Univ. of Tech.
Dingyi Huang Dalian Univ. of Tech.
Bin Yang Dalian Univ. of Tech.
Huiquan Yan Dalian Univ. of Tech.

10:10-10:30 MonB07-1

Design of sensorless PMSM system based on adaptive sliding mode observer

Hongfeng Zhu Jingchu Univ. of Tech.
Xue Chen Jingchu Univ. of Tech.
Xiaojian Zhao Jingchu Univ. of Tech.
Yuying Zhou China Three Gorges Univ.
Yunfeng Zou Jingchu Univ. of Tech.
Jing Luo Jingchu Univ. of Tech.

11:30-11:50 MonB08-5

Research on an Equivalent Earth-Staring Guidance Law and Hierarchical Saturation Control for GEO Satellite Observation

Jinjin Zhu Shanghai Aerospace Control Tech. Inst.
Xianfeng Xu Shanghai Aerospace Control Tech. Inst.
Rongfeng Lin Shanghai Aerospace Control Tech. Inst.
Mengxuan Wu Shanghai Aerospace Control Tech. Inst.

10:30-10:50 MonB07-2

Single-parameter adaptive backstepping tracking control for triple-hulled vessel with external time-varying disturbances

Kaiwen Guan Dalian Maritime Univ.

11:50-12:10 MonB08-6

Distributed Model Predictive Cooperative Tracking Control for Multiple Rehabilitation Robot System

Shengyao Sang Shenyang University of Tech.
Hongbin Chang Shenyang University of Tech.
Tianquan Yu Shenyang University of Tech.

MonB09	Room09	Fei Chen	Nankai Univ.
Control theory and control technology (20)	10:10-12:10	Yang Wang	Tianjin Data Development Center
Chair: Huasheng Zhang	Liaocheng Univ.	Huan Zhao	Dawning Information Industry Co., Ltd.
Co-Chair: Zhihui Wu	Harbin Univ. of Science and Tech.	Rong Dai	Dawning Information Industry Co., Ltd.
10:10-10:30	MonB09-1	11:30-11:50	MonB10-5
Asynchronous Control With Convergence Rate Constraints for Switched Nonlinear Stochastic Systems		Dynamic Event-Triggered Tracking Consensus for Fuzzy Multi-Agent Systems Under Cyber Attacks	
Yong Cao	Shandong Univ. of Political Science and Law	Jiafeng Yu	Harbin Inst. of Tech.
Penghe He	Liaocheng Univ.	Wen Xing	Harbin Inst. of Tech.
Huasheng Zhang	Liaocheng Univ.	Yang Cao	Southeast Univ.
10:30-10:50	MonB09-2	Huiyan Zhang	Chongqing Tech. and Business Univ.
Fault Detection of Delayed T-S Fuzzy Systems under Dynamic Event-Triggering W TOD Protocol		Qinsheng Li	Shanghai Univ.
Zhihui Wu	Harbin Univ. of Science and Tech.	11:50-12:10	MonB10-6
Hongyu Qin	Harbin Univ. of Science and Tech.	A Semi-Autonomous Teleoperation Control Framework for Omnidirectional Mobile Robots	
Yue Zhao	Harbin Univ. of Science and Tech.	Zhuoyue Zhang	Lanzhou Univ. of Tech.
Huanxu Liu	Harbin Univ. of Science and Tech.	Haochen Zhang	Lanzhou Univ. of Tech.
10:50-11:10	MonB09-3	Bozhi Tian	Lanzhou Univ. of Tech.
Neural Network-Based Adaptive Swing Suppression Control for a Quadrotor with a Variable-Length Suspended Payload		Jinyan Li	Lanzhou Univ. of Tech.
Qianqiu Li	Wuhan Univ. of Science and Tech.	Weirong Liu	Lanzhou Univ. of Tech.
Yanhua Yang	Wuhan Univ. of Science and Tech.	Haoyang Zhang	Lanzhou Univ. of Tech.
Yang Chen	Wuhan Univ. of Science and Tech.	MonB11	Room11
11:10-11:30	MonB09-4	Intelligent perception, synergic decision-making, and security for robots and unmanned systems (10)	10:10-12:10
Leg Motion Control of a Flyable Dual-Wheel-Legged Robot Based on ADRC		Chair: Jun Hu	Shenyang Univ. of Tech.
Peng Li	Harbin Engineering Univ.	Co-Chair: Jianxing Liu	Harbin Inst. of Tech.
Xianzhuang Zhang	Harbin Engineering Univ.	10:10-10:30	MonB11-1
Tengfei Wang	Harbin Engineering Univ.	Multi-sensor Fusion Mapping and Localization for Autonomous Vehicles in the Underground Parking Lot	
Jinlong Hao	Harbin Engineering Univ.	Yongzhe Xu	Shenyang Univ. of Tech.
11:30-11:50	MonB09-5	Jun Hu	Shenyang Univ. of Tech.
Anti-windup Backstepping Control for High-speed Flight Vehicles under Exact Command Derivatives		Siyuan Feng	Shenyang Univ. of Tech.
Yao Lu	Beijing Aerospace Automatic Control Inst.	Mingxin Duan	Shenyang Univ. of Tech.
Tianpeng Lan	Beijing Aerospace Automatic Control Inst.	Hongji Zhu	Northeastern Univ.
Xiaodong Liu	Beijing Aerospace Automatic Control Inst.	Wei Liu	Northeastern Univ.
Dizhi Long	Beijing Aerospace Automatic Control Inst.	Dingcheng Hu	Neusoft Reach Automotive Tech. (Shenyang) Co., Ltd.
Tianya Li	Beijing Aerospace Automatic Control Inst.	Jingyao Li	Neusoft Reach Automotive Tech. (Shenyang) Co., Ltd.
11:50-12:10	MonB09-6	10:30-10:50	MonB11-2
Improved Adaptive Super-Twisting Sliding-Mode Sensorless Control for Aviation Fuel Pumps		APF-Guided PPO for Obstacle Avoidance and Trajectory Planning of Manipulators	
Dehan Hou	DaLian Univ. of Tech.	Bowei Yao	Harbin Inst. of Tech.
Jixiang Chen	Dalian Maritime Univ.	Zhuang Liu	Harbin Inst. of Tech.
Xian Du	DaLian Univ. of Tech.	Fuxing Zhu	Harbin Inst. of Tech.
JiaJun Zhang	DaLian Univ. of Tech.	Yuqiang Wu	Heavy-Load Robots
Menglong Li	DaLian Univ. of Tech.	Liheng Tuo	Heavy-Load Robots
Tanzhou Zhou	AECC Guizhou Honglin Aero-Engine Control Tech. Co., Ltd.	Jianxing Liu	Harbin Inst. of Tech.
MonB10	Room10	10:50-11:10	MonB11-3
Intelligent perception, synergic decision-making, and security for robots and unmanned systems (9)	10:10-12:10	Multi-Agent Deep Reinforcement Learning Collaboration Algorithm Based on Semantic-Aware Gated Fusion	
Chair: Zhiping Liu	Xi'an Technological Univ.	Jiahao Jiang	East China Jiaotong Univ.
Co-Chair: Rui Mu	Beihang Univ.	11:10-11:30	MonB11-4
10:10-10:30	MonB10-1	Trajectory Planning Method for UAV Based on Safe Flight Corridor and Power Model	
Adaptive Sliding Model Control Applied to Reconfigurable Quadrotors		Shibo Gao	Shenyang Univ. of Tech.
Zhiping Liu	Xi'an Technological Univ.	Hongbin Chang	Chongqing Univ.
10:30-10:50	MonB10-2	11:30-11:50	MonB11-5
Hierarchical Soft Actor-Critic and Model Predictive Control Framework for Robotic Manipulator Grasping		Optimal Deployment of Heterogeneous Networks Using a Niche-Improved Grey Wolf Optimizer	
Yali Fan	Beihang Univ.	Yiming Zhang	Univ. of Chinese Academy of Sciences
Jian Shi	Beihang Univ.	Meilin Xie	Univ. of Chinese Academy of Sciences
Shaoping Wang	Beihang Univ.	Yan Tian	Univ. of Chinese Academy of Sciences
Rui Mu	Beihang Univ.	Huillin Tang	Univ. of Chinese Academy of Sciences
Yuwei Zhang	Beihang Univ.	Xiawen Cheng	Univ. of Chinese Academy of Sciences
Rentong Chen	Beihang Univ.	11:50-12:10	MonB11-6
10:50-11:10	MonB10-3	Dynamic Visual SLAM Algorithm Based on Lightweight YOLOv11 and Point-Line Fusion	
DCGAT Dual-Channel Graph Attention Network-based Reinforcement Learning for Multi-UAV Cooperative Pursuit		Daoqu Geng	Chongqing Univ. of Posts and Telecommunications
Le Hao	National Univ. of Defense Tech.	Yinjie Zhang	Chongqing Univ. of Posts and Telecommunications
Yu Zhang	National Univ. of Defense Tech.	Chuanlei Xu	Chongqing Univ. of Posts and Telecommunications
Qilin Yan	National Univ. of Defense Tech.	MonB12	Room12
Keyu Zhao	National Univ. of Defense Tech.	Intelligent perception, synergic decision-making, and security for robots and unmanned systems (11)	10:10-12:10
Xiaoguang Chen	National Univ. of Defense Tech.	Chair: Kun Qian	Southeast Univ.
11:10-11:30	MonB10-4	Co-Chair: Bo Zhou	Southeast Univ.
Monocular Object Association Method Based on Random Walk Encoding of Inter-object Relationships		10:10-10:30	MonB12-1
Wenbin Zhu	Nankai Univ.	Robotic Peg-in-Hole Assembly using Visuo-tactile Sensing and Admittance-based Hole Search	
Jing Yuan	Nankai Univ.		

Haoran Wang Feng Liu Moyan Liu Jinxiang Zhu Kun Qian	Southeast Univ. Southeast Univ. Southeast Univ. Anhui Univ. Southeast Univ.	11:30-11:50 Point Cloud Registration Method Based on Geometric Feature Encoding and Transformer Xiaofeng Chen Tao Zuo	MonB13-5 Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
10:30-10:50 Accurate and Safety-Aware Range-Based 3D Localization System with Parallel-Structured Estimation Framework Yueqi Zhu Chufan Rui Yan Pan Bo Zhou	MonB12-2 Southeast Univ. Southeast Univ. Southeast Univ. Southeast Univ.	11:50-12:10 Heart Rate and Inter-Beat Interval Estimation Using FMCW Radar and Vision Transformer Xingfu Xie Shilin Zhang Huike Liu Jian Guo	MonB13-6 Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
10:50-11:10 Hierarchical Adaptive MPC for Robust Quadrupedal Locomotion under Unknown Payloads Jie Liu Xinming Jin Xin Xin	MonB12-3 Southeast Univ. Southeast Univ. Southeast Univ.	MonB14 Security and intelligence of cyber-physical systems (2) 10:10-12:10 Chair: Yanyan Hu Co-Chair: Faxin Cao	Room14 Univ. of Science and Tech. Beijing Wuhan Univ. of Science and Tech.
11:10-11:30 Research on Commodity Recognition Algorithm in Complex Retail Scenarios Based on YOLO-Retail Qiang Huang Xin Xu Lingjun Ou	MonB12-4 Wuhan Univ. of Tech. Wuhan Univ. of Tech. Wuhan Univ. of Tech.	10:10-10:30 Distributed State Estimation under Channel Fading and False Data Injection Attacks with Random Access Protocol Shijiao Yu Yanyan Hu	MonB14-1 Univ. of Science and Tech. Beijing Key Laboratory of Knowledge Automation for Industrial Processes of Ministry of Education Univ. of Science and Tech. Beijing
11:30-11:50 Hierarchical Spatio-Temporal Trajectory Planning for Autonomous Parking via Differential Flatness and its Real Vehicle Validation Binghe An Jian Chen Bing Wu Xiangfei Ren Zihan Zhao Qing Zhao	MonB12-5 Zhejiang Geely Holding Group Co., Ltd. Autonomous Driving Center Autonomous Driving Center Autonomous Driving Center Autonomous Driving Center Autonomous Driving Center	10:30-10:50 A Replay Attack Detection Approach Based on Chi-Square-Triggered Watermark Injection Faxin Cao Bin Liu Yao-Wei Wang	MonB14-2 Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
11:50-12:10 Hierarchical Multi-Array Tactile Representation Learning and Diffusion Policy for Real-World Dexterous Placement Tasks Jiaqi Yang Gang Peng Chaoze Wang Mingjun Cong Chuangye Li Bingchuan Yang	MonB12-6 Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.	10:50-11:10 Finger vein counterfeiting detection algorithm based on multi-feature fusion Jie Gao	MonB14-3 Nanjing Univ. of Posts and Telecommunications
10:10-10:30 Simultaneous Localization and Mapping for Mobile Robots Based on Multi-Sensor Fusion Peng Li Tengfei Wang Xianzhuang Zhang Jinlong Hao	MonB13-1 Harbin Engineering Univ. Harbin Engineering Univ. Harbin Engineering Univ. Harbin Engineering Univ.	Channi Deng Lei Shao Jian Guo	Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
10:30-10:50 Lidar-Based Relative Pose Estimation Method Chenrong Long Heng Shi Qiang Yu Xiangyang Liu Qinglei Hu	MonB13-2 Beijing Inst. of Control Engineering Beijing Inst. of Control Engineering Beijing Inst. of Control Engineering Beijing Inst. of Control Engineering Beihang Univ. Beihang Hangzhou Innovation Inst. Yuhang	11:10-11:30 Incremental-Reward Deep Q-Network for Flexible Resource Scheduling under Extreme Contingencies Peibiao Chen Quan Liu Liang Zhao Chenxu Yin Haoran Dai Yonghui Sun	MonB14-4 Hohai Univ. NARI Group Corporation Hohai Univ. Hohai Univ. Hohai Univ. Hohai Univ.
10:50-11:10 Hornbill Chick-Rearing Behavior Recognition Based on Improved YOLOv8 Jing Yang Hao-Ran Tang Ruo-Xi Chen Zu-Han Song Li Kong Xiao-Hui Li	MonB13-3 Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications	11:30-11:50 KG-DDRL: A Joint Routing and Power Control Algorithm for UAV Ad Hoc Networks Xinyang Zhang Yu Zhou	MonB14-5 Southeast Univ. China United Network Communications Co., Ltd., Guangzhou Branch Southeast Univ.
11:10-11:30 Deployment and Visualization of MapTR on Huawei MDC610 Junsheng Liu Zhao Ding Binhui Liu Fei Long	MonB13-4 Univ. of Science and Tech. of China. Anhui Jianghuai Automobile Group Co. LTD Anhui Jianghuai Automobile Group Co. LTD State Key Lab. of Media Convergence Production Technology and Systems Univ. of Science and Tech. of China. Univ. of Science and Tech. of China.	11:50-12:10 Hybrid Texture Features-Based Algorithm for Finger Vein Presentation Attack Detection Han Huang Tianyu Zhao Zihaoran Wang Jian Guo	MonB14-6 Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
10:10-10:30 Interpretable Network for predicting quality in complex industrial processes using tabular data Xiaoqing Jiang Wenyue Hu Yafeng Zhang Shuang Kong Hang Yu Shijian Dong	MonB15-1 Northeastern Univ. Northeastern Univ. No.3 Middle School of Tangqi Town Northeastern Univ. Northeastern Univ. Northeastern Univ.	MonB15 Intelligent decision-making systems and applications (7) 10:10-12:10 Chair: Shijian Dong Co-Chair: Chen Yuan	Room15 Northeastern Univ. State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.

10:30-10:50	MonB15-2	Wentao Huang	Jiangnan Univ.
A Personalized Demand Response Control Strategy for User-Side Energy Storage Based on LSTM and DQN		Yixin Zhu	Jiangnan Univ.
Chen Yuan	State Grid Liaoning Integrated Energy Service Co., Ltd.	Dezhi Xu	Southeast Univ.
	State Grid Integrated Energy Service Group Co., Ltd.	MonBIS-04	
Xiaonan Mu	State Grid Liaoning Integrated Energy Service Co., Ltd.	Pathological Tremor Suppression Based on Adaptive Sliding Dual-Band FLC and LADRC	
	State Grid Integrated Energy Service Group Co., Ltd.	Tianle Li	Huazhong Univ. of Science and Tech.
Lei Fan	State Grid Liaoning Integrated Energy Service Co., Ltd.	Yurui Wu	Huazhong Univ. of Science and Tech.
	State Grid Integrated Energy Service Group Co., Ltd.	Kang Ren	GYENNO SCIENCE CO., LTD.
Cheng Huang	State Grid Liaoning Integrated Energy Service Co., Ltd.		HUST-GYENNO CNS Intelligent
	State Grid Integrated Energy Service Group Co., Ltd.	Zhonglue Chen	Digital Medicine Technology Center Shenzhen
Zhengqing Li	State Grid Liaoning Integrated Energy Service Co., Ltd.		GYENNO SCIENCE CO., LTD.
	State Grid Integrated Energy Service Group Co., Ltd.	Jun Zhao	HUST-GYENNO CNS Intelligent
Linkui Qu	State Grid Liaoning Integrated Energy Service Co., Ltd.		Digital Medicine Technology Center Shenzhen
	State Grid Integrated Energy Service Group Co., Ltd.	MonBIS-05	Huazhong Univ. of Science and Tech.
Baoqu Yang	State Grid Liaoning Integrated Energy Service Co., Ltd.	3D Visual Coverage of UAV based on Elastic Charging Strategy in Wide-Area Environments	
	State Grid Integrated Energy Service Group Co., Ltd.	Hongpeng Wang	Nankai Univ.
Lingyuan Meng	State Grid Liaoning Integrated Energy Service Co., Ltd.	Kun Deng	Nankai Univ.
	State Grid Integrated Energy Service Group Co., Ltd.	Qi Chen	Nankai Univ.
		Qinghao Zhang	Nankai Univ.
		Zhiwen Duan	Nankai Univ.
		Yue Fei	Nankai Univ.
		MonBIS-06	
		Research on Group Consensus Decision Making Method Driven by Expressed and Private Opinions Model under Trust Constraints	
		Zhimin Ma	National Univ. of Defense Tech.
		Yajie Dou	National Univ. of Defense Tech.
		Xiaoan Tang	Hefei Univ. of Tech.
		Weijun Ouyang	National Univ. of Defense Tech.
		Jikai Wang	National Univ. of Defense Tech.
		Yulong Dai	National Univ. of Defense Tech.
10:50-11:10	MonB15-3	MonBIS-07	
Learning Optimal Classification Trees from Positive and Unlabeled Data		Three-Dimensional Optimal Trajectory Planning for Horizontal Wells Based on an Improved Sand Cat Swarm Optimization Algorithm	
Lintao Li	Sichuan Univ.	Zhenwei Song	Beijing Univ. of Posts and Telecommunications
Zhibin Wu	Sichuan Univ.	Shurong Li	Beijing Univ. of Posts and Telecommunications
11:10-11:30	MonB15-4	MonBIS-08	
CRRC: A Prompt Engineering Approach for Logical Reasoning in Large Language Models		Methods for Determining Expert Weights in Comparative Evaluation of Science and Technology	
Bingyu He	National Univ. of Defense Tech.	Haoming Wang	National Univ. of Defense Tech.
Jianbin Sun	National Univ. of Defense Tech.	Xinyang Wu	National Univ. of Defense Tech.
Hailu Xin	National Univ. of Defense Tech.		
Ruijing Cui	National Univ. of Defense Tech.	MonBIS-09	
Luofu Wu	National Univ. of Defense Tech.	GGsplat: Pose-Free 3D Gaussian Scene Reconstruction via Explicit Geometric Consistency Constraints	
11:30-11:50	MonB15-5	Xu Nie	Beijing Univ. of Tech.
A GNN-DQN Based Approach for Task Allocation in Edge Devices		Daoxiong Gong	Beijing Univ. of Tech.
Peng Wang	Wuhan Univ. of Science and Tech.		
Zeyi Lu	Wuhan Univ. of Science and Tech.	MonBIS-10	
Feng Yu	Wuhan Univ. of Science and Tech.	Reliable Multi-View Stereo with Fused Confidence and Extensible Sampling	
Cong Liu	Wuhan Univ. of Science and Tech.	Yajie Zhang	Wuhan Univ. of Science and Tech.
		Qile Zhu	Wuhan Univ. of Science and Tech.
11:50-12:10	MonB15-6	Ji Luo	Wuhan Univ. of Science and Tech.
Symmetric Soft-Clipped PPO with Gaussian-Decay Greedy Exploration		Shiqian Wu	Wuhan Univ. of Science and Tech.
Mingbao Yang	Beijing Normal Univ.	MonBIS-11	
Qing-Guo Wang	Wuhan Univ. of Science and Tech.	Classification Method for Low-Slow-Small Radar Targets Based on Improved ResNet with Attention Mechanism	
Zhiwen Zhao	Beijing Normal Univ.	Xiaochi Li	Xi'an Electronic Engineering Research Inst.
Xiaoxiao Yang	Beijing Normal Univ.	Xingyu Cai	Xi'an Electronic Engineering Research Inst.
Fengbin Wu	Guizhou Univ.	Xu Wang	Xi'an Electronic Engineering Research Inst.
Meiliang Liu	Beijing Normal Univ.	MonBIS-12	
		Position-Aware Feature Aggregation Network for Lightweight RGB-D Saliency Detection	
MonBIS	RoomPT	Haikun Chen	Harbin Engineering Univ.
Interactive Session	10:10-12:10	Tianrui Gu	Harbin Engineering Univ.
MonBIS-01		Ning Li	Harbin Engineering Univ.
Sector-Mapping-Based Simplified MPC With Neutral-Point Voltage Balancing for Three-Level NPC Inverters		Lina Gao	Harbin Engineering Univ.
Mingyuan Li	Northeastern Univ. at Qinhuangdao	Yonggang Zhang	Harbin Engineering Univ.
Feiyu Chen	Northeastern Univ. at Qinhuangdao	MonBIS-13	
MonBIS-02		LiDAR SLAM Algorithm Integrating Density Adaptation and Multi-property Features	
Stochastic Model Predictive Control Strategy for Renewable Energy Hydrogen Production and Ammonia Synthesis System		Kun Liang	Wuhan Univ. of Science and Tech.
Yong Zhang	State Grid Jibei Electric Power Company Limited Management Training Center	WeiGang Li	Wuhan Univ. of Science and Tech.
Yue Kong	North China Electric Power Univ.	MonBIS-14	
MonBIS-03		High-Precision Camera Calibration via Iterative Optimization Using Solid Circle Grid Patterns	
Model-Free Predictive Cooperative Control for Multi-PMSM Systems Guided by A Virtual Leader		Shihao Xu	Henan Univ. Of Tech.
Jun Zhou	Jiangnan Univ.		
Guanyang Hu	Jiangnan Univ.		
Weilin Yang	Jiangnan Univ.		

Tianfei Chen	Henan Univ. Of Tech.	Research on the classification of multimodal EEG-fNIRS signals based on a hybrid CNN-Transformer model	
Lijun Sun	Henan Univ. Of Tech.	Ting Yue	Tianjin Univ. of Tech.
Mingyang Gu	Henan Univ. Of Tech.	Yan Yue	Tianjin Univ. of Tech.
Yiming Jing	Henan Univ. Of Tech.	Haihong Sun	Tiangong Univ.
Mingyang Liu	Henan Univ. Of Tech.	Shengzhi Du	Tshwane Univ. of Tech.
		Jigang Tong	Tianjin Univ. of Tech.
		Yankai Yin	Tiangong Univ.
			Tianjin Rongyuan Intelligent Tech. Co.,Ltd.
MonBIS-15		MonBIS-26	
Steel Defect Segmentation and Detection Method Based on Improved DeepLabV3+		Frequency-Adaptive and Hard-Sample-Aware YOLO for Robust Smoke Detection	
Jiuqing Yu	Xinjiang Univ.	Shang Hu	Wuhan Univ. of Science and Tech.
En Li	Shandong Laboratory of Aluminum Advanced Manufacturing in Binzhou Chinese Academy of Sciences	Wangming Xu	Wuhan Univ. of Science and Tech.
		Xiaolong Wang	Wuhan Univ. of Science and Tech.
Lirong Xie	Xinjiang Univ.		
Tianyu Zhang	Shandong Laboratory of Aluminum Advanced Manufacturing in Binzhou Binzhou Inst. of Tech.	MonBIS-27	
		Robust Manifold Separation for Sparse Circular Array DOA Estimation via Costas Sequence Design	
		Zhimin Gu	Nanjing Univ. of Posts and Telecommunications
MonBIS-16		MonBIS-28	
A signal recognition method for perimeter security of DAS based on RP-ResNet		PVTCARAFE: A Road Extraction Network Based on Multi-Scale Feature Reassembly and Adaptive Recovery	
Binjie Xuan	Nanjing Univ. Of Posts And Telecommunications	YuanHai Yang	Xi'an Univ. of Architecture and Tech.
Jiayin Cao	Nanjing Univ. Of Posts And Telecommunications	YueBo Meng	Xi'an Univ. of Architecture and Tech.
Hai Cao	Nanjing Univ. Of Posts And Telecommunications		
Qiang Wang	Nanjing Univ. Of Posts And Telecommunications	MonBIS-29	
MonBIS-17		Research on Loop Closure Correction and High-Fidelity Reconstruction Initialization Strategies for Multi-Sensor Fusion SLAM	
SSFE-Net: Subspace Structural Feature Enhancement Network for Hyperspectral Image Denoising		Hongjian Yan	Sichuan Univ.
Yingbei Xiao	Wuhan Univ. of Science and Tech.	Zishuai Peng	Sichuan Univ.
Jing Huang	Hubei Univ. of Automotive Tech.	Junran Zhang	Sichuan Univ.
Fang Yang	Wuhan Univ. of Science and Tech.		
MonBIS-18		MonBIS-30	
EEG-ECTHNet: A Enhanced Convolution Temporal Hybrid Network for MI-EEG Decoding		Physics-guided Image Deblurring with a Vision State-Space Model	
Jiangyin Huang	Xiamen Univ. of Tech.	Huixuan Zhao	Dalian Maritime Univ.
Binyang Lin	Xiamen Univ. of Tech.	Kai Zheng	Dalian Maritime Univ.
Yanze Cai	Xiamen Univ. of Tech.	Ting Liu	Dalian Maritime Univ.
Xiaohuan Xia	Xiamen Univ. of Tech.	Peiyong Gong	Dalian Maritime Univ.
Yangjie Li	Xiamen Univ. of Tech.	Yi Jiang	Dalian Maritime Univ.
Xiner Li	Xiamen Univ. of Tech.		
MonBIS-19		MonBIS-31	
Ultrasonic Detection of Interfacial Hollows Based on Energy Response and Depth Consistency		An Autonomous Driving Traffic Sign Recognition Method Based on an Improved YOLOv11	
Hai Cao	Nanjing Univ. Of Posts And Telecommunications	Zherui Wu	Ningbo Univ. of Tech.
Binjie Xuan	Nanjing Univ. Of Posts And Telecommunications	Yehui Ding	North China Univ. of Tech.
Yuanyu Cao	Nanjing Univ. Of Posts And Telecommunications	Jingcheng Guo	North China Univ. of Tech.
Qiang Wang	Nanjing Univ. Of Posts And Telecommunications		
MonBIS-20		MonBIS-32	
Miniature RGB-Illuminated Camera for Uncalibrated Photometric Stereo-Based Braille Surface Reconstruction		Gesture Recognition Based on 2D CNNs with Temporal-Channel Attention	
Teng Wang	Guangdong Polytechnic Normal Univ.	Xichen Yang	Cambridge Univ.
Shuxin Ling	Guangdong Polytechnic Normal Univ.	Fei Lu	Shandong Univ.
Xichun Yuan	Guangdong Polytechnic Normal Univ.		
Jinhui Li	Guangdong Polytechnic Normal Univ.	MonBIS-33	
Tianyou Pi	Guangdong Polytechnic Normal Univ.	Affine Registration of Multimodal Remote Sensing Images with Local Context Attention and Dilated Context Aggregation	
Yong Yang	Guangdong Polytechnic Normal Univ.	Junfei Chen	Wuhan Univ. of Science and Tech.
		Fang Yang	Wuhan Univ. of Science and Tech.
MonBIS-21		MonBIS-34	
Multi-branch Cross-receptive Field Network for Wearable Human Action Recognition		Absolute phase extraction based on self-encoding for phase-shifting 3D reconstruction	
Liu Lu	Southeast Univ.	Sen Xiang	Wuhan Univ. of Science and Tech.
Chenjie Ni	Southeast Univ.	Haiyang Yuan	Hubei Optical Fundamental Research Center
Can Bu	Southeast Univ.		Wuhan Univ. of Science and Tech.
Yongming Huang	Southeast Univ.		
MonBIS-22		MonBIS-35	
ADGFormer : Adaptive Dynamic Graph Transformer for 3D Human Pose Estimation		A Low Complexity DOA Estimation Algorithm for Nested Arrays with Unknown Mutual Coupling	
Chenjie Ni	Southeast Univ.	Zixue Liu	Nanjing Univ. Of Posts And Telecommunications
Liu Lu	Southeast Univ.		
Liangze Tao	Southeast Univ.	MonBIS-36	
Yongming Huang	Southeast Univ.	A WiFi Human Activity Recognition Network Based on Multi-Scale Feature Fusion with DenseNet-121	
		Tao Chen	Wuhan Univ. of Science and Tech.
MonBIS-23		Yimin Liu	Wuhan Univ. of Science and Tech.
Single-Image Camera Calibration Based on Wavelet-Transformer		MonBIS-37	
Ping Wang	Lanzhou Univ. of Tech.	A Distributed Reduced Order Kalman Filter for Health Parameter Estimation of Aero-engine in Network System	
Lipeng Wang	Lanzhou Univ. of Tech.	Menglong Li	Dalian Univ of Tech.
		Feiyu Gao	Beijing Power Machinery Research Inst.
MonBIS-24		Dingyi Huang	Dalian Univ of Tech.
Research on Weld Seam Extraction Based on Multi Dimensional Information Fusion		Jiajun Zhang	Dalian Univ of Tech.
Yuntao Zhao	Wuhan Univ. of Science and Tech.		
Yifan Chi	Wuhan Univ. of Science and Tech.		
MonBIS-25			

Dehan Hou Xian Du	Dalian Univ of Tech. Dalian Univ of Tech.	Maoyin Chen	China Univ. of Petroleum (Beijing)
MonBIS-38 <i>Spatio-Temporal Dual-Channel Anomaly Detection Method for Key Cigarette Indicators with Noisy Labels</i>		MonC01 Industrial big data and industrial artificial intelligence (5)	Room01 13:30-15:30
Liming Zhu Bo Zhang Ming Chen Ming Li Bin Peng Hao Wang Chunhui Zhao	Zhejiang Industrial Company Limited Zhejiang Industrial Company Limited Zhejiang Industrial Company Limited Zhejiang Industrial Company Limited Zhejiang Univ. Zhejiang Univ. Zhejiang Univ.	Chair: Yanyan Hu Co-Chair: Hao Wang	Univ. of Science and Tech. Beijing Harbin Inst. of Tech.
MonBIS-39 <i>Improvement of YOLOv11n for Gas Station Target Detection</i>		13:30-13:50	MonC01-1
Guoqi Liu Haojie Yang	Shenyang Jianzhu Univ. Shenyang Jianzhu Univ.	<i>Feature Separation-Based Domain Adaptation for Remaining Useful Life Prediction of Aero-Engines</i>	
MonBIS-40 <i>Incipient Fault Detection in Industrial Processes Using Sliding Window K-Means Shared Dictionary Learning</i>		Yuxin Chu Yuxu Zhang Yanyan Hu Zhichao Feng	Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing Xi'an High tech Research Inst.
Shuchen Shen Shu Chen Liangliang Shang Chenxi Zhu Gaosheng Hu	Nantong Univ. Nantong Univ. Nantong Univ. Nantong Univ. Nantong Univ.	13:50-14:10	MonC01-2
MonBIS-41 <i>Early prediction of battery aging trajectories: a multi-view learning approach</i>		<i>Distributed Robust Monitoring for Three-Tank Systems Based on Dynamic Average Consensus</i>	
Yi Yu Yu Zhou Shangkun Liu Jingli Huang Jie Huang	Fuzhou Univ. Fuzhou Univ. Fuzhou Univ. Fuzhou Univ. Fuzhou Univ.	Xianling Li Xiao Zhang Ziang Chen Jiaxin Zhang Zhu Wang Hao Luo Hao Wang	Wuhan Second Ship Des. & Res. Ins. Beihang Univ. Harbin Inst. of Tech. Harbin Inst. of Tech. Jilin Univ. Harbin Inst. of Tech. Harbin Inst. of Tech.
MonBIS-42 <i>A Distribution Network Fault Diagnosis Method Based on a Depthwise Separable Convolution - Hierarchical Attention Network</i>		14:10-14:30	MonC01-3
Xiaomei Liu Zhenxing Liu Peng Wang	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.	<i>A High-Precision and Lightweight Method for Surface Defect Detection of Ceramic Tableware</i>	
MonBIS-43 <i>Fault Detection of Wind Turbine Based on Double Branch Fusion Model</i>		Pu Sun Changchun Hua	Yanshan Univ. Yanshan Univ.
Yusen He Wei Xie Langwen Zhang	South China Univ. of Tech. South China Univ. of Tech. South China Univ. of Tech.	14:30-14:50	MonC01-4
Guangfu Mao	China RePower Technology, no. 380, Guangming Avenue, Tangwei Community, Fenghuang Street, Guangming Distr, Shenzhen	<i>Online Action Detection via Multi-Stage Memory Compression and Selective State Modeling</i>	
MonBIS-44 <i>Research on the anomaly detection method of the steel pipe galvanising process</i>		Runran Yang Liping Xie Jingyu Zhang	Southeast Univ. Southeast Univ. Southeast Univ.
Yanan Sun Yingjie Li Shihong Han Qinghao Ni Zhendong Liu Zhiqiang Wang	North China Univ. of Science and Tech. Anhui Yimaifu Engineering Tech. Co., Ltd. North China Univ. of Science and Tech. North China Univ. of Science and Tech. North China Univ. of Science and Tech. North China Univ. of Science and Tech.	14:50-15:10	MonC01-5
MonBIS-45 <i>A Few-Shot Prediction Method for Drum Drying Processing Intensity Based on Attention-Enhanced TimeGAN and Physical Constraints</i>		<i>BSformer: Specialized Trend and Periodic Modeling for Wind Power Forecasting</i>	
Fanda Pan Xuefeng Gao Mingming Hu Fan Hu Kaixuan Jiao Kai Shen Tengfei Bian Wenkui Zhu Xi Sun Chunhui Zhao Haoran Zhang	Zhejiang Industrial Co., Ltd. Zhejiang Industrial Co., Ltd. Zhejiang Industrial Co., Ltd. Zhejiang Industrial Co., Ltd. Zhejiang Industrial Co., Ltd. Zhejiang Industrial Co., Ltd. Zhejiang Industrial Co., Ltd. Zhengzhou Tobacco Res. Inst. of CNTC Zhejiang Univ. Zhejiang Univ. Zhejiang Univ.	Yulong Lu Yanhui Tong Yuanyuan Li Dawen Zhao Fanjing Huang	Shanghai Univ. of Engineering Science Shanghai Univ. of Engineering Science Shanghai Univ. of Engineering Science Shanghai Electric Wind Power Group Co., Ltd Shanghai Univ. of Engineering Science
MonBIS-46 <i>Image Anomaly Detection and Its Application Based on Adaptive Diffusion Anomaly Generation and Reverse Distillation</i>		15:10-15:30	MonC01-6
Ken Deng Jian Wang Fengyang Lv	Bohai Univ. Bohai Univ. Bohai Univ.	<i>Twin-Boundary Extreme Learning Machine for Robust Short-Term Traffic Flow Forecasting</i>	
MonBIS-47 <i>Adaptive Weighted-based Feature Augmentation CVDA for Dynamic Process Fault Detection</i>		Guangqing Zhang Chongyang He Wei Zheng	CETC Cloud (Beijing) Tech. Co., Ltd. CETC Cloud (Beijing) Tech. Co., Ltd. Shenyang Univ. of Tech.
Zhaoyi Wang	China Univ. of Petroleum (Beijing)	MonC02 Industrial big data and industrial artificial intelligence (6)	Room02 13:30-15:30
		Chair: Zhengfang Wang Co-Chair: Weiming Shao	Shandong Univ. China Univ. of Petroleum
		13:30-13:50	MonC02-1
		<i>A Semi-Supervised Deep Learning-Based Method for Identifying Wall Surface Defects in Complex Scenes</i>	
		Zhiyuan Gao Zhenkang Feng Chunbo Zhang Xueyi Feng Jinkuang Huang Qinghao Meng Jing Xu Zhengfang Wang	Shandong Grede Design Consulting Co., Ltd. Shandong Grede Design Consulting Co., Ltd. Shandong Grede Design Consulting Co., Ltd. Shandong Grede Design Consulting Co., Ltd. Shandong Grede Design Consulting Co., Ltd. Shandong Grede Design Consulting Co., Ltd. Shandong Univ. Shandong Univ.
		13:50-14:10	MonC02-2
		<i>Data-Driven Fault Detection for Nonlinear Non-Gaussian Process Based on Weighted Probabilistic Independent Component Analysis</i>	
		Yiyang Zhang Weiming Shao	China Univ. of Petroleum China Univ. of Petroleum
		14:10-14:30	MonC02-3
		<i>Multi-scale Hybrid Graph Neural Network for Multi-variable Time Series Imputation</i>	
		Zhi Sun Genglin Zhang Liyong Zhang	Dalian Univ. of Tech. Dalian China-creative Tech. Co., Ltd Dalian Univ. of Tech.
		14:30-14:50	MonC02-4
		<i>Enhancing Multi-Step Solar Irradiance Forecasting with a Hybrid Model Integrating VMD and Attention-Based LSTM</i>	
		Qi Xia	Nanchang Univ.

Qian Li	Nanchang Univ.	JiaHao Zhu	Telecommunications
Xiaohan Li	Nanchang Univ.		Chongqing Univ. of Posts and
Wenxuan Tu	Nanchang Univ.	Wei Zhu	Telecommunications
			Chongqing Univ. of Posts and
			Telecommunications
14:50-15:10	MonC02-5	14:10-14:30	MonC04-3
<i>PAVMT-Unet: A Physics-Aware Hybrid Network for SO₂ Vertical Profile Assimilation</i>		<i>Strategy for Power Line Overloading Based on Multiple Flexible Resources</i>	
Ziwei Wang	Southeast Univ.	Yuchen Wu	Southeast Univ.
Zengliang Zang	National Univ. of Defense Tech.	Kun YUAN	Southeast Univ.
Dan Niu	Southeast Univ.	Ying Wang	Southeast Univ.
Yi Li	National Univ. of Defense Tech.	Kaifeng Zhang	Southeast Univ.
Chi Zheng	Southeast Univ.		
Zitong Shuai	Southeast Univ.		
15:10-15:30	MonC02-6	14:30-14:50	MonC04-4
<i>Deployment and Optimization of MapTR-based Lane Detection on Huawei MDC610</i>		<i>Application of bounded trust model in multi-attribute group decision-making</i>	
Sining Ang	Univ. of Science and Tech. of China	Zhengzheng Jiang	Nantong Univ.
Binhui Liu	Anhui Jianghuai Automobile Group Co., Ltd.	Enze Li	Nantong Univ.
Zhao Ding	Anhui Jianghuai Automobile Group Co. Ltd.	naibo wang	Nantong Univ.
Xiaoyan Li	Ningxia Vocational and Technical Univ.	Jiahao Gu	Nantong Univ.
Yi Fang	Univ. of Science and Tech. of China	Jian Kong	Nantong Maternal and Child Health Hospital
Qiang Ling	Univ. of Science and Tech. of China	Chun Cheng	Nantong Univ.
MonC03	Room03	14:50-15:10	MonC04-5
Control, optimization, and security of complex networks and systems (5)	13:30-15:30	<i>Multipartite consensus over matrix-weighted structurally balanced networks</i>	
Chair: Yujiang Zhong	Northwestern Polytechnical Univ.	YuJing Fan	Nanjing Univ. of Posts and
			Telecommunications
13:30-13:50	MonC03-1	yingjiang zhou	Nanjing Univ. of Posts and
<i>Consensus of Multi-Agent Systems with Directed Signed Networks via Beneficial Noise Exploitation and Evolutionary Game</i>			Telecommunications
Yu Li	Northwestern Polytechnical Univ.	Ming Lu	Beijing Inst. of Control Engineering
Tengfei Hua	Northwestern Polytechnical Univ.	Shuo Li	Nanjing Univ. of Posts and
Yujiang Zhong	Northwestern Polytechnical Univ.		Telecommunications
Jingru Liu	Northwestern Polytechnical Univ.		
Jiayi Zhou	Northwestern Polytechnical Univ.		
13:50-14:10	MonC03-2	15:10-15:30	MonC04-6
<i>Reduced-Order Safety Control for Discrete-Time Systems</i>		<i>H[∞] Average Consensus of Nonlinear Multi-Agent Systems under Semi-Markov Switching Topologies with Packet Dropouts and Disturbances</i>	
sishi Cai	Wenzhou Univ.	Wei Xie	Harbin Univ. of Science and Tech.
Lixin Gao	Wenzhou Univ.	Chong Tan	Harbin Univ. of Science and Tech.
Zhitao Li	Wenzhou Univ.		Beijing Inst. of Tech.
		XueTing Wan	Harbin Univ. of Science and Tech.
		Weiru Chen	Harbin Univ. of Science and Tech.
		Yanjiang Li	Harbin Univ. of Science and Tech.
14:10-14:30	MonC03-3	MonC05	Room05
<i>A Distributed Queue-aware Routing Algorithm Based on Multi-Agent Deep Reinforcement Learning for MANETs</i>		Operational optimization and decision-making (4)	13:30-15:30
Ziheng Dai	Southeast Univ.	Chair: Jianbo Liu	Northeastern Univ.
Xianghui Cao	Southeast Univ.	Co-Chair: Chuang Zheng	Beijing Normal Univ.
14:30-14:50	MonC03-4	13:30-13:50	MonC05-1
<i>Finite-time synchronization and energy estimation of T-S fuzzy complex networks</i>		<i>A hybrid model based on VMD and neural network for short-term electricity load forecasting</i>	
Chen Wang	Nanjing Tech Univ.	Zijing Cao	Northeastern Univ. at Qinhuangdao
Zhihao Zhang	Nanjing Tech Univ.	Jianbo Liu	Northeastern Univ. at Qinhuangdao
Yang Gu	Nanjing Tech Univ.		
Mouquan Shen	Nanjing Tech Univ.		
Ju Hyun Park	Yeungnam Univ.		
14:50-15:10	MonC03-5	13:50-14:10	MonC05-2
<i>Robust Integral Sliding Mode Boundary Control for Uncertain Time-Delay Semi-Markov Jump Reaction-Diffusion Systems</i>		<i>Entropy, Similarity, and Ranking Methods for Fuzzy Numbers in the Gaussian-PDMF Space</i>	
Ying Li	Yunnan Minzu Univ.	Zi'ang Gan	Beijing Normal Univ.
Lianglin Xiong	Yunnan Minzu Univ.	Wenyi Zeng	Beijing Normal Univ.
Haiyang Zhang	Yunnan Minzu Univ.	Yong Zhang	Beijing Normal Univ.
		Chuang Zheng	Beijing Normal Univ.
15:10-15:30	MonC03-6	14:10-14:30	MonC05-3
<i>Guaranteed cost control for interval type-2 fuzzy systems with hybrid-triggered stochastic protocol</i>		<i>Task Offloading Optimization of Intelligent Video Analysis Based on PPO under Cloud-Edge Collaboration</i>	
Fan Xiao	Hubei Normal Univ.	Guorong Lin	Fuzhou Univ.
Bo Wu	Hubei Normal Univ.		
Xisheng Zhan	Hubei Normal Univ.		
MonC04	Room04	14:30-14:50	MonC05-4
Control, optimization, and security of complex networks and systems (6)	13:30-15:30	<i>Integrated Design of Bus Networks and Timetable Synchronization for Multi-modal Transit Systems</i>	
Chair: He Huang	Soochow Univ.	Yindong Shen	Huazhong Univ. of Science and Tech.
Co-Chair: Weisong Zhou	Chongqing Univ. of Posts and	Zhuang Qian	Huazhong Univ. of Science and Tech.
	Telecommunications	Wei Wang	Huazhong Univ. of Science and Tech.
13:30-13:50	MonC04-1	14:50-15:10	MonC05-5
<i>Flatness Guided Adaptive Gradient Descent Algorithm for Fully Complex-Valued Neural Networks</i>		<i>A fluctuation suppression strategy for photovoltaic and energy storage collaboration based on dynamic compensation of prediction errors</i>	
Xirui Yin	Soochow Univ.	Jiyi Lang	State Grid Shandong Luruan Digital Technology
He Huang	Soochow Univ.		Co., Ltd
		Junling Zhang	State Grid Shandong Luruan Digital Technology
			Co., Ltd
		Xiufen Li	State Grid Shandong Luruan Digital Technology
			Co., Ltd
		Junjie Zhuo	State Grid Shandong Luruan Digital Technology
			Co., Ltd
		Tao Yang	State Grid Shandong Luruan Digital Technology

Wanqing Chu	State Grid Shandong Luruan Digital Technology Co., Ltd	14:10-14:30	MonC07-3
Qingbin Hu	China Three Gorges Univ.	Disturbance Rejection and Noise Suppression Control for Aviation Fuel Pumps Based on Cascaded Error-Constrained Observer	
15:10-15:30	MonC05-6	Jiajun Zhang	Dalian Univ. of Tech.
GPU-Accelerated Parallel Optimization for Turbofan Engine Performance Control		Jixiang Chen	Dalian Maritime Univ.
Hang Zhou	Dalian Univ. of Tech.	Xian Du	Dalian Univ. of Tech.
Dongjie Wang	The 36th Research Institute of China Electronics Technology Group Corporation	Dehan Hou	Dalian Univ. of Tech.
Si-Xin Wen	Dalian Univ. of Tech.	Menglong Li	Dalian Univ. of Tech.
Yongliang Zhang	Beijing Power Machinery Inst.	Li Zhou	AECC Guizhou Honglin Aero-Engine Control Tech. Co., Ltd.
Xian Du	Dalian Univ. of Tech.	14:30-14:50	MonC07-4
Xi-Ming Sun	Dalian Univ. of Tech.	Adaptive Neural Network Zeta-Backstepping Control for Quadrotor UAVs with Prescribed Damping Characteristics	
MonC06	Room06	Jian Wang	Bohai Univ.
Advanced control and predictive control (5)	13:30-15:30	Jiaying Yang	Harbin Inst. of Tech.
Chair: Jinlu Dong	Shandong Jiaotong Univ.	Xiaolong Zheng	Harbin Inst. of Tech.
Co-Chair: Lanxuan Wang	Beihang Univ.	Xuebo Yang	Harbin Inst. of Tech.
13:30-13:50	MonC06-1	14:50-15:10	MonC07-5
Fixed-Time Sliding Mode Control with Binary-Optimal Scheduling for NSHV Hybrid Actuation		Construction of a Four-Dimensional Mixed Emotion Model	
Jinlu Dong	Shandong Jiaotong Univ.	Xiwen Zhang	Tongji Univ.
13:50-14:10	MonC06-2	Hui Xiao	Tongji Univ.
Physics-Informed Hybrid Predictor-Corrector Guidance for Real-Time Terminal Area Energy Management		15:10-15:30	MonC07-6
Lanxuan Wang	Beihang Univ.	A Position Paper on Generalized Disturbance Estimation in Safety-Critical Control Under Unmatched Disturbances	
Bingyuan Ding	Beihang Univ.	Zhiqiang Wei	Zhejiang Univ. of Tech.
Jingjing Xu	Beihang Univ.	Ye Liu	Zhejiang Univ. of Tech.
Tengjie Zheng	Beihang Univ.	Junxiao Wang	Zhejiang Univ. of Tech.
Lin Cheng	Beihang Univ.	MonC08	Room08
Shengping Gong	Beihang Univ.	Control theory and control technology (22)	13:30-15:30
14:10-14:30	MonC06-3	Chair: Xian Du	Dalian Univ. of Tech.
MPC with Electro-Pneumatic Coordination for Impulse Suppression in Heavy-Haul Trains on Long Steep Downhills		Co-Chair: Sixuan Shi	Southeast Univ.
Hongyi Zhao	Southwest Jiaotong Univ.	13:30-13:50	MonC08-1
Qingyuan Wang	Southwest Jiaotong Univ.	Disturbance Compensation Control Strategy for Variable Cycle Engines Based on Gradient Projection Algorithm	
Haochen Jiang	Southwest Jiaotong Univ.	Hui-Quan Yan	Dalian Univ. of Tech.
Pengfei Sun	Southwest Jiaotong Univ.	Xian Du	Dalian Univ. of Tech.
14:30-14:50	MonC06-4	Ding-Yi Huang	Dalian Univ. of Tech.
Adaptive MPC-Based Coordinated 4WS and Yaw Moment Control for High-Speed Vehicle Path Tracking		Qing-Yun Wang	Dalian Univ. of Tech.
Chongyu Guo	Tongji Univ.	Yan-Hua Ma	Dalian Univ. of Tech.
Mengge Sun	Tongji Univ.	Xi-Ming Sun	Dalian Univ. of Tech.
Lulu Guo	Tongji Univ.	13:50-14:10	MonC08-2
14:50-15:10	MonC06-5	An Adaptive PID Controller Based on Actor-Critic Network for the Pointing Control of Leighton Chajnantor Telescope	
Adaptive Convexification-Based Predictive Control for Spacecraft Attitude Maneuver under Non-Convex Constraints		Sixuan Shi	Southeast Univ.
Wujun Tao	National Univ. of Defense Tech.	Weirui Chen	Southeast Univ.
Jia-xin Hu	National Univ. of Defense Tech.	Zheng Wang	Southeast Univ.
Chengming Zhang	National Univ. of Defense Tech.	14:10-14:30	MonC08-3
Yanwei Zhu	National Univ. of Defense Tech.	Attitude Tracking Control of Reusable Launch Vehicle During Deceleration Phase Based On Periodic Delayed Sliding Mode Surface	
15:10-15:30	MonC06-6	Junjie Sha	Harbin Inst. of Tech.
Automated Parameter Design for Continuous Control Set Model-Free Predictive Control Based on Reinforcement Learning		Zhao-Yan Li	Harbin Inst. of Tech.
Xiaoya Mi	Huazhong Univ. of Science and Tech.	Mengyang Wang	Zhengzhou Research Inst. of HIT
Yang Liu	Huazhong Univ. of Science and Tech.	14:30-14:50	MonC08-4
Qianhong Chen	Huazhong Univ. of Science and Tech.	Self-Tuning Fusion Filtering for Unknown Parameter Systems under DoS Attacks	
Guoqing Zhang	Huazhong Univ. of Science and Tech.	Rongjiang Zhu	Heilongjiang Univ.
Ying Shi	Heilongjiang Univ.	Ying Shi	Heilongjiang Univ.
MonC07	Room07	14:50-15:10	MonC08-5
Control theory and control technology (21)	13:30-15:30	Modeling and Cooperative Control of a Dual-Antenna System for Wind Disturbance Suppression	
Chair: Yuan Gao	Heilongjiang Univ.	Haohua Tu	South China Univ. of Tech.
Co-Chair: Caihong Li	Shandong Univ. of Tech.	Jieying Lu	South China Univ. of Tech.
13:30-13:50	MonC07-1	Weizhou Su	South China Univ. of Tech.
Student-t Mixture Model-Based Unscented Kalman Filter for Nonlinear Non-Gaussian System		15:10-15:30	MonC08-6
Runheng Zhang	Heilongjiang Univ.	Improved MAF-PLL for Non-Ideal Operating Conditions	
Zhiwei Liu	Heilongjiang Univ.	Tingjian Yan	Nanjing Univ. of Posts and Telecommunications
Xuenan Zhang	Heilongjiang Univ.	MonC09	Room09
Mingyue Li	Heilongjiang Univ.	Control theory and control technology (23)	13:30-15:30
Wenbin Yang	Heilongjiang Univ.	Chair: Kunzhi Liu	Dalian Univ. of Tech.
Yuan Gao	Heilongjiang Univ.	Co-Chair: Wenxuan Zhang	Southeast Univ.
13:50-14:10	MonC07-2	13:30-13:50	MonC09-1
The Complete Coverage Path Planning for Mobile Robots Based on the Hyperchaotic System with Large L_E Values and Chaotic Synchronization		Composite Anti-Windup Control for Fixed-Wing Aircraft: An Improved State-Dependent and Hybrid Compensation Approach	
Caihong Li	Shandong Univ. of Tech.	Wangwang Ji	Dalian Univ. of Tech.
Yong Song	Shandong Univ.	Yusong Lin	Dalian Univ. of Tech.
Na Guo	Shandong Univ. of Tech.	Kunzhi Liu	Dalian Univ. of Tech.

13:50-14:10	MonC09-2	MonC11	Room11
Hankel Matrix Identification of a 1-meter Aperture Telescope Servo System with Flexible Dynamics		Intelligent perception, synergic decision-making, and security for robots and unmanned systems (13)	13:30-15:30
Wenxuan Zhang	Southeast Univ.	Chair: Mingzhi Chen	Univ. of Shanghai for Science and Tech.
Jueqi Lin	Southeast Univ.	Co-Chair: Tao Li	Nanjing Univ. of Aeronautics and Astronautics
Zheng Wang	Southeast Univ.		
14:10-14:30	MonC09-3	13:30-13:50	MonC11-1
Trajectory Planning and Control for Automatic Berthing of USV in Complex Environments		A Review of Visual Transformer-Based Visual Object Tracking	
Yuang Zhou	Huazhong Univ. of Science and Tech.	Liming Feng	Univ. of Shanghai for Science and Tech.
Rui Wang	Huazhong Univ. of Science and Tech.	Mingzhi Chen	Univ. of Shanghai for Science and Tech.
Zhiquan Li	Huazhong Univ. of Science and Tech.	Daqi Zhu	Shanghai Maritime Univ.
Hai-Tao Zhang	Huazhong Univ. of Science and Tech.		
14:30-14:50	MonC09-4	13:50-14:10	MonC11-2
Fuzzy Adaptive Tracking Control of Stochastic Nonlinear Systems with Full-State Constraints and Input Saturation under Unknown Time-Varying Disturbances		SPM-LIO: Soft Reweighted Voxel-Plane Mapping for LiDAR-Inertial Odometry	
Tong Wang	Nanjing Univ. of Science and Tech.	Xiaorui Wang	Nanjing Univ. of Aeronautics and Astronautics
Weimin Chen	Nanjing Univ. of Science and Tech.	Tao Li	Nanjing Univ. of Aeronautics and Astronautics
Xu Liu	Nanjing Univ. of Science and Tech.	Min Wan	Nanjing Univ. of Aeronautics and Astronautics
		Yannuo Shi	Nanjing Bestway Intelligent Control Tech. Co. Ltd.
14:50-15:10	MonC09-5	14:10-14:30	MonC11-3
Strong Stabilization of the Acrobot with Imaginary Zeros via Optimal Triple Conjugate Pole Placement		Robust MLLM-Based Decision Making for Swarm Confrontation under Uncertain Constraints	
Xiaohui Ji	Southeast Univ.	Li Wang	Beijing Inst. of Tech.
Xin Xin	Southeast Univ.	Lei Chen	Beijing Inst. of Tech.
Yannian Liu	Southeast Univ.		
15:10-15:30	MonC09-6	14:30-14:50	MonC11-4
Equilibrium Posture Tracking Control of Planar Underactuated Three-Link Robot Using Angular and Linear Momentum		A Lightweight Framework for Open-Set Language-Guided Industrial Grasping	
Chenchen Gu	Southeast Univ.	Junxi Bi	Hohai Univ.
Xin Xin	Southeast Univ.	Tingting Wang	Hohai Univ.
		Mingyu Yin	Hohai Univ.
MonC10	Room10	14:50-15:10	MonC11-5
Intelligent perception, synergic decision-making, and security for robots and unmanned systems (12)		A Lightweight YOLOv11-Based Algorithm for High-Altitude Operation Safety Monitoring in Wind Farms	
Chair: Fuyong Wang	Nankai Univ.	Hongli San	Shenyang Univ. of Tech.
Co-Chair: Han Dong	Xiamen Univ. Tan Kah Kee College	Lu Sun	Shenyang Univ. of Tech.
		Songchao Fu	Shenyang Univ. of Tech.
		Zihan Xu	Shenyang Univ. of Tech.
13:30-13:50	MonC10-1	15:10-15:30	MonC11-6
Efficient Trajectory Optimization for Car-like Robots with ESDF-driven Soft Constraints		HA-DeepTSK: A Residual Deep Fuzzy System with Hierarchical Attention for Multimodal Emotion Recognition	
Zhipeng Yang	Nankai Univ.	Yuxuan Mao	Huazhong Univ. of Science and Tech.
Shengyi Wang	Shandong Univ. of Science and Tech.	Xinrun He	Huazhong Univ. of Science and Tech.
Tuo Zhou	Shandong Univ. of Science and Tech.	Chaojie Li	Univ. of New South Wales
Fuyong Wang	Nankai Univ.	Jian Huang	Huazhong Univ. of Science and Tech.
13:50-14:10	MonC10-2	MonC12	Room12
Research on pure azimuth passive positioning in attempted formation flight of unmanned aircraft		Intelligent perception, synergic decision-making, and security for robots and unmanned systems (14)	13:30-15:30
Han Dong	Xiamen Univ. Tan Kah Kee College	Chair: Meng Li	Univ. of Jinan
Haiyong Gu	Xiamen Univ. Tan Kah Kee College	Co-Chair: Jing Luo	Jingchu Univ. of Tech.
14:10-14:30	MonC10-3	13:30-13:50	MonC12-1
Hierarchical Multi-Agent Safe Path Planning Based on Graph Neural Networks		Adaptive Contract Net Scheduling Strategy for UAV Swarms Handling Sudden Tasks	
Xiaoguang Chen	National Univ. of Defense Tech.	Qicheng Liu	Univ. of Jinan
Yu Zhang	National Univ. of Defense Tech.	Meng Li	Univ. of Jinan
Jiayu Zhao	National Univ. of Defense Tech.	Qing Song	Univ. of Jinan
Keyu Zhao	National Univ. of Defense Tech.		
Aiwei Liu	National Univ. of Defense Tech.		
14:30-14:50	MonC10-4	13:50-14:10	MonC12-2
Multi-Scale Obstacle Perception and Adaptive Reward Shaping for UAV Deep Reinforcement Learning Navigation		Research on autonomous inspection system for warehouse robots based on ROS	
Tao Wen	National Univ. of Defense Tech.	Kaikai Chen	Jingchu Univ. of Tech.
Zefeng Xiong	National Univ. of Defense Tech.	Hongfeng Zhu	Jingchu Univ. of Tech.
Xiangkai Lian	National Univ. of Defense Tech.	Xiaojian Zhao	Jingchu Univ. of Tech.
Jinpu Zhang	National Univ. of Defense Tech.	Jing Luo	Jingchu Univ. of Tech.
Hui Shen	National Univ. of Defense Tech.	Xue Chen	Jingchu Univ. of Tech.
		Yunfeng Zou	Jingchu Univ. of Tech.
14:50-15:10	MonC10-5	14:10-14:30	MonC12-3
Self-Organizing Optimal Control for Embodied Intelligence Systems		Diffusion-Head VLA Model for Adaptive UAV Vision-Language Navigation	
Weiyu Ji	Bohai Univ.	Tanhui Lin	Beijing Inst. of Tech.
Honggui Han	Beijing Univ. of Tech.	Qing Fei	Beijing Inst. of Tech.
Zheng Liu	Beijing Univ. of Tech.	Qingbo Geng	Beijing Inst. of Tech.
15:10-15:30	MonC10-6	14:30-14:50	MonC12-4
A Multi-Objective Optimization Strategy Based on the IEEE Std 7000-2021 Ethical Standard		Roll Prediction of USVs Based on WTCnv-GRU-SA Model	
Kaiyuan Chen	Tsinghua Univ.	Huixuan Fu	Harbin Engineering Univ.
Zhengjie Hu	Beijing Inst. of Tech.	Xinyu Wang	Harbin Engineering Univ.
Senchun Chai	Beijing Inst. of Tech.	Yuchao Wang	Harbin Engineering Univ.
Yuhan Suo	Beijing Inst. of Tech.		
Shaowei Cui	Chinese Academy of Sciences		
Wannian Liang	Tsinghua Univ.		
Shuo Wang	Chinese Academy of Science		
		14:50-15:10	MonC12-5
		Graph-Filtering-Based Affine Formation Control with Time-Varying Gains	
		Wen Mei	Wuhan Univ. of Science and Tech.
		Jingwen Yi	Wuhan Univ. of Science and Tech.

15:10-15:30	MonC12-6	Ruilin Zhang Xiaopeng Li Shuolong Ren	Northeastern Univ. Northeastern Univ. Northeastern Univ.
Adaptive Multi-scale Training-free Neural Architecture Search for Medical Image Segmentation in Robot-Assisted Surgery			
Teng Liu Xiaoxue Sun Hongpeng Wang	Nankai Univ. Nankai Univ. Nankai Univ.		
MonC13	Room13		
Advanced sensing and intelligent perception (7)	13:30-15:30		
Chair: Yuyang Li CO-Chair: Haocheng Sun	China Univ. of Mining and Tech. Univ. of Jinan		
13:30-13:50	MonC13-1	Tianle Li	Huazhong Univ. of Science and Tech. HUST-GYENNO CNS Intelligent Digital Medicine Tech. Center
Few-Shot Classification Method Based on Contrastive Learning and Multi-Scale Feature Pyramid			
Yuyang Li Yajun Li Jingrui Liu Yafeng Zhang Qian Wu Shijian Dong	China Univ. of Mining and Tech. China Univ. of Mining and Tech. China Univ. of Mining and Tech. Cangzhou Technical College Northeastern Univ.	Xiaohuan Jin	Huazhong Univ. of Science and Tech. HUST-GYENNO CNS Intelligent Digital Medicine Tech. Center
13:50-14:10	MonC13-2	Zhonglue Chen	Huazhong Univ. of Science and Tech. HUST-GYENNO CNS Intelligent Digital Medicine Tech. Center
Dynamic Visual SLAM Method Based on Improved YOLOv11n			
Haocheng Sun Meng Li Huifen Zhang	Univ. of Jinan Univ. of Jinan Univ. of Jinan	Kang Ren	HUST-GYENNO CNS Intelligent Digital Medicine Tech. Center
14:10-14:30	MonC13-3	Jin Zhao	Huazhong Univ. of Science and Tech. HUST-GYENNO CNS Intelligent Digital Medicine Tech. Center
A Lightweight Multi-scale Residual Attention Network for Hand Gesture Recognition			
Xin Pang Qinjun Zhao Kang Zhao Tao Shen	Univ. of Jinan Univ. of Jinan Univ. of Jinan Univ. of Jinan	15:10-15:30	MonC14-6
14:30-14:50	MonC13-4	Deep-Supervised Attention U-Net Based Automatic Segmentation for Recognition and Diagnosis of Characteristic Regions in the Carotid Artery From Ultrasound Images	
EOG Artifact Removal for Single-Channel EEG Signals based on DWT-VMD Algorithm			
Yongqi Xian Meng Li Qiulin Yue	Univ. of Jinan Univ. of Jinan Shandong Xiaoying Biotechnology Co.,Ltd	Lele Dang	Nankai Univ. Shenzhen Research Inst. Of Nankai Univ. Tianjin First Center Hospital
14:50-15:10	MonC13-5	Lijun Duan Hongpeng Wang	Nankai Univ. Nankai Univ.
Complex and High-Density Face Detection Based on YOLOv10-SNEG			
Benhang Liu Haoran Meng Yashuang Mu	Henan Univ. of Tech. Henan Univ. of Tech. Henan Univ. of Tech.	Jianda Han	Shenzhen Research Inst. Of Nankai Univ. Nankai Univ.
15:10-15:30	MonC13-6	Yanding Qin	Shenzhen Research Inst. Of Nankai Univ.
Research on Mobile Real-Time Fall Detection system for Elderly care applications			
Qingchao Zhang Yuanyuan Zou Zuoquan Kang	Shenyang Jianzhu Univ. Shenyang Jianzhu Univ. Shenyang Jianzhu Univ.	MonC15	Room15
MonC14	Room14	Intelligent decision-making systems and applications (8)	13:30-15:30
Advanced sensing and intelligent perception (8)	13:30-15:30	Chair: Weijie Ren Co-Chair: Chen Yuan	Harbin Engineering Univ. State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.
Chair: Weiming Shao CO-Chair: Jianguin Huang	China Univ. of Petroleum (East China) Xiamen Univ. of Tech.	13:30-13:50	MonC15-1
13:30-13:50	MonC14-1	MambaBFS: A Semantic Change Detection Model Integrating Bidirectional Feedback and Spectral Enhancement	
A multi-scale JITL method based on semi-supervised linear dynamical system for industrial soft sensing			
Yulong Wang Weiming Shao	China Univ. of Petroleum (East China) China Univ. of Petroleum (East China)	Weijie Ren Kuangjie Fu Zhike Zhou Yuan Shan	Harbin Engineering Univ. Harbin Engineering Univ. Harbin Engineering Univ. Dalian Univ. of Tech. ACRE Coking & Refractory Engineering Consulting Corporation
13:50-14:10	MonC14-2	13:50-14:10	MonC15-2
MCLTNet:A Hybrid CNN-LSTM-Transformer Approach for EEG Decoding		Modeling and Flexibility Analysis of Thermal Storage Electric Heating Loads	
Jianguin Huang Yanze Cai Jiaxiang Zou Yangjie Li Xiaohuan Xia Binyang Lin Xiner Li	Xiamen Univ. of Tech. Xiamen Univ. of Tech. Xiamen Univ. of Tech. Xiamen Univ. of Tech. Xiamen Univ. of Tech. Xiamen Univ. of Tech. Xiamen Univ. of Tech.	Chen Yuan	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd. State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd. State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd. State Grid Liaoning Integrated Energy Service Co., Ltd.
14:10-14:30	MonC14-3	Xiaonan Mu	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.
EK-Det: Expert Knowledge-Guided Wildlife Detection via Cross-Modal Alignment and Soft Fusion			
Jie Li Huayun Han Xuejin Gao	Beijing Univ. of Tech. Beijing Univ. of Tech. Beijing Univ. of Tech.	Lei Fan	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd. State Grid Liaoning Integrated Energy Service Co., Ltd.
14:30-14:50	MonC14-4	Cheng Huang	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.
A Dual-Branch Hybrid Attention Network for Breast Lesion Segmentation in Ultrasound Images			
Zhangyu Liu	Northeastern Univ.	Zhengqing Li	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.
		Linkui Qu	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.
		Baoqu Yang	State Grid Liaoning Integrated Energy Service Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.
		Lingyuan Meng	State Grid Liaoning Integrated Energy Service

	Co., Ltd. State Grid Integrated Energy Service Group Co., Ltd.	15:10-15:30 MonC16-6 STA-TGC: Spatio-Temporal Attention Temporal Graph Convolution for Traffic Flow Forecasting	Lanzhou Univ. of Tech. Lanzhou Univ. of Tech. Lanzhou Univ. of Tech. Lanzhou Univ. of Tech. Lanzhou Univ. of Tech.
14:10-14:30		MonC15-3 Hybrid Multi-Target 3D Path Planning Algorithm for Unmanned Aerial Vehicle	
Kui Liu	Beijing Inst. of Tech.	Jingjing Sun	
Qingbo Geng	Beijing Inst. of Tech.	Zhiwen Wang	
Fengqing Xian	Beijing Inst. of Tech.	Kangkang Yang	
		Jingxiao Zeng	
		Haoxu Wang	
14:30-14:50		MonC15-4 Research on Autonomous Cooperative Multi-Task Scheduling Method for Heterogeneous UAVs Based on the AlphaSGA Algorithm	
Zhenglei Wei	China Aerodynamics Research & Development Center	Chenglei Wang	Northeastern Univ.
Dongxiao Ma	93207 Unit of the Chinese People's Liberation Army	Yujie Gao	Northeastern Univ.
Chengwei Ruan	93207 Unit of the Chinese People's Liberation Army	Xinglong Cui	Northeastern Univ.
		Bowen Han	Northeastern Univ.
		Xiaowei Tang	Northeastern Univ.
		Yu Xia	Northeastern Univ.
		Hongru Li	Northeastern Univ.
14:50-15:10		MonC15-5 An Environmental-Robust Data-Driven Framework for Multi-Agent Pursuit-Evasion Game	
Yueming Cao	Tsinghua Univ.		
Zonghao Liu	Tsinghua Univ.		
Shaobing Xu	Tsinghua Univ.		
15:10-15:30		MonC15-6 Audio-Visual Interest Network for Video Recommendation	
Mingbao Yang	Beijing Normal Univ.		
Zhiwen Zhao	Beijing Normal Univ.		
Qing-Guo Wang	Wuhan Univ. of Science and Tech.		
Huiwen Dong	Beijing Normal Univ.		
Fengbin Wu	Guizhou Univ.		
Zijin Li	Beijing Normal Univ.		
MonC16		Room16 Fault diagnosis, prognosis and prediction maintenance (5)	
Chair: Funian Li	Wuhan Univ. of Science and Tech.		
Co-Chair: Haochong Li	China Univ. of Petroleum (Beijing)		
13:30-13:50		MonC16-1 Research on Strain Prediction Model for Bridge Monitoring Based on CEEMDAN-SE-Informer	
Ziheng Wang	Wuhan Univ. of Science and Tech.		
Funian Li	Wuhan Univ. of Science and Tech.		
Zhiming Liu	China Railway Siyuan Survey And Design Group Co., Ltd		
Xinyu Song	China Railway Siyuan Survey And Design Group Co., Ltd		
Jiezhen Guo	China Railway Siyuan Survey And Design Group Co., Ltd		
13:50-14:10		MonC16-2 Multi-Scale Temporal Graph Network with Physics-Guided Constraints for Robust Photovoltaic Power Forecasting	
Haochong Li	China Univ. of Petroleum (Beijing)		
Huan Yu Zhao	China Univ. of Petroleum (Beijing)		
Lin Wang	China Univ. of Petroleum (Beijing)		
Jian Du	China Univ. of Petroleum (Beijing)		
Rui Qiu	China Univ. of Petroleum (Beijing)		
Yongtu Liang	China Univ. of Petroleum (Beijing)		
14:10-14:30		MonC16-3 Remaining Useful Life Prediction Based on Kernel Slow Feature Analysis and Graph-Enhanced Physics-Informed Neural Network	
Yunqi Liu	Beijing Univ. of Chemical Tech.		
Youqing Wang	Beijing Univ. of Chemical Tech.		
Xin Ma	Beijing Univ. of Chemical Tech.		
14:30-14:50		MonC16-4 Dual-Channel Fusion Network based on iTransformer and ResNet for Remaining Useful Life Prediction of Rolling Bearing	
Baokang Yan	Wuhan Univ. of Science and Tech.		
Di Du	Wuhan Univ. of Science and Tech.		
Tingxuan Li	Wuhan Univ. of Science and Tech.		
Miao Wang	Wuhan Univ. of Science and Tech.		
14:50-15:10		MonC16-5 Hierarchical Multi-Scale Graph Fusion Network for Multi-Sensor Fault Diagnosis	
Ziheng Gu	Nanjing Univ. of Science and Tech.		
Xiansong He	Nanjing Univ. of Science and Tech.		
Yibo Song	Nanjing Univ. of Science and Tech.		
Xiaowei Yang	Nanjing Univ. of Science and Tech.		
Xiaoli Zhao	Nanjing Univ. of Science and Tech.		
Jianyong Yao	Nanjing Univ. of Science and Tech.		
		MonCIS Interactive Session	RoomPT 13:30-15:30
		MonCIS-01 An Integrated Transfer-Learning Framework for Intelligent Bearing Fault Diagnosis	
		Chenglei Wang	Northeastern Univ.
		Yujie Gao	Northeastern Univ.
		Xinglong Cui	Northeastern Univ.
		Bowen Han	Northeastern Univ.
		Xiaowei Tang	Northeastern Univ.
		Yu Xia	Northeastern Univ.
		Hongru Li	Northeastern Univ.
		MonCIS-02 Zero-Shot Compound Fault Diagnosis Method Based on Knowledge and Data Semantic Embedding	
		Fuqiang Nian	Shenyang Engine Res. Inst.
		Kai Wang	Northeastern Univ.
		Jinghao Zhang	Northeastern Univ.
		Yongbao Xiao	Northeastern Univ.
		Xiaojuan Li	Northeastern Univ.
		Huimin Wang	Northeastern Univ.
		MonCIS-03 PRAE: Prototype-Guided Recurrent Autoencoder for Data-Driven Fault Detection in Industrial Processes	
		Shen Li	Zhejiang Univ.
		Chunjie Yang	Zhejiang Univ.
		Siwei Lou	Huzhou Inst. of Industrial Control Tech. Zhejiang Univ.
		MonCIS-04 Imaging of Multiple Types of Underground Pipelines in Chemical Plants Based on F-K Migration and Minimum Entropy Optimization	
		Hengyu Liu	Wuhan Inst. of Tech.
		Binyi Lian	Wuhan Inst. of Tech.
		Ziang Wei	Wuhan Inst. of Tech.
		Hao Liu	Wuhan Inst. of Tech.
		Peng Huang	Wuhan Inst. of Tech.
		Zixin Huang	Wuhan Inst. of Tech.
		MonCIS-05 Bearing Fault Diagnosis Based on the Improved CGO Algorithm for Optimizing VMD and MSDCNN-ResBiLSTM	
		Jianyong Tuo	Beijing Univ. of Chemical Tech.
		Pengcheng Zhu	Beijing Univ. of Chemical Tech.
		Chenghou Wong	Beijing Univ. of Chemical Tech.
		Weitao Li	Hollysys Tech. Group Co., Ltd
		Youqing Wang	Beijing Univ. of Chemical Tech.
		MonCIS-06 Bayesian Reliability Evaluation with Limited Accelerated Degradation Data	
		Xunhao Lei	Nanjing Univ. of Aeronautics and Astronautics
		Zujin Wang	Nanjing Kangni Mechanical & Electrical Company
		Ningyun Lu	Nanjing Univ. of Aeronautics and Astronautics
		MonCIS-07 Anchor-Based Local Kullback-Leibler Divergence for Incipient Fault Detection in Nonlinear Dynamic Processes	
		Shu Chen	Nantong Univ.
		Shuchen Shen	Nantong Univ.
		Liangliang Shang	Nantong Univ.
		Gaosheng Hu	Nantong Univ.
		Chenxi Zhu	Nantong Univ.
		MonCIS-08 Efficient Neural Architecture for the detection of Multi-Class Road Damage Detection in Onboard Driving Data	
		Shuai Pan	Nanjing Univ. of Posts and Telecommunications
		Yingjiang Zhou	Nanjing Univ. of Posts and Telecommunications
		Xiangbiao Zeng	Nanjing Univ. of Posts and Telecommunications
		Nan Yang	Nanjing Univ. of Posts and Telecommunications
		Jiale Li	Nanjing Univ. of Posts and Telecommunications
		MonCIS-09 Physics-informed Neural Network-based Current Distribution Inversion for Proton Exchange Membrane Fuel Cells	
		Pengyu Yue	Huazhong Univ. of Science and Tech.
		Qian Xiang	Huazhong Univ. of Science and Tech.

Zhuo Wang	Huazhong Univ. of Science and Tech.	TCN-CrossFormer with Sparse Attention and a Dual-Branch Attention Feed-Forward Network for Series Arc-Fault Detection	
Linghong Zeng	Huazhong Univ. of Science and Tech.	Ping Wang	Lanzhou Univ. of Tech.
Xi Li	Huazhong Univ. of Science and Tech.	Yu Zhou	Lanzhou Univ. of Tech.
Fengyuan Guo	Huazhong Univ. of Science and Tech.		
MonCIS-10		MonCIS-21	
Research on Intelligent Bearing Fault Diagnosis Based on Meta-CGAN		Reliability Improvement Methods for Power Loss in Spacecraft Power Systems	
Kai Wang	Xi'an Univ. of Tech.	Tingting Zhang	Shanghai Inst. of Space Power-Sources
Kefan Luo	Xi'an Univ. of Tech.	Junwu Yang	Shanghai Inst. of Space Power-Sources
Fan Dong	Xi'an Univ. of Tech.	Zhenhua Wang	Harbin Inst. of Tech.
Yangkai Ma	Xi'an Univ. of Tech.		
Menghui Han	Xi'an Univ. of Tech.	MonCIS-22	
Yibo Ma	Xi'an Univ. of Tech.	Active Sliding Mode Fault-Tolerant Control on Zonotopic Set-Membership Estimation for Linear Parameter-Varying Systems	
MonCIS-11		Meijia Pan	Harbin Inst. of Tech.
1D-MSFNet: A Multi-Level Cross-Attention Fusion Network for Multi-Modal Fault Diagnosis under Strong Noise		Deting Li	Shanghai Inst. of Spaceflight Control Tech.
Zhigang Feng	Shenyang Aerospace Univ.	Zhenhua Wang	Harbin Inst. of Tech.
Nan Wang	Shenyang Aerospace Univ.		
MonCIS-12		MonCIS-23	
An Industrial Fault Signal Generation Method Based on Data-Predictive Diffusion Transformers and DDIM Sampling		Integrating TOPSIS with a Hierarchical Belief Rule Base Model for Health State Assessment of Critical Rotating Machinery in Complex Systems	
Xiangxin Li	Xi'an Univ. of Tech.	Jianglong Mi	Changchun Univ. of Tech.
Anqi Shangguan	Xi'an Univ. of Tech.	Xiaojing Yin	Changchun Univ. of Tech.
Rong Fei	Xi'an Univ. of Tech.	Dianxin Chen	Jilin Engineering Normal Univ.
Qirui Huang	Xi'an Univ. of Tech.	Yubo Shao	Changchun Univ. of Tech.
Nan Feng	Univ. of Science and Tech. Beijing	Shouxin Peng	Changchun Univ. of Tech.
Xinhong Hei	Xi'an Univ. of Tech.	Zhi Gao	Changchun Univ. of Tech.
MonCIS-13		MonCIS-24	
Remaining Useful Life Prediction Method Based on Dynamic Failure Threshold Interval Adjustment		Collision Detection for Dual-Arm SCARA Robots Using Momentum-Based ESO with Parameter Uncertainty Compensation	
Qirui Huang	Xi'an Univ. of Tech.	Zhiheng Liang	Harbin Inst. of Tech.
Anqi Shangguan	Xi'an Univ. of Tech.	Yewei Lu	Harbin Inst. of Tech.
Rong Fei	Xi'an Univ. of Tech.	Zhenhua Wang	Harbin Inst. of Tech.
Xiangxin Li	Xi'an Univ. of Tech.		
Yajun Liu	Xi'an Univ. of Tech.	MonCIS-25	
Qian Li	Xi'an Univ. of Tech.	Collision Detection of Robotic Manipulators Based on Momentum Residual Analysis	
MonCIS-14		Yewei Lu	Harbin Inst. of Tech.
Rolling Bearing Fault Diagnosis Based on Variance-Optimized SVD and Weighted Overlapping Group Shrinkage		Zhiheng Liang	Harbin Inst. of Tech.
Fan Huang	Wuhan Univ. of Science and Tech.	Zhenhua Wang	Harbin Inst. of Tech.
Zheng Jiang	Wuhan Univ. of Science and Tech.		
Bin Liu	Wuhan Univ. of Science and Tech.	MonCIS-26	
Weihua Huang	Wuhan Univ. of Science and Tech.	Adaptive Hybrid Fault estimation Observer Design for Systems with Intermittent Measurements	
MonCIS-15		Jingjing Yan	AVIC Shenyang Aircraft Corporation
An improved fault diagnosis method with class-oriented hypersphere		MonCIS-27	
Chuang Nie	Changchun Univ. of Tech.	UAV Aerial Images Object Detection Based on Improved D-FINE Model	
Xiaojing Yin	Changchun Univ. of Tech.	Siman Lin	Southeast Univ.
Yubo Shao	Changchun Univ. of Tech.	Junyong Zhai	Southeast Univ.
Shouxin Peng	Changchun Univ. of Tech.		
Xiaopeng Xi	Seoul National Univ.	MonCIS-28	
Bangcheng Zhang	Changchun Univ. of Tech.	From Foot Workers (1873) and Hand Workers (1974) to Brain Workers (2074), toward Soul Workers (2174), Estimated via Technological Revolution Data and Zhang Extrapolation Formulas	
MonCIS-16		Yunong Zhang	Sun Yat-sen Univ.
Physics-Informed Energy-Aware Feature Enhancement for Rolling Bearing Fault Diagnosis		Pengyuan Shao	Sun Yat-sen Univ.
Baokang Yan	Wuhan Univ. of Science and Tech.	Junyan Liu	Sun Yat-sen Univ.
Siyi Lu	Wuhan Univ. of Science and Tech.	Fan Zhang	Sun Yat-sen Univ.
Xinran Hu	Wuhan Univ. of Science and Tech.		
Tingxuan Li	Wuhan Univ. of Science and Tech.	MonCIS-29	
MonCIS-17		Density Peaks Clustering Algorithm Based on Fusion of k-Nearest Neighbour with Gaussian Kernel Density	
Pressure Prediction in Water Distribution Networks Based on a Hybrid LSTM-Transformer Model		Xiaoyun Liu	North China Univ. of Science and Tech.
Zheng Tu	Shenyang Jianzhu Univ.	Wanying Zhu	East China Jiaotong Univ.
Changtao Wang	Shenyang Jianzhu Univ.	Yufan Xie	North China Univ. of Science and Tech.
Jianzhao Cao	Shenyang Jianzhu Univ.	Hang Lei	North China Univ. of Science and Tech.
MonCIS-18		Zhigang Yang	North China Univ. of Science and Tech.
Intelligent Estimation of EH Oil Pipe Vibration in Steam Turbine Units Based on BLT-Net		Zhiqiang Wang	North China Univ. of Science and Tech.
Xintao Gong	Dalian Univ. of Tech.	MonCIS-30	
Junzhe Cao	Dalian Univ. of Tech.	Research on Soft Measurement Methods for Concentrate Copper Grade Based on Foam Images	
Zhuang Li	Northeastern Univ.	Guobao Wu	North China Univ. of Science and Tech.
MonCIS-19		Han Zhang	Novtium (Beijing) Electric Tech. Co., Ltd.
Semi-Supervised Few-Shot Fault Diagnosis based on Causal Mechanism Consistency Priors		Haoyang Lu	North China Univ. of Science and Tech.
Jianlong Liu	Donghua Univ.	Wenfeng Shuai	North China Univ. of Science and Tech.
Lei Chen	Donghua Univ.	Ruicheng Zhang	North China Univ. of Science and Tech.
Kuangrong Hao	Donghua Univ.	Zhiqiang Wang	North China Univ. of Science and Tech.
MonCIS-20		MonCIS-31	
		UIKG: New Uncertain-Dynamic Incremental Knowledge Graphs	
		Zhangcong Xu	Shanghai Jiao Tong Univ.
		Gumin Jin	Shanghai Jiao Tong Univ.
		Guangyao Wang	Aircraft Design Inst. AVIC Shenyang
		Jianxun Li	Shanghai Jiao Tong Univ.

MonCIS-32
Improved Multi-Level Morphological Statistical Algorithm for Ground Filtering
 Puyu Zhang China Three Gorges Univ.
 Xi Chen China Three Gorges Univ.

MonCIS-33
Steel Surface Defect Detection Method Based on an Improved YOLOv11s
 Qian Xue Dalian Maritime Univ.
 Ying Hu Dalian Maritime Univ.
 Chunxin Li Dalian Maritime Univ.

MonCIS-34
Zinc Flotation Grade Prediction via a Spatio-Temporal Dual-Stream Network and Multi-Task Adaptive-Threshold Semi-Supervised Learning
 Yiting Huang Central South Univ.
 Zhaohui Tang Central South Univ.
 Jin Luo Central South Univ.
 Hongda Li Central South Univ.
 yongfang Xie Central South Univ.
 Weihua Gui Central South Univ.

MonCIS-35
A Lightweight RT-DETR-Based Method for Subsurface Defect Detection in Pavement GPR Data
 Jiasen Chen Xi'an Univ. of Architecture and Tech.
 Xiang Bai China Railway Xi'an Bureau Group Co.,Ltd.

Zongxing Duan Xi'an Univ. of Architecture and Tech.

MonCIS-36
Semi-supervised steel surface defect detection method based on improved Yolov8
 Mao Zhang Inner Mongolia Univ. of Science and Tech.
 Yan Ren Inner Mongolia Univ. of Science and Tech.
 Haotian Qin Inner Mongolia Univ. of Science and Tech.
 Hang Zhang Inner Mongolia Univ. of Science and Tech.
 Yang Sun Inner Mongolia Univ. of Science and Tech.
 Zhengbo Hu Inner Mongolia Univ. of Science and Tech.

MonCIS-37
Particle Size Distribution Control of Cement Combined Grinding Process Based on Improved Unscented Kalman Filter Assisted Heuristic Dynamic Programming
 Cunrui Lu Univ. of Jinan
 Qiang Zhang Univ. of Jinan
 Xuming Zhai Univ. of Jinan
 Yize Liu Univ. of Jinan
 Haozhe Li Univ. of Jinan
 Kai Sun Univ. of Jinan

MonCIS-38
Corrosion Prediction of Metal Materials Based on Time Series and Large Language Model
 Chentao Qu Univ. of Science and Tech. Beijing
 Tao Yang Univ. of Science and Tech. Beijing
 Beijing Engineering Research Center of Industrial Spectrum Imaging

MonCIS-39
A Review of Deep Learning Architectures for EEG-Based Motor Imagery Decoding
 Qijie Zou Dalian Univ.
 Junxiao Wang Dalian Univ.
 Bing Gao Dalian Univ.
 Xiuli Du Dalian Univ.

MonCIS-40
MFPIN: A Lightweight Legendre-Based Framework for Real-Time Measured State Trajectory Prediction in Industrial Processes
 Yuxin Huang Zhejiang Univ.
 Xinggao Liu Zhejiang Univ.

MonCIS-41
SSH-Unet: A deep Learning Framework for Hourly Prediction Near-Surface NO2 Concentrations
 Chi Zheng Southeast Univ.
 Zengliang Zang National Univ. of Defense Tech.
 Dan Niu Southeast Univ.
 Ziwei Wang Southeast Univ.
 Zitong Shuai Southeast Univ.
 Chenyan Zhou Southeast Univ.

MonCIS-42
Transformer-Based Cyber Threat Intelligence Extraction
 Kutub Thakur St. John's Univ.
 Joan DeBello St. John's Univ.
 David Byrne St. John's Univ.
 Abu Kamruzzaman York College/CUNY

MonCIS-43
Reinforcement Learning-Based Fixed-Time Attitude Control for Multiple Spacecraft Systems
 Chen Xu Univ. of Science and Tech. Beijing
 Yize Rui Univ. of Science and Tech. Beijing
 Zuodong Zhong Univ. of Science and Tech. Beijing
 Qing Li Univ. of Science and Tech. Beijing
 Heng Wang Univ. of Science and Tech. Beijing

MonCIS-44
Adaptive Security Control of DC Microgrids under Coordinated FDI and DoS Attacks
 Xiaotian Xu Nanjing Univ. of Posts and Telecom
 Songlin Hu Nanjing Univ. of Posts and Telecom
 Yu Huang Nanjing Univ. of Posts and Telecom
 Xiaoli Chen Nanjing Univ. of Posts and Telecom

MonCIS-45
Multimodal consistency anomaly detection method based on MLP
 Ke Wang Wuhan Univ. of Science and Tech.
 Yajie Ma Wuhan Univ. of Science and Tech.
 Shaowu Lu Wuhan Univ. of Science and Tech.
 Xiaohui Li Wuhan Univ. of Science and Tech.
 Feng Dan Wuhan Univ. of Science and Tech.
 Engineering Research Center For Metallurgical Automation and Measurement Tech. of Ministry of Education

MonCIS-46
SPLS-based adaptive resilient secure control for nonlinear CPSs under input saturation
 Yongjie Tian Northeastern Univ.
 Jipeng Zhao Northeastern Univ.
 Guang-Hong Yang Northeastern Univ.
 State Key Laboratory of Synthetical Automation for Process Industries

MonCIS-47
Adaptive Compromise-Threshold Wavelet Denoising and Gabor Enhancement for Low-Quality Fingerprints
 Fenyong Ma Qilu Univ. of Tech.
 Xian Xu Qilu Univ. of Tech.
 Ruzhou Tian Qilu Univ. of Tech.
 Peng Ji Qilu Univ. of Tech.
 Yanchen Zong Qilu Univ. of Tech.
 Zechao Chen Qilu Univ. of Tech.

MonD01 Room01
Industrial big data and industrial artificial intelligence (7)15:50-17:50
 Chair: Zhitao Liu Zhejiang Univ.
 Co-Chair: Hui Zhao Shenyang Univ. of Tech.

15:50-16:10 MonD01-1
A Novel Framework for Battery SOH Estimation: Coupling LSTP Strategy with LoRA-Fine-tuned Large Language Models
 Tao An Zhejiang Univ.
 Lei Zhang Wanxiang A123 Systems Corp.
 Yong Wang Wanxiang A123 Systems Corp.
 Min Su Wanxiang A123 Systems Corp.
 Zhitao Liu Zhejiang Univ.

16:10-16:30 MonD01-2
Multi-Modal Entity Alignment Method for Industrial Knowledge Graph Fusion
 Ruoxi Niu Shenyang Univ. of Tech.
 Yao Li Shenyang Univ. of Tech.
 Jiawei Xie Shenyang Univ. of Tech.

16:30-16:50	MonD01-3	17:30-17:50	MonD02-6
LG-YOLO: A Lightweight Small Object Detector with Learnable Laplacian-Gated Convolution		Adaptive Deep Interpretable Constructive Algorithm for Data Analysis	
Pu Sun Changchun Hua	Yanshan Univ. yanshan Univ.	Mingzi Duan Jing Nan Wei Dai	China Univ. of Mining and Tech. China Univ. of Mining and Tech. China Univ. of Mining and Tech.
16:50-17:10	MonD01-4	MonD03	Room03
A Meta-Learning-Based Approach for Missing Value Imputation in Univariate Time Series Using Echo State Networks		Control, optimization, and security of complex networks and systems (7)	15:50-17:50
Xiaohan Li Qian Li Qi Xia Wenxuan Tu	Nanchang Univ. Nanchang Univ. Nanchang Univ. Nanchang Univ.	Chair: Peng Li Co-Chair: You Li	Harbin Engineering Univ. National Univ. of Defense Tech.
17:10-17:30	MonD01-5	15:50-16:10	MonD03-1
PestSOLO: A Shallow-Deep Adaptive Framework for Cloud-based Stored-Grain Pest Detection		Multi-Vessel Encounter Recognition and Collision Risk Assessment in Complex Waters	
Jida Tian Huiling Zhou Chuanyang Ma	Beijing Univ. of Posts and Telecommunication Beijing Univ. of Posts and Telecommunication Beijing Univ. of Posts and Telecommunication	Peng Li Jinlong Hao Tengfei Wang Xianzhuang Zhang	Harbin Engineering Univ. Harbin Engineering Univ. Harbin Engineering Univ. Harbin Engineering Univ.
17:30-17:50	MonD01-6	16:10-16:30	MonD03-2
Dynamic Power Generation Assessment of Tethered Aerostat Photovoltaic Systems Based on TSMixer Attitude Prediction		Attention-Enhanced HMARL for Resource Optimization in UAV Swarm-Assisted SAGIN	
Ruijie Min Haikun Wei	Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering	You Li Jun He Xiaomin Liao Yang Han Tielian Fu Ge Li	National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. National Univ. of Defense Tech. Equipment project management center 31007 Troops of PLA
MonD02	Room02	16:30-16:50	MonD03-3
Industrial big data and industrial artificial intelligence (8)	15:50-17:50	DoS Amplification in gPTP via Switch HOL Blocking: A Control-Theoretic and MACsec Case Study	
Chair: Xue Chen Co-Chair: Yafeng Zhang	Jingchu Univ. of Tech. No.3 Middle School of Tangqi Town	Jizhi Li Gangfeng Yan	Zhejiang Univ. Zhejiang Univ.
15:50-16:10	MonD02-1	16:50-17:10	MonD03-4
Research on real-time detection algorithm Ghost-YOLOv8 for embedded platforms		Recurrent Neural Network-Based Estimation for Multi-rate Sampling Linear Systems with Correlated Noises	
Zixi Wang Pei Yu Huafeng Chen Miaomiao Xiang Siyu Xiang Xue Chen	Jingchu Univ. of Tech. Jingchu Univ. of Tech. Jingchu Univ. of Tech. Jingchu Univ. of Tech. Jingchu Univ. of Tech. Jingchu Univ. of Tech.	Chao Li Honglei Lin	Heilongjiang Univ. Heilongjiang Univ.
16:10-16:30	MonD02-2	17:10-17:30	MonD03-5
Deep Tabular framework integrating LightGBM feature selection and TabPFN pre-trained inference for predicting academic outcomes		A Time Synchronization Strategy under Sleep Control Based on Hierarchical Link Centrality in Wireless Sensor Networks	
Yafeng Zhang Yue Sun Jingrui Liu Yiqin Shao Yuyang Li Shijian Dong	No.3 Middle School of Tangqi Town Queensland Univ. of Tech. China Univ. of Mining and Tech. Zhejiang Sci-Tech Univ. China Univ. of Mining and Tech. Northeastern Univ.	Wei Zhu Xiaochun Liu Nanxiang Yu	Chongqing Univ. of Posts and Telecommunications Chongqing Univ. of Posts and Telecommunications Chongqing Univ. of Posts and Telecommunications
16:30-16:50	MonD02-3	17:30-17:50	MonD03-6
Optimal Sensor Placement in Water Distribution Networks Based on Improved Structured Deep Clustering Network		Optimal Time-varying Formation Control of Multi-Agent Systems with Switching Topologies Based on Neural Network Observer and Simplified Reinforcement Learning	
Xiaomeng Guo Changtao Wang Jianzhao Cao	Shenyang Jianzhu Univ. Shenyang Jianzhu Univ. Shenyang Jianzhu Univ.	Huizhu Pu Wei Zhu	Chongqing Univ. of Posts and Telecommunications Chongqing Univ. of Posts and Telecommunications
16:50-17:10	MonD02-4	MonD04	Room04
Multi-source Feature Collaboration Network with Hypergraph for Image inpainting		Control, optimization, and security of complex networks and systems (8)	15:50-17:50
Liang Zhang Yuqing Shi Yutian Wang Mingbo Liu Shiqiang Du	Northwest Minzu Univ. Key Laboratory of Linguistic and Cultural Computing of Ministry of Education Northwest Minzu Univ. Northwest Minzu Univ. Key Laboratory of Linguistic and Cultural Computing of Ministry of Education Northwest Minzu Univ. Key Laboratory of Linguistic and Cultural Computing of Ministry of Education Northwest Minzu Univ.	Chair: Hongqian Lu Co-Chair: Lulu Li	Qilu Univ. of Tech. Hefei Univ. of Tech.
17:10-17:30	MonD02-5	15:50-16:10	MonD04-1
EAFormer: an Edge-Aware Transformer for Real-time Conveyor Belt Deviation Detection		Hidden Markov Jump Systems: Event-Triggered Control against Deception Attacks under Restricted Information Flow	
Ya Yu Jinya Su	Southeast Univ. Key Laboratory of Measurement and Control of CSE Southeast Univ. Key Laboratory of Measurement and Control of CSE	YouYin Zheng Yu Jinyong Hongqian Lu	Qilu Univ. of Tech. Guangxi City Vocational Univ. Qilu Univ. of Tech.
		16:10-16:30	MonD04-2
		Solvability of probabilistic dynamic-algebraic Boolean networks	
		Yirui Ge Jiaqi Jiang Lulu Li Jianquan Lu	Hefei Univ. of Tech. Hefei Univ. of Tech. Hefei Univ. of Tech. Southeast Univ.
		16:30-16:50	MonD04-3
		State Fusion Estimation for Multi-sensor Multi-rate Descriptor Systems with Unknown Inputs	
		Hanyue Mou Honglei Lin Lei Zhang	Heilongjiang Univ. Heilongjiang Univ. Heilongjiang Univ.
		16:50-17:10	MonD04-4

Dynamic-Surface-based Predefined-Time Containment Tracking of Networked High-order Nonlinear Multi-Agent Systems

Chenglin Han Univ. of Electronic Science and Tech. of China
 Weihao Li Univ. of Electronic Science and Tech. of China
 Boxian Lin Univ. of Electronic Science and Tech. of China
 Mengji Shi Univ. of Electronic Science and Tech. of China
 Kaiyu Qin Univ. of Electronic Science and Tech. of China

Shaoyuan Li Shanghai Jiao Tong Univ.

16:30-16:50 MonD06-3
BiGRU-based Surrogate Process Model for Wastewater Treatment Plant Aeration Control Aided by Multi-Head Attention
 Lili Ji Huazhong Univ. of Science and Tech.
 Yihua Zhou Huazhong Univ. of Science and Tech.
 Zhixiong Zhang Huazhong Univ. of Science and Tech.
 Wenyu Xiong Jiangnan Univ.
 Dingxin He Huazhong Univ. of Science and Tech.
 Jie Ye Huazhong Univ. of Science and Tech.
 Jinbang Xu Huazhong Univ. of Science and Tech.
 Lijun Zhang Stellenbosch Univ.

17:10-17:30 MonD04-5

Movement Planning of Multi-UGV Convoy Based on DQN and FNN
 Yang Wang Civil aviation Univ. of China
 Zejun Zhang Civil aviation Univ. of China
 Chong Zhang Civil aviation Univ. of China
 Yuchu Ji Civil aviation Univ. of China

16:50-17:10 MonD06-4

Precise Aeration Control of Wastewater Treatment Plants based on Dynamic Matrix Control
 Xiaolong Lu Huazhong Univ. of Science and Tech.
 Kai Chen CNNC Jianzhong Nuclear Fuel Co., Ltd.
 Wenyu Xiong Jiangnan Univ.
 Zhixiong Zhang Huazhong Univ. of Science and Tech.
 Jie Ye Huazhong Univ. of Science and Tech.
 Jinbang Xu Huazhong Univ. of Science and Tech.
 Lijun Zhang Stellenbosch Univ.

17:30-17:50 MonD04-6

D-Type Iterative Learning Control for Master-Slave Synchronization of Memristive Neural Networks with Time-Varying Delays and Uncertainties
 Liu Zekun Southwest Univ.
 Haibo Bao Southwest Univ.

MonD05 Room05
Operational optimization and decision-making (5) 15:50-17:50

Chair: Yingxin Liu Northeastern Univ.
 Co-Chair: Haiyan Yu Chongqing Univ. of Posts and Telecommunications

17:10-17:30 MonD06-5

PrismNet: A Trajectory Prediction Method Incorporating Time Query Enhancement and FFT-Based Weighted Segmentation
 Yuji Ye Shanghai Jiao Tong Univ.
 Gumin Jin Shanghai Jiao Tong Univ.
 Guangyao Wang Aircraft Design Inst.
 Jianxun Li Shanghai Jiao Tong Univ.

15:50-16:10 MonD05-1

Optimization of electric vehicle routing with simultaneous pickup and delivery in time-varying networks
 Yingxin Liu Shenyang Univ.
 Qianrui Shao Shenyang Univ.

17:30-17:50 MonD06-6

A MPC-Based Optimal Temperature Control Strategy for Final Cooling Towers in Coking Processes
 Shuaiyan Liu Harbin Inst. of Tech.
 Ruifeng Li Harbin Inst. of Tech.
 Tao Xie Harbin Inst. of Tech.
 Changming Jiang Jianlong Xilin Iron and Steel Co.,Ltd.
 Hui Wang Jianlong Xilin Iron and Steel Co.,Ltd.
 Qiang Wang Jianlong Xilin Iron and Steel Co.,Ltd.

16:10-16:30 MonD05-2

Selection of Optimal Treatment Regimes with Doubly Robust Reinforcement Learning
 Tao Huang Chongqing Univ. of Posts and Telecommunications
 Haiyan Yu Chongqing Univ. of Posts and Telecommunications

MonD07 Room07
Control theory and control technology (24) 15:50-17:50

Chair: Jinya Su Southeast Univ.
 Co-Chair: Zhaoyang Li North China Electric Power Univ.

16:30-16:50 MonD05-3

A Stochastic Approximation Approach for Optimization with Censored Measurements
 Yuxing He Sichuan Univ.
 Shujun Liu Sichuan Univ.

15:50-16:10 MonD07-1

Extended State Unscented Kalman Filter for Mobile Robots Localization
 Mingyuan Jia Southeast Univ.
 Xinlong Miao Southeast Univ.
 Jinya Su Southeast Univ.

16:50-17:10 MonD05-4

Improved Superb Fairy-wren Optimization Algorithm with Multi-strategy for Global Optimization
 Jiawen Li Northeast Petroleum Univ.
 Heming Jia Sanming Univ.
 Bowen Xue Northeast Petroleum Univ.
 Honghua Rao Northeast Petroleum Univ.

16:10-16:30 MonD07-2

Frequency Regulation under High Renewables and Load Disturbances A Coordinated Strategy for Energy Storage and Thermal Power Using Fuzzy Adaptive PID Control
 Lei Liu North China Electric Power Research Inst. Co., Ltd.
 Zhaoyang Li North China Electric Power Univ.
 Zhiwei Xing North China Electric Power Research Inst. Co., Ltd.
 Ning Ma North China Electric Power Research Inst. Co., Ltd.
 Zhan Li North China Electric Power Research Inst. Co., Ltd.

17:10-17:30 MonD05-5

Task sequence optimization of vision-guided rail-mounted robot based on look-ahead scheduling strategy
 Miaomiao Xiang Jingchu Univ. of Tech.
 Zixi Wang Jingchu Univ. of Tech.
 Pei Yu Jingchu Univ. of Tech.
 Jing Luo Jingchu Univ. of Tech.

16:30-16:50 MonD07-3

Differential Graphical Game-Based Formation Control for Heterogeneous Multi-Agent Systems with Sensor Faults
 Yadong Li Huazhong Univ. of Science and Tech.
 Qiufeng Wang Huazhong Univ. of Science and Tech.
 Yaping Tang Huazhong Univ. of Science and Tech.

17:30-17:50 MonD05-6

A Hierarchical Matching-based Approach for Vehicle Scheduling
 Yindong Shen Huazhong Univ. of Science and Tech.
 Yuanyuan Li Huazhong Univ. of Science and Tech.

MonD06 Room06
Advanced control and predictive control (6) 15:50-17:50

Chair: Hongqian Lu Qilu Univ. of Tech.
 Co-Chair: Yongwei Yu Shanghai Jiao Tong Univ.

16:50-17:10 MonD07-4

Finite-Time Convergent Reinforcement Learning for Pursuit-Evasion Games of Multi-Agent Systems With Input Saturation
 Qiufeng Wang Huazhong Univ. of Science and Tech.
 Yadong Li Huazhong Univ. of Science and Tech.
 Yaping Tang Huazhong Univ. of Science and Tech.

15:50-16:10 MonD06-1

Dynamic Output Feedback Control for Networked Systems with Event-Triggered Communication and Deception Attacks
 Zhenkun Tian Qilu Univ. of Tech.
 Jinyong Yu Guangxi City Vocational Univ.
 Hongqian Lu Qilu Univ. of Tech.

17:10-17:30 MonD07-5

UAV Formation Control with Obstacle Avoidance Using High-Order Control Barrier Functions in Complex Environments
 Weilin Wang Beihang Univ.
 Liang Han Beihang Univ.

16:10-16:30 MonD06-2

Deep Learning-Based Model Predictive Control for Total Nitrogen Concentration in Wastewater Treatment
 Yongwei Yu Shanghai Jiao Tong Univ.
 Aisen Zhang Shanghai Jiao Tong Univ.
 Yuanyuan Zou Shanghai Jiao Tong Univ.

17:30-17:50 MonD07-6

Nonovershooting Control of Robotic Manipulators Driven by Series Elastic Actuators
 Kaixin Lu Tongji Univ.
 National Univ. of Singapore (Suzhou) Research Inst.

Lili Wang Yanfang Mo	Lingnan Univ. Southern Univ. of Science and Tech. Lingnan Univ.	Relay Control of Second-order Systems with Matched Disturbances via Filtered Delayed Feedback Implementation Wenhui Shi Yuxin Guo Shuailong Wang Jin Zhang	Shanghai Univ. Shanghai Univ. Shanghai Univ. Shanghai Univ.
MonD08 Control theory and control technology (25) Chair: Weiwei Sun Co-Chair: Jinlong Lu	Room08 15:50-17:50 Qufu Normal Univ. North China Electric Power Univ.	16:50-17:10 Modeling and Analysis of Complex Scenarios Based on Lancheater's Laws Yi Zou Jinghao Li Zhaohui Liu	MonD09-4 Key Laboratory of Complex Aviation Simulation System Northeastern Univ. National Key Laboratory of Avionics Integration and Aviation System-of-Systems Synthesis Shanghai Jiao Tong Univ. Key Laboratory of Complex Aviation Simulation System
15:50-16:10 Improved TD3-Based Adaptive Relaxed Sliding Mode Trajectory Tracking Control for Uncertain 6-DOF Manipulators Zhuangzhuang Luan Weiwei Sun Jiahui Li Dehai Yu	MonD08-1 Qufu Normal Univ. Qufu Normal Univ. Qufu Normal Univ.	17:10-17:30 Vision-Enhanced Model-Free Reinforcement Learning for 6-DOF AUV Control Weifan Zheng Junyu Zhang Shanling Dong Changkun Du	MonD09-5 Zhejiang Univ. Zhejiang Univ. of Tech. Zhejiang Univ. Intelligent Science and Tech. Academy Ltd. CASIC Zhejiang Univ.
16:10-16:30 Research on a Supercapacitor-Based Frequency Regulation Strategy for Thermal Power Plants Using Predictive PID Control Lei Liu	MonD08-2 North China Electric Power Research Inst. Co., Ltd. North China Electric Power Univ. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd.	17:30-17:50 Numerical Investigation of Ride Control System for Wave Piercing Catamarans Lihua Liang Pengfei Cai Quancheng Cheng	MonD09-6 Harbin Engineering Univ. Harbin Engineering Univ. Harbin Engineering Univ.
Jinlong Lu Jingqiu Kang Zhiwei Xing Ning Ma Yue Kong	North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Univ.	MonD10 Intelligent perception, synergic decision-making, and security for robots and unmanned systems (15) Chair: Jia Zhang Co-Chair: Ziyi Liu	Room10 15:50-17:50 Beijing Inst. of Tech. China Electronics Tech. Group Corporation 28th Research Inst.
16:30-16:50 Online Trajectory Optimization for the Ascent Phase of U-MPSP Based on Flipped Radau Pseudospectral Discretization Yuxuan Zou Lei Liu Bo Wang Huijin Fan Yongji Wang	MonD08-3 Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.	15:50-16:10 Adaptive Task Allocation for in Forest Firefighting: A PPO-based Hyper-Heuristic Approach Sili Yang Jia Zhang	MonD10-1 Beijing Inst. of Tech. Beijing Inst. of Tech.
16:50-17:10 Decentralized Adaptive Delayed Control of Large-Scale Systems with Biased Measurements Yuxin Guo Jin Zhang	MonD08-4 Shanghai Univ. Shanghai Univ.	16:10-16:30 Low-altitude Air Traffic Capacity-Flow Control Based on Airspace Resource Allocation - A Simple Review Ziyi Liu	MonD10-2 China Electronics Tech. Group Corporation 28th Research Inst. China Electronics Tech. Group Corporation 28th Research Inst. China Electronics Tech. Group Corporation 28th Research Inst. China Electronics Tech. Group Corporation 28th Research Inst. China Electronics Tech. Group Corporation 28th Research Inst.
17:10-17:30 Six-Degree-of-Freedom Vertical Landing Control for Launch Vehicles Based on Periodic Delayed Sliding Mode MengYang Wang Zhaoyan Li	MonD08-5 Harbin Inst. of Tech. Harbin Inst. of Tech. Zhengzhou Research Inst. of HIT Harbin Inst. of Tech.	17:30-17:50 Coordinated Frequency Regulation Strategy for FESS and Thermal Power Using LADRC under High Renewable Energy Penetration Zhiwei Xing Shuang Liu Zhenyong Yang Lei Liu Zhan Li Zhaoyang Li	MonD08-6 North China Electric Power Research Inst. Co., Ltd. North China Electric Power Univ. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Research Inst. Co., Ltd. North China Electric Power Univ.
17:30-17:50 Robust Positively Invariant Sets for Switched Systems under Smooth Control Transitions Shengao Lu Xiaorui Liu Mingye Cao Jiajun Liu Lixian Zhang	MonD09-1 Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech. Harbin Inst. of Tech.	MonD09 Control theory and control technology (26) Chair: Lixian Zhang Co-Chair: Kunhua Cheng	Room09 15:50-17:50 Harbin Inst. of Tech. Huazhong Univ. of Science and Tech.
15:50-16:10 An Error-Filtered Cascaded Linear ESO with Enhanced High-Frequency Noise Suppression Kunhua Cheng Caihua Xiong Jiarui Zhang Yu Yan Jinhao Yang Jiayi Ma	MonD09-2 Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.	16:30-16:50 Research on Apple Ripeness Detection Method Based on Improved YOLOv11 Shunyun Xiu Qinjun Zhao Kang Zhao Tao Shen	MonD10-3 Univ. of Jinan Univ. of Jinan Univ. of Jinan Univ. of Jinan
16:10-16:30 An Error-Filtered Cascaded Linear ESO with Enhanced High-Frequency Noise Suppression Kunhua Cheng Caihua Xiong Jiarui Zhang Yu Yan Jinhao Yang Jiayi Ma	MonD09-2 Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech. Huazhong Univ. of Science and Tech.	16:50-17:10 AeroWarp: A High-Fidelity GPU-Accelerated Simulation Framework for Fixed-Wing UAV Flight Control Yinhao Fang Dong Cao Cheng Wang	MonD10-4 Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics Nanjing Univ. of Aeronautics and Astronautics
16:30-16:50	MonD09-3	17:10-17:30 An Emotion Recognition Algorithm Based on Multi-Domain Collaborative Modeling Zhenyu Wu Zhixian Hao Zhenyang Liu	MonD10-5 Dalian Univ. of Tech. Dalian Univ. of Tech. School of Control Science and Engineering of Tech.
		17:30-17:50 Energy-Aware Variable Impedance Control for Quadrotor UAVs Using a Virtual Energy Tank Junhui Yang Hao Lu	MonD10-6 Univ. of Science and Tech. Beijing Univ. of Science and Tech. Beijing

Xianggui Guo	Univ. of Science and Tech. Beijing	Huafeng Chen Rui Ke	Jingchu Univ. of Tech. Jingchu Univ. of Tech.
MonD11 Intelligent perception, synergic decision-making, and security for robots and unmanned systems (16)	Room11 15:50-17:50	16:50-17:10	MonD12-4
Chair: Xiao Liang Co-Chair: Xiyuan Li	Nankai Univ. Yantai Univ.	<i>Global Consensus Analysis of Networked Multi-Agent Systems with Heterogeneous Dynamics and Time-Varying Communication Delay</i> Weisong Zhong Wenxiu Cao	Suqian Univ. Suqian Univ.
15:50-16:10	MonD11-1	17:10-17:30	MonD12-5
<i>Deep Reinforcement Learning-Based Strategy for Autonomous Aerial Manipulators in Dynamic Ball-Hitting Tasks</i> Dongyang Zhang Huiying Ye Jianda Han Yongchun Fang Xiao Liang	Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ.	<i>Adaptive Label Assignment Strategy Based on Normalized Distance for Tiny Object Detection of Aerial Images</i> jinrong Ma	Army Engineering Univ. of PLA, Shijiazhuang Campus
16:10-16:30	MonD11-2	Changlong Wang Jingyu Ji Xiaolin Ma yuefei zhao	Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA Army Engineering Univ. of PLA
<i>Terrain-Adaptive Speed Allocation for In-Wheel Motors of Wheeled Quadruped Robots via Jacobian Matrix and Fuzzy Logic</i> Xiyuan Li Guangyun Li yunsong li Xuxu Zhang	Yantai Univ. Univ. of Chinese Academy of Sciences Beijing Univ. of Tech. Yantai Univ.	17:30-17:50	MonD12-6
16:30-16:50	MonD11-3	<i>Stability-Guaranteed Coordination for Multirobot Systems on Converging DAG Topology</i> Pengyu Pu Xiaoli Li Yangbin Xin	Donghua Univ. Donghua Univ. Donghua Univ.
<i>Multi-Modal Adversarial Reinforcement Learning for Human-Like Autonomous Ultrasound Scanning</i> Dingqian Xue Jiaxin Zhang Dongyang Zhang Yongchun Fang Jianda Han Xiao Liang	Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ. Nankai Univ.	MonD13 Advanced sensing and intelligent perception (9) Chair: Shuguang Liu CO-Chair: Yuchu Ji	Room13 15:50-17:50 Huaibei Inst. of Tech. Civil Aviation Univ. of China
16:50-17:10	MonD11-4	15:50-16:10	MonD13-1
<i>CP-SMC for High-Dynamic Visual Servoing of Omnidirectional Mobile Robots</i> Li weizhong Qiyuan Li wei huang Xingjian Li runmei li	Beijing Jiaotong Univ. Beijing Jiaotong Univ. Beijing Jiaotong Univ. Beijing Jiaotong Univ. Beijing Jiaotong Univ.	<i>The Intelligent Lighting System of Classroom Based on Internet of Things</i> Yunfei Hu Shuguang Liu Lianguyan Nie	Huaibei Inst. of Tech. Huaibei Inst. of Tech. Huaibei Inst. of Tech.
17:10-17:30	MonD11-5	16:10-16:30	MonD13-2
<i>Path Planning for Unmanned Vehicles Based on the Bidirectional Rapidly Expanding Random Tree and DWA Algorithm Rapidly Expanding Random Tree</i> Jinglin Li Junru Wang Liqiang Chen Xiaoxu Yan Zixuan Wang	Beijing Information Scientific and Tech. Univ. Beijing Information Scientific and Tech. Univ. Beijing Information Scientific and Tech. Univ. Beijing Information Scientific and Tech. Univ. Beijing Information Scientific and Tech. Univ.	<i>Intrusion Detection Method Based on HighFrequency Signal Transmission Characteristics of Hollow Coaxial Cable</i> Yuchu Ji Tianyi Yang Yang Wang	Civil Aviation Univ. of China Civil Aviation Univ. of China Civil Aviation Univ. of China
17:30-17:50	MonD11-6	16:30-16:50	MonD13-3
<i>Attention-Enhanced Feedback Spatio-Temporal Graph Neural Network for Multi-Agent Formation State Prediction</i> Lihua Fan Jihong Gu Xinhao Wang Yinhe Zhai Song Ma	Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech. Dalian Univ. of Tech.	<i>A Spatial-Temporal Network via Region-Aware Cross-Attention for Blepharospasm Recognition</i> Jihai Sun Lizuo Jin Jun Yan	Southeast Univ. Southeast Univ. Affiliated Brain Hospital of Nanjing Medical Univ.
MonD12 Intelligent perception, synergic decision-making, and security for robots and unmanned systems (17)	Room12 15:50-17:50	16:50-17:10	MonD13-4
Chair: XiaoJun ZHOU Co-Chair: Na Xing	Central South Univ. North China Univ. of Tech.	<i>A Boundary-Aware Adaptive Node Joint Optimization Positioning Method</i> Yiman Liang Jun Yang	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
15:50-16:10	MonD12-1	17:10-17:30	MonD13-5
<i>Multi-UAV Cooperative Path Planning Based on Reinforcement Learning-Assisted State Transition Algorithm</i> Yuqi Wang XiaoJun ZHOU	Central South Univ. Central South Univ.	<i>An Adaptive Differential Evolution Particle Swarm Optimization Based Node Localization Method for Wireless Sensor Networks</i> Xinyi Xu Jun Yang	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
16:10-16:30	MonD12-2	17:30-17:50	MonD13-6
<i>Multi-UAV reconnaissance task allocation based on an improved wolf pack algorithm</i> Yuehai Wang Yu hang Yang Na Xing Ping Zhang	North China Univ. of Tech. North China Univ. of Tech. North China Univ. of Tech. North China Univ. of Tech.	<i>Computational Analysis of Local Impedance as a Predictor for Lesion Dimensions in Cardiac Radiofrequency Ablation</i> Xiangxiang Wang Jingjin Shen	Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications
16:30-16:50	MonD12-3	MonD14 Advanced sensing and intelligent perception (10) Chair: YongLi Yang CO-Chair: Suifang Lin	Room14 15:50-17:50 Wuhan Univ. of Science and Tech. Xi'an Univ. of Tech.
<i>A multi target detection method for NanoDet-YOLOv8 cascade model</i> Mengyuan Yang Xue Chen Jing Luo Xiaolong Zhu	Jingchu Univ. of Tech. Jingchu Univ. of Tech. Jingchu Univ. of Tech. Jingchu Univ. of Tech.	15:50-16:10	MonD14-1
		<i>Research on Human Activity Recognition Based on Wi-Fi CSI and MC-1DResNet</i> JiaoXuan Shi YongLi Yang	Wuhan Univ. of Science and Tech. Wuhan Univ. of Science and Tech.
		16:10-16:30	MonD14-2
		<i>Soft Sensor of Lithium-ion Battery Impedance with Particle Swarm Optimization and Least Square Vector Machine</i> Huijun Guo Suifang Lin	Xi'an Univ. of Tech. Xi'an Univ. of Tech.
		16:30-16:50	MonD14-3

STP-based Transformers: Enabling Padding-Free Processing and Mixed-Head Attention

Yuxuan Liu Nanchang Univ.
Rongpei Zhou Nanchang Univ.

Liuxin Chen Chongqing Univ. of Posts and Telecommunications
Hailong Lang Chongqing Univ. of Posts and Telecommunications
Hangyin Wu Chongqing Univ. of Posts and Telecommunications

16:50-17:10 **MonD14-4**

Nanoelectromechanical Systems (NEMS) for Geomagnetic Field Sensing: Theory, Noise Optimization, and Future Applications

Lei Zhao Liaoning Earthquake Agency
Qing-qin Dai Liaoning Earthquake Agency
Yi-mei Sun Liaoning Earthquake Agency
Qiao Wang Liaoning Province Data Center
Qi Wang Northeastern Univ.
Fei Gong Tianyuan TimesAutomation Instrumentation CO.Ltd
Hong-zhi Sun Liaoning Earthquake Agency

MonD16 Room16
Security and intelligence of cyber-physical systems (3) 15:50-17:50
Chair: Lei Mo Southeast Univ.
Co-Chair: Shangkun Liu Fuzhou Univ.

15:50-16:10 **MonD16-1**
Quality-Aware Offline-Online Hybrid Scheduling for Approximate Computing Tasks on Multicores
Haotong Zhu Southeast Univ.
Xinmei Li Southeast Univ.
Jie Han Southeast Univ.
Lei Mo Southeast Univ.

17:10-17:30 **MonD14-5**

Comparative Study of Covariance Estimation Schemes for MVDR Speech Enhancement in Reverberant Environments

Jianyi Liang Wuhan Univ. of Tech.
Wei Chu China Tobacco Hubei Industrial LLC
Kaidong Xu Wuhan Univ. of Tech.
Haoming Chen Wuhan Univ. of Tech.
Jinran Tang Wuhan Univ. of Tech.
Caifeng Wang Wuhan Univ. of Tech.
Lu Ban Wuhan Univ. of Tech.

16:10-16:30 **MonD16-2**
Prescribed-Time Adaptive Fault-Tolerant Formation Control for Multi-Agent Systems under Actuator Faults and Deception Attacks
Junjiang Xie Fuzhou Univ.
Shangkun Liu Fuzhou Univ.
Jingli Huang Fuzhou Univ.
Jie Huang Fuzhou Univ.

17:30-17:50 **MonD14-6**

Lightweight Multi-Scale Attention Network for Polar Whiteout Restoration

Haonan Yan Southeast Univ.
Yitong Yao Southeast Univ.
Cheng Gu Southeast Univ.
Shixiong Fang Southeast Univ.
Kanjian Zhang Southeast Univ.
Haikun Wei Southeast Univ.

16:30-16:50 **MonD16-3**
Meta-Reinforcement Learning for Mixed-Traffic Platoon Control under Adversarial Communication at Signalized Intersections
Zhonghe He North China Univ. of Tech.
Baiwen Ding North China Univ. of Tech.

MonD15 Room15
Intelligent decision-making systems and applications (9)15:50-17:50

Chair: Shaofei Chen National Univ. of Defence Tech.
Co-Chair: Zhu Ma Anhui Jianzhu Univ.

16:50-17:10 **MonD16-4**
Robust Extended Kalman Filtering for Event-Triggered Stochastic Uncertain Systems
Chenglong Lu Huzhou Univ.
Huiying Chen Huzhou Univ.
Yanfeng Wang Suqian Univ.

15:50-16:10 **MonD15-1**

Incentive Mechanism Design in Multi-Agent Reinforcement Learning

Liye Hua National Univ. of Defence Tech.
Shaofei Chen National Univ. of Defence Tech.
Jing Chen National Univ. of Defence Tech.

17:10-17:30 **MonD16-5**
Fault Recovery in Active Distribution Networks: A Cloud-Edge Collaboration-Based Intelligent Decision Scheme
Ning Cui Shanxi Univ.
Shihong Gao Shanxi Univ.
Xinchun Jia Shanxi Univ.
Xiaomin Wang Shanxi Univ.
Min Yin Shanxi Univ.
Xiaobo Chi Shanxi Univ.

16:10-16:30 **MonD15-2**

A Deep Deterministic Policy Gradient-based Quasi-Minimum Mean Square Error Controller for Dynamic Manufacturing Systems

Zhu Ma Anhui Jianzhu Univ.
Simeng Zhang Anhui Jianzhu Univ.
Yujian Yang Anhui Jianzhu Univ.
Tianhong Pan Anhui Univ.

17:30-17:50 **MonD16-6**
Physics-Informed Data Augmentation for Cyber-Physical Power Systems under Mixed Incompleteness Patterns
Xing Wu East China Univ. of Science and Tech.
State Key Laboratory of Industrial Control Tech.

16:30-16:50 **MonD15-3**

From Semantic Decomposition to Human-Guided Control: Interpretable Multi-Agent Reinforcement Learning with Gated Expert

Jiyuan Ru Beijing Inst. of Tech.
Baokui Li Beijing Inst. of Tech.
Qing Fei Beijing Inst. of Tech.
Peizhang Li Beijing Inst. of Tech.

Luolin Xiong East China Univ. of Science and Tech.
Chensheng Liu East China Univ. of Science and Tech.
State Key Laboratory of Industrial Control Tech.
Key Laboratory of Computing Power Network and Information Security
Qilu Univ. of Tech.

16:50-17:10 **MonD15-4**

Maximum Correntropy based Two-stage Deep One-class Classification for Robust Learning

Xiaoyun Tu Hangzhou Dianzi Univ.
Machine Learning and I-health International Cooperation Base of Zhejiang Province,

MonDIS RoomPT
Interactive Session 15:50-17:50

Peng Lin Hangzhou Dianzi Univ.
Machine Learning and I-health International Cooperation Base of Zhejiang Province,

MonDIS-01
Finger Vein Recognition with Contrastive Pretraining and Attention Enhancement
Yuyang Guo Nanjing Univ. of Posts and Telecommunications

Tianlei Wang Hangzhou Dianzi Univ.
Machine Learning and I-health International Cooperation Base of Zhejiang Province,

Yian Qian Nanjing Univ. of Posts and Telecommunications
Renyu Feng Nanjing Univ. of Posts and Telecommunications
Jian Guo Nanjing Univ. of Posts and Telecommunications

Jiuwen Cao Hangzhou Dianzi Univ.
Machine Learning and I-health International Cooperation Base of Zhejiang Province,

17:10-17:30 **MonD15-5**

Traffic Conflict Severity Prediction Model Based on Vehicle Trajectory Data and Machine Learning Methods

Jinyu Rong Beijing information science & Tech. Univ.
Xin Wang Beijing Information Science & Tech. Univ.

MonDIS-02
Sliding Mode Control for 2D Switched Systems Under Multi-Strategy Injection Attacks
Xinping Wang Qingdao Univ. of Tech.
Haijuan Zhao Qingdao Univ. of Tech.
Xinyu Lv Qufu Normal Univ.
Dan Zhang Yanshan Univ.
Yiming Liu Qingdao Univ. of Tech.

17:30-17:50 **MonD15-6**

A Large-Scale Group Decision Making Method with Overlapping Communities and Bidirectional Feedback in Social Trust Networks

MonDIS-03

Trajectory Tracking Control for Mother UAV with Time-Varying Load During Child UAV Release

Zihua Zhang Southwest Univ. of Science and Tech.
 Jingyue Luo Southwest Univ. of Science and Tech.
 Zuo Liu Southwest Univ. of Science and Tech.
 Yixin Wang Southwest Univ. of Science and Tech.
 Yang Yang Southwest Univ. of Science and Tech.
 Jianwen Huo Bauman Moscow State Technical Univ.

Hengjie Yu Northeastern Univ.
 Yueyan Niu National Key Laboratory of Complex Aviation System Simulation
 Northeastern Univ.

Xiaojian Li

MonDIS-04

Multimodal Perception-Based Control Strategy for a Multi-Agent Dual-Arm Ball-on-Plate System

Hongyu Leng Xi'an Univ. of Architecture and Tech.
 Yuebo Meng Xi'an Univ. of Architecture and Tech.

MonDIS-15

Research on Adaptive Control of Quadruped Robot for Complex Terrain Based on Improved PPO Algorithm

Muchen Cheng Qufu Normal Univ.
 Jinming Huang Qufu Normal Univ.
 Jinyang Yu Qufu Normal Univ.
 Jacob Liu GoerTek Inc.
 Hongjin Yu Shandong Inst. Of Intelligent Robot & Applied Tech.
 Xiaojiao Xu Shandong Huimi Intell Tech Co., Ltd.

MonDIS-05

Based on Genetic Adaptive Optimized Particle Swarm Fruit Fly Algorithm of RBPF-SLAM for Mobile Robot

Zhang Feng Shenyang Jianzhu Univ.
 Zhao Wenze Shenyang Jianzhu Univ.
 Yuan Shuai Shenyang Jianzhu Univ.
 Zhao Languang Shenyang Jianzhu Univ.

MonDIS-16

Research on Lightweight Inspection System Based on Multi-Sensor Fusion for Deep Foundation Pits of Transmission Lines

Yanmei Liu Shenyang Aerospace Univ.
 Xuke Liu Shenyang Aerospace Univ.
 zhen chen Liaoning Power Transmission and Transformation Engineering Co, Ltd.

MonDIS-06

H-GLIVO: A Hierarchically Tightly-Coupled SLAM Framework for GNSS, LiDAR, Inertial, and Visual Odometry

Huirong Cai Beijing Univ. of Posts and Telecommunications
 Siyuan Jin Beijing Univ. of Posts and Telecommunications
 Boyang Lou Beijing Univ. of Posts and Telecommunications
 Enwen Hu Beijing Univ. of Posts and Telecommunications

MonDIS-17

Integrated Structures of Gravity Feedforward Terms in PD Control for a 6-DOF Mobile Manipulator

Lingyu Kong Beijing Jiaotong Univ.
 Haoran Xu Beijing Jiaotong Univ.
 Siyuan Zhou Beijing Jiaotong Univ.
 Xingjian Li Beijing Jiaotong Univ.
 Li weizhong Beijing Jiaotong Univ.
 runmei li Beijing Jiaotong Univ.

MonDIS-07

Zero-Fine-Tuning Safety-First Closed-Loop Decision Making for UAVs

Lei Xiang Xi'an Jiaotong Univ.
 Donghe Li Xi'an Jiaotong Univ.
 Ye Yang Shanghai DianJi Univ.
 Haoxiang li Xi'an Jiaotong Univ.
 Qingyu Yang Xi'an Jiaotong Univ.

MonDIS-18

LFTUF: A Limited-FoV Time-Sharing UKF Fusion Localization Method for Outdoor Robots

Guoqing Yang Zhejiang Univ.
 Weiye Zhang Zhejiang Univ.
 Yiqun Zhou Zhejiang Univ.
 Haowen Lai Zhejiang Univ.
 Pan Lv Zhejiang Univ.
 Zhijie Pan Zhejiang Univ.
 Hong Li Zhejiang Univ.

MonDIS-08

Multi-Task Collaborative Allocation for Heterogeneous UAV Swarms via TEA-PPO

Huayu Xu Donghua Univ.
 Jie Qi Donghua Univ.

MonDIS-09

Coverage Path Planning for UAVs Based on Variable Speed and Direction

Manjie Lu Army Engineering Univ. of PLA
 Jiajing Zhuo Army Engineering Univ. of PLA
 Xinglong Zhao Army Engineering Univ. of PLA
 Zhongzhu He Army Engineering Univ. of PLA

MonDIS-19

A Hybrid Path Planning Algorithm for USVs Combining Improved A* and Kinematic-Aware Velocity Obstacle

Kaidong Xu Wuhan Univ. of Tech.
 Jianyi Liang Wuhan Univ. of Tech.
 Haoming Chen Wuhan Univ. of Tech.
 Jinran Tang Wuhan Univ. of Tech.
 Caifeng Wang Wuhan Univ. of Tech.
 Lu Ban Wuhan Univ. of Tech.

MonDIS-10

Design of a 3D Tunnel Modeling System for Underground Intelligent Shotcrete Robotics

Yuanheng Liu Shandong Univ. of Science and Tech.
 Guanzheng Liu Shandong Univ. of Science and Tech.
 Hong Zhou Shandong Univ. of Science and Tech.
 Mingchao DU Shandong Univ. of Science and Tech.
 Liangsong Huang Shandong Univ. of Science and Tech.

MonDIS-20

Nonlinear Weight Decomposition based Coverage Path Planning method for Irregular Polygonal Areas

Zhongjie Wang Chongqing Univ. of Posts and Telecommunications
 MinYu Zhang Chongqing Univ. of Posts and Telecommunications
 Ming Cen Chongqing Univ. of Posts and Telecommunications

MonDIS-11

MIXCL: A Mixture-of-Experts-Based Cross-Scene Adaptive Multi-Sensor Fusion Method for Localization

Keer Wang National Univ. of Defense Tech.
 Meiping Wu National Univ. of Defense Tech.
 Yan Guo National Univ. of Defense Tech.
 Kaixin Luo National Univ. of Defense Tech.

MonDIS-21

Design of Weed Detection and Spraying Control System Based on Lightweight RT-DETR

Xinlei Yuan Harbin Engineering Univ.
 Songtao Zhang Harbin Engineering Univ.
 Songyuan Zhang Harbin Inst. of Tech.
 Yuming Hu Harbin Engineering Univ.
 Mingjie Xue Harbin Engineering Univ.

MonDIS-12

Design of an Intelligent Three-Dimensional Transportation System for Cargo Elevators

Zhixue Qian Hengda Fuji Elevator Co., Ltd.
 Wanbing Liu Hengda Fuji Elevator Co., Ltd.
 Renzhi Liu Huzhou Univ.
 Huiying Chen Huzhou Univ.

MonDIS-22

Iterative Learning Control for Continuum Robot Arms Based on BP Neural Networks

Zijian Chen Nanjing Univ. of Science and Tech.
 Jian Guo Nanjing Univ. of Science and Tech.
 Liaoxue Liu Nanjing Univ. of Science and Tech.
 Zhengyuan Li Nanjing Univ. of Science and Tech.

MonDIS-13

Multi-Constraint Path Planning for Stratospheric Airships Based on Deep Reinforcement Learning

Chongshen Tian Beihang Univ.
 Zewei Zheng Beihang Univ.

MonDIS-23

Mapping Content to Questions: Scalable Instruction Synthesis for Domain RAG

Jing Wang China Communications Information & Tech. Group Co., Ltd.
 Rui Zhang China Communications Information & Tech. Group Co., Ltd.
 Yang Mo China Communications Information

MonDIS-14

An Interpretable Prediction Method for UAV Trajectories Based on RBF-ResNet

Shaodong Li National Key Laboratory of Complex Aviation System Simulation

Kang Li	& Tech. Group Co., Ltd. State Key Laboratory of Intelligent Optimized Manufacturing in Mining & Metallurgy Process	Junsheng Zhao	Liaocheng Univ.
Cuilan Liang	China Communications Information & Tech. Group Co., Ltd.	MonDIS-34 <i>Optimal Consensus for Multi-Agent Systems: A Resilient Approach Against DoS Attacks</i>	
You Wu	China Communications Information & Tech. Group Co., Ltd.	Xiao Luo	Wuhan Textile Univ.
Guanghe Li	China Communications Information & Tech. Group Co., Ltd.	Peng Jin	Wuhan Textile Univ.
		Guopeng Zhou	Wuhan Textile Univ.
		Yangxizi liu	nical Research Inst. Wuhan Textile Univ.
MonDIS-24 <i>Optimizing Dynamic and Stochastic Matching in Asset-Sharing Platforms via Queuing Disciplines and Prioritization Rules</i>		MonDIS-35 <i>Analysis and Testing of the Anti-Jamming Mechanism in Wireless Mesh Ad-Hoc Networks</i>	
Ahmed Benhamimid	Hamad Bin Khalifa Univ.	zjian cui	Naval Univ. of Engineering
Majed Hadid	Hamad Bin Khalifa Univ.	hongbo liu	Naval Univ. of Engineering
Adel Elomri	Hamad Bin Khalifa Univ.	Yuhan zhang	Naval Univ. of Engineering
Nezir Aydin	Hamad Bin Khalifa Univ.		Huazhong Univ. of Science and Tech.
MonDIS-25 <i>Research on a Multi-objective Location Model for Waste Transfer Station Location Based on an Improved Black-winged Kite Algorithm</i>		MonDIS-36 <i>Optimal event-triggered integral sliding mode control of nonlinear systems subject to actuator faults and disturbances</i>	
Chufeng He	Wuhan Univ. of Science and Tech.	Honggui Wang	Harbin Univ. of Science and Tech.
Chao Pan	Hubei College of Economics	Hongxu Zhang	Harbin Univ. of Science and Tech.
Jin Liu	Wuhan Univ. of Science and Tech.	Weiru Chen	Harbin Univ. of Science and Tech.
		Jun Hu	Harbin Univ. of Science and Tech.
MonDIS-26 <i>Urban Logistics Efficiency in Production-Service-Oriented National Logistics Hubs: A Total Factor Productivity Analysis</i>		MonDIS-37 <i>Hybrid Event-Triggered Distributed Model Predictive Control for Nonlinear Coupled Systems</i>	
Litao Yin	Hubei Univ. of Automotive Tech.	Min Zhao	Qufu Normal Univ.
dinghua Liu	Hubei Univ. of Automotive Tech.	Baili Su	Qufu Normal Univ.
Qixuan Wei	Hubei Univ. of Automotive Tech.		
Lingyu Zhou	Hubei Univ. of Automotive Tech.		
liangui Peng	Hubei Univ. of Automotive Tech.		
Jingyuan Chen	Hubei Univ. of Automotive Tech.		
MonDIS-27 <i>Integrating Improved RRT Algorithm for Unmanned Vehicle Path Planning</i>		MonDIS-38 <i>Design of Portable Low-Intensity Transcranial Magnetic Stimulation System</i>	
Pingyu Wei	Fuzhou Univ.	Jiawang Wei	Univ. of Jinan
Ying Zhang	Fuzhou Univ.	Meng Li	Univ. of Jinan
He Cai	South China Univ. of Tech.	Huifen Zhang	Univ. of Jinan
Youfeng Su	Fuzhou Univ.		
MonDIS-28 <i>AMSD-Yolo: An improved algorithm for small target detection from the perspective of unmanned aerial vehicles</i>		MonDIS-39 <i>Privacy-Preserving Consensus Control of Multi-Agent Systems via the FH-MCIPE scheme</i>	
Jinshan Wang	Northeastern Univ.	Shurui Liang	Southeast Univ.
Jihong Liu	Northeastern Univ.	Wenwu Yu	Southeast Univ.
		Haofei Meng	Southeast Univ.
MonDIS-29 <i>Distributed Optimization for Heterogeneous Linear Multi-Agent Systems Under Safety Constraints and Sampled Communication</i>		MonDIS-40 <i>High-Quality Pseudo-CT Generation Based on Cycle-Consistent Adversarial Networks and Transformer Convolutional Models</i>	
Jianhong Lan	Xiamen Univ.	Liwei Deng	Harbin Univ. of Science and Tech.
Ji Ma	Xiamen Univ.	Songyu Chen	Harbin Univ. of Science and Tech.
		He Cao	Harbin Univ. of Science and Tech.
		Xin Yang	Sun Yat-sen Univ. Cancer Center
		Sijuan Huang	Sun Yat-sen Univ. Cancer Center
		Jing Wang	South China Normal Univ.
MonDIS-30 <i>Adaptive Bitrate Control Algorithm for Live Streaming Based on PID Control</i>		MonDIS-41 <i>Network Dismantling Based on Aggregative Properties</i>	
Chongyu Luo	Chongqing Univ. of Posts and Telecommunications	Kunyang Wu	Univ. of Jinan
Min Xiang	Chongqing Univ. of Posts and Telecommunications	Jihui Wang	Univ. of Jinan
Jiajia Zhang	Chongqing Univ. of Posts and Telecommunications	Xiaohan Cheng	Univ. of Jinan
Jinyu Luo	Chongqing Univ. of Posts and Telecommunications		
xiaojing Dong	Chongqing Univ. of Posts and Telecommunications	MonDIS-42 <i>Long-term Load Forecasting Based on iTransformer with Multiple Weather Variables</i>	
Xinran Yu	Chongqing Univ. of Posts and Telecommunications	Yuhui Yin	Southeast Univ.
		Kaiqiang Wang	China Construction Third Engineering Group Co., Ltd
		Zhiwu Ye	China Construction Third Engineering Group Co., Ltd
		Jiyun Zhou	China Construction Third Engineering Group Co., Ltd
		Yulu Ren	Southeast Univ.
		Shan Shuo	Southeast Univ.
		Haikun Wei	Southeast Univ.
MonDIS-31 <i>Secure Computation Offloading and Resource Reconfiguration for Terminal Energy Efficiency in IIoT</i>		MonDIS-43 <i>Layered Scalable Data Lake Architecture for Game Engine Big Data: Integrating Stream-Batch Processing, Ad Hoc Analysis, and Privacy Security</i>	
Yang Jiang	Shanghai Univ.	Mingqiang Yang	Southwest Forestry Univ.
Minrui Fei	Shanghai Univ.	Jiaolong Liu	Guizhou Univ.
Yangjie Chen	Shanghai Univ.	Xianlong Yang	Xihua Univ.
		Lisi Yang	Wuyi Univ.
MonDIS-32 <i>Distributed Coordinated Voltage Control for Three-Phase Unbalanced Distribution Systems via Momentum-Based Acceleration</i>		Junyan Wang	Zhuhai College of Science and Tech.
Yu Si	Wuhan Univ. of Science and Tech.	Yue Wang	Yunnan Univ. of Finance and Economics
Bing Liu	Wuhan Univ. of Science and Tech.		
MonDIS-33 <i>Fuzzy Adaptive Fixed-Time Control for Stochastic Nonlinear Systems with Sensor and Actuator Faults</i>		MonDIS-44 <i>MFTF: Multiscale Frequency-domain Modeling for Multivariate Time Series Forecasting</i>	
Hao Jiang	Liaocheng Univ.	Sen Xiang	Wuhan Univ. of Science and Tech.

Dadong Rao Wuhan Univ. of Science and Tech.
Jun Zhao Wuhan DongYan Intelligent Design Inst. Co., Ltd.

MonDIS-45***Interval Prediction Method for Coal Slurry Filter Cake Moisture Based on CPO-DRBLS-ABKDE***

Qianyu Wu China Univ. of Mining and Tech.
Lanhao Wang China Univ. of Mining and Tech.
Yonggai Li China Univ. of Mining and Tech.
Hongyan Wang China Univ. of Mining and Tech.
Wei Dai China Univ. of Mining and Tech.

MonDIS-46***FLOC-YOLO: Real-Time Visual Detection for Coagulant Dosing Optimization in Water Treatment***

Di Zhang Northeastern Univ.
Jinze Guan Northeastern Univ.
Xiaolong Qian Northeastern Univ.
Shengyue Zhou Northeastern Univ.
Yingying Pan Northeastern Univ.
Anyang Lu Northeastern Univ.

MonDIS-47***Dioxin Emission Reduction Optimization Based on Improved Case-Based Reasoning for Municipal Solid Waste Incineration Process***

Tianzheng Wang Beijing Univ. of Tech.
Jian Tang Beijing Univ. of Tech.
Chunsheng Yang Beijing GaoAnTun Waste to Energy Co., Ltd.

MonDIS-48***Coordinated Task Allocation and Collision Avoidance in Multi-AGV Systems***

Yefeng Liu Linyi Univ.
 Shenyang Ligong Univ.
Zeyu Zhang Shenyang Ligong Univ.
Ruixing Pang Linyi Univ.
Linze Song Shenyang Ligong Univ.
Shichao Zhu Shenyang Ligong Univ.