

2019 Chinese Control And Decision Conference (CCDC 2019)

**Nanchang, China
3-5 June 2019**

Pages 1-646



**IEEE Catalog Number: CFP1951D-POD
ISBN: 978-1-7281-0107-1**

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IEEE Catalog Number:	CFP1951Dx-POD
ISBN (Print-On-Demand):	978-1-7281-0107-1
ISBN (Online):	978-1-7281-0106-4
ISSN:	1948-9439

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Technical Papers

Session	MonA01 : Intelligent Control, Computation and Optimization (I)	
Venue	Room01	
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Session	MonA09 : Automatic Control of Unmanned Systems (I)	
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Venue	Room10	
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Session	MonB01 : Presentations by Finalists of Zhang Si-Ying Outstanding Youth Paper Award
Venue	Room01
Date/Time	Monday, 3 June, 2019 / 15:50-17:30
Chair	Changyun Wen , <i>Nanyang Technological Univ.</i>

15:50-16:10	MonB01-1 Dynamic Analysis and Decision-making in Disease-behavior Systems with Perceptions 665 Xue Feng, <i>Peking Univ.</i> Long Wang, <i>Peking Univ.</i> Simon A. Levin, <i>Princeton Univ.</i>
16:10-16:30	MonB01-2 An Adaptive Compensation Scheme for Angular Velocity Control of Spacecraft Under Finite Sequential Actuator Faults 671 Yajie Ma, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Bin Jiang, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Gang Tao, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Hao Yang, <i>Nanjing Univ. of Aeronautics and Astronautics</i>
16:30-16:50	MonB01-3 A Modified Riccati Approach to Analytic Interpolation with Applications to System Identification and Robust Control 677 Yufang Cui, <i>Shanghai Jiao Tong Univ.</i> Anders Lindquist, <i>Shanghai Jiao Tong Univ.</i>
16:50-17:10	MonB01-4 A Novel Hybrid Systems Framework For Leader-Following Consensus of Multi-Agent Systems 685 Guanglei Zhao, <i>Yanshan Uni.</i> Shida Yang, <i>Yanshan Uni.</i> Changchun Hua, <i>Yanshan Uni.</i>
17:10-17:30	MonB01-5 An Adaptive Evolutionary Multi-objective Algorithm Based on R2 Indicator 692 Fei Li, <i>Anhui Univ. of Techn.</i> Jianchang Liu, <i>Northeastern Univ.</i> Yuexi Song, <i>Northeastern Univ.</i> Liangliang Shang, <i>Nantong Univ.</i>



Session	MonB02 : Intelligent Control, Computation and Optimization (II)	
Venue	Room02	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Yaoming Zhou, <i>Beihang Univ.</i>	
Co-Chair	Lifu Ding, <i>Zhejiang Univ.</i>	
15:50-16:10	MonB02-1	A Unified Coordinate Frame Method for GNSS/MEMS-INS Navigation System 698 Hailu Wang, <i>Univ. of Beijing Information Science & Tech.</i> Zhong Su, <i>Univ. of Beijing Information Science & Tech.</i> Ning-Liu, <i>Univ. of Beijing Information Science & Tech.</i>
16:10-16:30	MonB02-2	Research on Extraction Method of Time-Frequency Feature of Human Motion 704 Tianrun Wang, <i>Univ. of Beijing Information Science & Tech.</i> Zhong Su, <i>Univ. of Beijing Information Science & Tech.</i> Chao Li, <i>Univ. of Beijing Information Science & Tech.</i> Ning Liu, <i>Univ. of Beijing Information Science & Tech.</i>
16:30-16:50	MonB02-3	A Method for Decreasing Negative Effects of the Robots Close to their Targets 709 Wangbao Xu, <i>Liaoning Univ. of Science and Tech.</i> Pengfei Xu, <i>Liaoning Univ. of Science and Tech.</i> Lijuan Wu, <i>Liaoning Univ. of Science and Tech.</i>
16:50-17:10	MonB02-4	Demand Estimation of Water Resources based on Coupling Algorithm 714 Jiangjiang Zhang, <i>TaiYuan Univ. of Science and Tech.</i> Zhuanghua Zhu, <i>Shanxi Finance &Taxation College</i> Yu Chang, <i>TaiYuan Univ. of Science and Tech.</i> Di Wu, <i>TaiYuan Univ. of Science and Tech.</i> Lei Du, <i>TaiYuan Univ. of Science and Tech.</i> Zhihua Cui, <i>TaiYuan Univ. of Science and Tech.</i>
17:10-17:30	MonB02-5	An Optimization Method for Frame Structure of Unmanned Helicopter Based on Empirical Optimization and Downhill Simplex Method 720 He Wang, <i>Tianjin Aerospace Reliability Tech. Co., Ltd</i> Haoran Zhao, <i>Beihang Univ.</i> Chenghao Lin, <i>Beihang Univ.</i> Yaoming Zhou, <i>Beihang Univ.</i>
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Session	MonB03 : Recent Developments on Uncertain Complex Systems: Analysis and Control (II) (Invited Session)	
Venue	Room03	
Date/Time	Monday, 3 June, 2019 / 15:50-17:30	
Chair	Hao Shen , <i>Anhui Univ. of Technology</i>	
Co-Chair	Baoyong Zhang , <i>Nanjing Univ. of Science and Technology</i>	
15:50-16:10	MonB03-1	A Resilient Asynchronous Filter Design for Hybrid Stochastic Systems based on an Extended Stochastic Dissipativity 731 Jing Wang, <i>Hohai Univ.</i> Xiaohui Hu, <i>Anhui Univ. of Techn.</i> Yonghui Sun, <i>Hohai Univ.</i> Bing Wang, <i>Anhui Univ. of Techn.</i> Hao Shen, <i>Anhui Univ. of Techn.</i>
16:10-16:30	MonB03-2	Derivative Feedback Control for Differential-algebraic Systems with Time-varying Delay 736 Guangming Zhuang, <i>Liaocheng Univ.</i> Kun Ma, <i>Liaocheng Univ.</i> Guowei Zhao, <i>Liaocheng Univ.</i> Wei Sun, <i>Liaocheng Univ.</i> Junsheng Zhao, <i>Liaocheng Univ.</i> Huasheng Zhang, <i>Liaocheng Univ.</i>
16:30-16:50	MonB03-3	Robust Stabilization Control for a Class of Non-Triangular High-Order Time-Delay Systems 740 Lingrong Xue, <i>Shanxi Univ. of Finance and Economics</i> Zhenguo Liu, <i>Shanxi Univ. of Finance and Economics</i>
16:50-17:10	MonB03-4	Unified Non-fragile Controller Design for Event-triggered Networked Control Systems 744 Meiyu Li, <i>Liaocheng Univ.</i> Xingyue Liang, <i>Liaocheng Univ.</i> Jianli Zhao, <i>Liaocheng Univ.</i> Jianwei Xia, <i>Liaocheng Univ.</i>
17:10-17:30	MonB03-5	Dissipativity and Stabilization for Uncertain Switched Nonlinear Systems with Mixed Delays 750 Tianrui Li, <i>Nanjing University of Science and Tech.</i> Weiqun Wang, <i>Nanjing University of Science and Tech.</i> Weimin Chen, <i>Nanjing University of Science and Tech.</i>



Session	MonB04 : Pattern Recognition and Deep Learning (I)	
Venue	Room04	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Ting Zhang , <i>Beijing Inst. of Techn.</i>	
Co-Chair	Jun Zhang , <i>Naval Univ. of Engineering</i>	
15:50-16:10	MonB04-1	Research on Target Identification Technique of Anti-ship Missile Terminal Guidance Based on GA-BP 756 Jun Zhang, <i>Naval Univ. of Engineering</i> Shengliang Hu, <i>Naval Univ. of Engineering</i> Lingang Wu, <i>Naval Univ. of Engineering</i> Xueman Fan, <i>Submarine Combat Software and Simulation Inst.</i> Qing Yang, <i>Southern Theater Command</i>
16:10-16:30	MonB04-2	A KCF-Based Tracker with Faster Scale Estimation and Effective Occlusion Detection 762 Weiyang Feng, <i>Beijing Inst. of Techn.</i> Ting Zhang, <i>Beijing Inst. of Techn.</i> Cong Lin, <i>Beijing Inst. of Techn.</i> Xiang Zhan, <i>Beijing Inst. of Techn.</i>
16:30-16:50	MonB04-3	Motion Cue Based Instance-level Moving Object Detection 767 Junjie Huang, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i> Wei Zou, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences TainJin Intelligent Tech. Institute of CASIA Co.</i> Zheng Zhu, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i> Jiagang Zhu, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i>
16:50-17:10	MonB04-4	The Li-ion Battery State of Charge Prediction of Electric Vehicle Using Deep Neural Network 773 Fen Zhao, <i>Chongqing Univ. of Posts and Telecommunications</i> Penghua Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Yinguo Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Yuanyuan Li, <i>Chongqing Univ. of Posts and Telecommunications</i>
17:10-17:30	MonB04-5	Study on Identification for the Typical Pasture Based on Image Texture Features 778 Ding Han, <i>Inner Mongolia Univ.</i> Junling Wang, <i>Inner Mongolia Univ.</i> Jing Wen, <i>Hohhot Vocational College</i> Ziyin Ma, <i>Inner Mongolia Univ.</i> Xu Zhang, <i>Inner Mongolia Univ.</i> Depeng Du, <i>Inner Mongolia Univ.</i>
17:30-17:50	MonB04-6	Robust Object Tracking Via Low-Rank and Reverse Fused-Lasso Regularization 783 Dan Tian, <i>Tianjin Univ. Shenyang Univ.</i> Guoshan Zhang, <i>Tianjin Univ.</i> Shenshen Sun, <i>Shenyang Univ.</i>



Session	MonB05 : IntelliSense and Advanced Sensing, Detection Technology (II) (Special Session)	
Venue	Room05	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Dan Yang , <i>Northeastern Univ.</i>	
15:50-16:10	MonB05-1	Application of Inclination Sensor in Deflection Deformation Detection of Bridge 788 ShenShen Shao, <i>Guangzhou Xinguang Expressway Co., Ltd.</i> YuXi Zhang, <i>Guangzhou Xinguang Expressway Co., Ltd.</i> YuFeng Xu, <i>South China Univ. of Techn.</i> ZhaoFeng Li, <i>South China Univ. of Techn.</i>
16:10-16:30	MonB05-2	Occluded Face Recognition Based on the Deep Learning 793 Gui Wu, <i>Jiangnan Univ.</i> Jun Tao, <i>Jiangnan Univ. Rowan Univ.</i> Xun Xu, <i>Jiangnan Univ.</i>
16:30-16:50	MonB05-3	A New Structural Damage Identification Method Based on Artificial Fish Swarm Optimization and Support Vector Machine 798 Can He, <i>Army 91053</i> Xiaochen Wu, <i>Army 91053</i> Jianchun Xing, <i>Land Force Univ. of Engineering</i>
16:50-17:10	MonB05-4	A New Semantic Segmentation Method of Point Cloud Based on PointNet and VoxelNet 803 Weihang Zhou, <i>Shanghai Jiaotong Univ.</i> Junguo Lu, <i>Shanghai Jiaotong Univ.</i> Wenlong Yue, <i>Shanghai Jiaotong Univ.</i>
17:10-17:30	MonB05-5	Hierarchical Recurrent and Convolutional Neural Network Based on Attention for Chinese Document Classification 809 Lianxin Lei, <i>Shanghai Jiaotong Univ.</i> Junguo Lu, <i>Shanghai Jiaotong Univ.</i> Shaohui Ruan, <i>Shanghai Jiaotong Univ.</i>
17:30-17:50	MonB05-6	Improved Harmony search Algorithm for Bus Scheduling Optimization 815 Qidan Zhu, <i>Harbin engineering Univ.</i> Yong Li, <i>Harbin engineering Univ.</i>



Session	MonB06 : Optimal Control and Optimization (I)	
Venue	Room06	
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Chair	Lin Pan, Wuhan University of Tech.	
Co-Chair	Guangyan Xu, Shenyang Aerospace Univ.	
15:50-16:10	MonB06-1	Internal Traffic Congestion: A New Application of Kruskal's Theorem 819 Lin Pan, Wuhan University of Tech. Axel Dias, National Engineering Research Center for Water Transport Safety (WTS Center). Jiyang Wang, Shanghai Jiaotong Univ.
16:10-16:30	MonB06-2	Availability Analysis of the Software Rejuvenation System with Impulse Control 825 Huixia Huo, Beijing Institute of Tech. Thet Thet Win, Beijing Institute of Tech. Houbao Xu, Beijing Institute of Tech.
16:30-16:50	MonB06-3	Optimal State Feedback Control for Markov Jump Linear System with Input Delay and Addition Noise 830 Yue Liu, Univ. of Jinan. Chunyan Han, Univ. of Jinan.
16:50-17:10	MonB06-4	Optimal State Tracking Control for Linear Discrete-time Systems Via Value Iteration 836 Yingying Liu, Northeastern Univ. Zhan Shi, Northeastern Univ. Zhanshan Wang, Northeastern Univ.
17:10-17:30	MonB06-5	Multi-machine Joint Attack and Defense Game Based on Pareto Optimality 842 Guangyan Xu, Shenyang Aerospace Univ. Qun Liu, Shenyang Aerospace Univ. Hongmei Zhang, Shenyang Aerospace Univ.
17:30-17:50	MonB06-6	Incremental Wiener Predictor for the Systems under Poor Observation Condition 848 Guangpeng Ma, Heilongjiang Univ. Han Zhou, Heilongjiang Univ. Guangming Yan, Heilongjiang Univ. Xiaojun Sun, Heilongjiang Univ.



Session	MonB07 : Theory and Application of Nonlinear Systems (II)	
Venue	Room07	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Yifan Chen , <i>Zhejiang Univ.</i>	
Co-Chair	Lei Sun , <i>Nankai Univ.</i>	
15:50-16:10	MonB07-1	Optimal Trajectory Tracking Control of AUVs with Delays in Actuator and Measurement Under Shallow Wave Disturbances 851 Qing Yang, <i>Qingdao Univ. of Science & Tech.</i> Dexin Gao, <i>Qingdao Univ. of Science & Tech.</i> Yaguang Sun, <i>Qingdao Univ. of Science & Tech.</i> Meng Li, <i>Qingdao Univ. of Science & Tech.</i>
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16:30-16:50	MonB07-3	Proxy Based Sliding Mode Control for Series Elastic Actuator Based on Algebraic Identification and Motion Planning 863 Xinru Gong, <i>Nankai Univ.</i> Lei Sun, <i>Nankai Univ.</i> Jingtai Liu, <i>Nankai Univ.</i>
16:50-17:10	MonB07-4	Super-Twisting Fast Sliding Mode Guidance for Rocket Powered Landing 869 Yifan Chen, <i>Zhejiang Univ.</i> Lin Ma, <i>Zhejiang Univ.</i> Zhijiang Shao, <i>Zhejiang Univ.</i> Zhengyu Song, <i>Beijing Aerospace Automatic Control Inst.</i>
17:10-17:30	MonB07-5	Dynamics Analysis of a Three-Dimensional Nonlinear System with No or Infinite Equilibria 875 Kexian Huang, <i>Shenyang Jianzhu Univ.</i> Changchun Sun, <i>Shenyang Jianzhu Univ.</i>



Session	MonB08 : Multi-agent Systems and Co-operative Control (I)	
Venue	Room08	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Bin Cheng , <i>Peking Univ.</i>	
Co-Chair	Zhenwei Liu , <i>Northeastern Univ.</i>	
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16:30-16:50	MonB08-3	Delayed State Synchronization of Continuous-time Multi-agent Systems in the Presence of Unknown Communication Delays 891 Zhenwei Liu, <i>Northeastern Univ.</i> Ali Saberi, <i>Washington State Univ.</i> Anton A. Stoorvogel, <i>Univ. of Twente</i> Rong Li, <i>Shanghai Lixin Univ. of Accounting and Finance</i>
16:50-17:10	MonB08-4	Delayed State Synchronization of Homogeneous Discrete-time Multi-agent Systems in the Presence of Unknown Communication Delays 897 Zhenwei Liu, <i>Northeastern Univ.</i> Ali Saberi, <i>Washington State Univ.</i> Anton A. Stoorvogel, <i>Univ. of Twente</i> Rong Li, <i>Shanghai Lixin Univ. of Accounting and Finance</i>
17:10-17:30	MonB08-5	Distributed-observer-based Robust H_∞ Consensus Control for Multi-agent Systems Under Switching Topologies 903 Heng Liu, <i>Heilongjiang Univ.</i> Xian Zhang, <i>Heilongjiang Univ.</i> Xin Wang, <i>Heilongjiang Univ.</i> Jianting Lyu, <i>Heilongjiang Univ.</i>
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Session	MonB09 : Automatic Control of Unmanned Systems (II)	
Venue	Room09	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Lin Ma, Zhejiang Univ.	
Co-Chair	Meng Li, Univ. of Jinan	
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16:10-16:30	MonB09-2	UAV 3-Dimension Flight Path Planning Based on Improved Rapidly-exploring Random Tree 921 Li Meng, Univ. of Jinan Qinpeng Sun, Univ. of Jinan Mengmei Zhu, Qilu Univ. of Tech.
16:30-16:50	MonB09-3	A Novel Steering Control for Real Autonomous Vehicles via PI Adaptive Dynamic Programming 926 Xiaoyun Lu, Univ. of Chinese Academy of Sciences Shuming Tang, Univ. of Chinese Academy of Sciences Lifu Zhang, Univ. of Chinese Academy of Sciences Peng Li, Univ. of Chinese Academy of Sciences Chuang Li, Univ. of Chinese Academy of Sciences Yunkuan Wang, Univ. of Chinese Academy of Sciences
16:50-17:10	MonB09-4	Variable Structure Control Method for Human-Machine Cooperative Driving 931 Chunyuan Li, Chongqing Univ. of Posts and Telecommunications Lin Liu, Chongqing Univ. of Posts and Telecommunications Ming Ceng, Chongqing Univ. of Posts and Telecommunications
17:10-17:30	MonB09-5	Dynamic Modeling and Control of Small-size Quadrotor Considering Wind Field Disturbance 937 Yaohong Qu, Northwestern Polytechnical Univ. Xiwei Wu, Northwestern Polytechnical Univ. Bing Xiao, Northwestern Polytechnical Univ. Kai Wang, Northwestern Polytechnical Univ.
17:30-17:50	MonB09-6	Optimal Design of Distributed Adaptive Guidance Laws for Simultaneous Attack 943 Xiaoqian Wei, Peking Univ. Jiaying Yang, Peking Univ. Xiangru Fan, Clarkson Univ.



Session	MonB10 : Supply Chain and Logistics Management (II)	
Venue	Room10	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Hanbin Kuang, <i>Northeastern Univ.</i>	
Co-Chair	Xiaoxiao Yang, <i>Beijing Jiaotong Univ.</i>	
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16:30-16:50	MonB10-3	Design of Sewage Treatment Monitoring System Based on Internet of Things 960 Chunbo Xiu, <i>Tianjin Polytechnic Univ.</i> Liyong Dong, <i>Tianjin Polytechnic Univ.</i>
16:50-17:10	MonB10-4	One-to-One Logistics-Client Stable Matching 965 Hechuan Wei, <i>Northeastern Univ.</i> Min Huang, <i>Northeastern Univ.</i> Yan Chen, <i>Dalian Maritime Univ.</i>
17:10-17:30	MonB10-5	Supply Chain Complexity Meaning and Quantitative Research 971 Xiaoxiao Yang, <i>Beijing Jiaotong Univ.</i> Zikui Lin, <i>Beijing Jiaotong Univ.</i>
17:30-17:50	MonB10-6	Research on Simulation of Ship Logistics System based on Reliability 977 Bin Hu, <i>Naval Univ. of Engineering</i> Tong Chen, <i>Naval Univ. of Engineering</i> Jing Yang, <i>Naval Univ. of Engineering</i>



Session	MonB11 : Image Processing and Robot Vision (II)	
Venue	Room11	
Date/Time	Monday, 3 June, 2019 / 15:50-17:50	
Chair	Yahui Gan, <i>Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering</i>	
Co-Chair	Bing Xiao, <i>Bohai Univ.</i>	
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16:50-17:10	MonB11-4	The Weld Extraction Algorithm for Robotic Arc Welding Based on 3D Laser Sensor 998 Peilin Wu, <i>Southeast Univ.</i> Yahui Gan, <i>Southeast Univ.</i> Xianzhong Dai, <i>Southeast Univ.</i>
17:10-17:30	MonB11-5	Application of Point Cloud Segmentation Algorithm in High-Precision Virtual Assembly 1003 Li Ma, <i>North China Univ. of Tech.</i> Chunxin Zhang, <i>North China Univ. of Tech.</i> Yingxun Fu, <i>North China Univ. of Tech.</i> Dongchao Ma, <i>North China Univ. of Tech.</i>
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Venue	Room12
Date/Time	Monday, 3 June, 2019 / 15:50-17:50
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MonBIS-02	MFL Data Feature Extraction based on KPCA-BOMW Model 1019 Lin Jiang, <i>Northeastern Univ.</i> Jinhai Liu, <i>Northeastern Univ.</i> Huaguang Zhang, <i>Northeastern Univ.</i> Kexin Xu, <i>Northeastern Univ.</i>
MonBIS-03	Research on Vehicle Detection Algorithm of Driver Assistance System Based on Vision 1024 Chenyang Yuan, <i>Liaoning Univ. of Techn.</i> Chunbao Huo, <i>Liaoning Univ. of Techn.</i> Zhibo Tong, <i>State Grid Jinzhou Electric Power Supply Company</i> Guangwen Men, <i>Liaoning Univ. of Techn.</i> Yan Wang, <i>Beijing Inst. of Graphic Communication</i>
MonBIS-04	Probabilistic Classification Vector Machines for Multiclass Classification 1028 Xusheng Qian, <i>Chinese Academy of Sciences</i> He Huang, <i>Soochow Univ.</i> Jisu Hu, <i>Chinese Academy of Sciences</i> Zhiyong Zhou, <i>Chinese Academy of Sciences</i> Chen Geng, <i>Chinese Academy of Sciences</i> Yakang Dai, <i>Chinese Academy of Sciences</i>
MonBIS-05	Multi-pattern Recognition Technology based Feature Selection and Processing of Apple Near Infrared Spectrum 1033 Ning Zhang, <i>Univ. of Jinan</i> Shuhui Bi, <i>Univ. of Jinan</i> Changfeng Zhang, <i>National Engineering Research Center for Agricultural Products Logistics</i> Tao Shen, <i>Univ. of Jinan</i>
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 Hongli Xu, *China Academy of Science*
 Jing Jiang, *Shenyang Ligong Univ.*
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 Hanyu Li, *Wuhan Univ. of Science and Techn.*
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 Chunli Liu, *Anhui Science and Techn. Univ.*
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 Jing Zhang, *Kunming Univ. of Science and Techn. Yunnan Xiaorun Techn. Service Co. Ltd.*
 Weilin Li, *Kunming Univ. of Science and Techn.*
 Qingyi Luo, *Kunming Univ. of Science and Techn.*
- MonBIS-18** **Construction of the Lyapunov Function for a Class of H_∞ Norm Problem** 1108
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 Chuanxue Song, *Jilin Univ.*
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 Xiaohui Lu, *Jilin Univ. Changchun Univ. of Techn.*
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- MonBIS-30 Research on Improvement of Multi-motor Synchronous Controller of Rolling Mill independent Drive Elastic System with Considering Torsional Vibration 1176**
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 Feng Gao, *North China Univ. of Science and Techn.*
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 Yuan Fan, *Anhui Univ.*
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 Yi Zhao, *Shenzhen Univ.*



- MonBIS-46** **Finite-time Increased Order Chaotic Synchronization Using an Adaptive Terminal Sliding Mode Control** 1258
 Jing Luo, *Central China Normal Univ.*
 Shaocheng Qu, *Central China Normal Univ.*
 Zhili Xiong, *Central China Normal Univ. Huanggang Normal Univ.*
- MonBIS-47** **Analysis Identification of Hub Airport of Flight Training Network** 1264
 Yong Yang, *Civil Aviation Flight Univ. of China.*
 KaiJun Xu, *Civil Aviation Flight Univ. of China.*
 JiaYi Wu, *Civil Aviation Flight Univ. of China.*
 Lei Liang, *Civil Aviation Flight Univ. of China.*
- MonBIS-48** **H_∞ State Estimation for Stochastic Recurrent Neural Networks with Randomly Occurring Nonlinearities and Variance Constraint** 1270
 Yan Gao, *Harbin Univ. of Science and Tech.*
 Jun Hu, *Univ. of South Wales.*
 Junhua Du, *Qiqihar Univ.*
- MonBIS-49** **Method for Urban Subway Network Controllability Analysis** 1276
 Shuliang Wang, *Jiangsu Normal Univ.*
 Wenzhuo Lv, *Jiangsu Normal Univ.*
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 Ziqi Wang, *Jiangsu Normal Univ.*
- MonBIS-50** **CSR: A Centrality Based on Robustness and Controllable Subspace of Complex Networks** 1280
 A. Mahmood, *Shanghai Jiao Tong Univ.*
 Umair Usman, *Shanghai Jiao Tong Univ.*
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- MonBIS-51** **Non-fragile State Estimation for Nonlinear Complex Networks subject to Missing Measurements and Random Delay with Uncertain Probabilities** 1286
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 Meiyu Sun, *Electrical and Mechanical College Shangdong Management Univ. Jinan.*
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 Meiyu Sun, *Electrical and Mechanical College Shangdong Management Univ. Jinan.*
- MonBIS-54** **Robustness Analysis of Urban Public Transportation Network Based on Accessibility Index** 1302
 Lin Xu, *Northeastern Univ.*
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MonBIS-55 **Markov Model Design of TCP Network Systems** 1308
 Wenjuan Xu, *Northeastern Univ. PLA Army Academy of Artillery and Air Defense.*
 Yuanwei Jing, *Northeastern Univ.*
 M Dimirovski Georgi, *Dogus Univ. SS Cyril and Methodius Univ.*

Session	TueA02 : Fault Diagnosis and Self-healing Control (I)	
Venue	Room02	
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00	
Chair	Chunhui Zhao, Zhejiang Univ.	
Co-Chair	Jian Wang, Bohai Univ.	
8:00-8:20	TueA02-1	Sliding Mode Observer based Satellite Actuator Fault Diagnosis with Attitude-Only Measurement 1313 Sheng Gao, <i>State Key Laboratory of Robotics</i> Wei Zhang, <i>State Key Laboratory of Robotics</i> Xu He, <i>State Key Laboratory of Robotics</i> Fan Yang, <i>State Key Laboratory of Robotics</i> Hao Huang, <i>State Key Laboratory of Robotics</i>
8:20-8:40	TueA02-2	Design of Elevator Fault Diagnosis Cloud System based on Smart Phones 1318 Yanfeng Gao, <i>China Jiliang Univ.</i> Ling Wang, <i>China Jiliang Univ.</i> Yang Liu, <i>China Jiliang Univ.</i> Kaixing Hong, <i>China Jiliang Univ.</i> Bingrui Wang, <i>China Jiliang Univ.</i>
8:40-9:00	TueA02-3	A Health Indicator Construction Method based on the Information Entropy of Specific Frequency Band and GGRBM 1322 Gang Zhang, <i>Naval Univ. of Engineering</i> Fuqing Tin, <i>Naval Univ. of Engineering</i> Weige Liang, <i>Naval Univ. of Engineering</i> Xin Song, <i>China Ordnance Industrial Standardization Research Institute</i>
9:00-9:20	TueA02-4	Hybrid Fault-tolerant Control System for Multiple Faults of Aeroengines 1328 Xiaofeng Liu, <i>Beijing Univ. of Aeronautics and Astronautics</i>
9:20-9:40	TueA02-5	The Fault Prognosis Method based on Dynamic Compensation AR Model 1332 Jian Wang, <i>Bohai Univ.</i> Zhiyan Han, <i>Bohai Univ.</i>
9:40-10:00	TueA02-6	Fault Degradation State Prediction under Closed-loop Control for 1000MW Ultra Supercritical Unit 1337 Bingya Weng, <i>Zhejiang Univ.</i> Chunhui Zhao, <i>Zhejiang Univ.</i> Haidong Fan, <i>Zhejiang Provincial Energy Group Company Ltd.</i> Weijian Zheng, <i>Zhejiang Provincial Energy Group Company Ltd.</i> Youxian Sun, <i>Zhejiang Univ.</i>



Session	TueA03 : Control and Management on Smart City (I) (Special Session)	
Venue	Room03	
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00	
Chair	Yahui Wang , <i>Beijing Univ. of Civil Engineering and Architecture</i>	
8:00-8:20	TueA03-1	Prediction of COP Value of Air-Conditioning Chillers based on Improved FOA-GRNN 1343 Siqi Li, <i>Beijing Uvniv. of Civil Engin. and Architecture</i> Zhijian Jiang, <i>Beijing Uvniv. of Civil Engin. and Architecture</i>
8:20-8:40	TueA03-2	A Manner to Assess the Energy Consumption of Business Hotel Buildings 1348 Zongjie Du, <i>Qingdao Univ. of Scie. & Techn.</i> Xinyu Jiang, <i>Qingdao Univ. of Scie. & Techn.</i> Weicai Song, <i>Qingdao Univ. of Scie. & Techn.</i>
8:40-9:00	TueA03-3	Personalized Control of Indoor Air Temperature Based on Deep Learning 1354 Jing Jin, <i>Tongji Univ.</i> Shaolong Shu, <i>Tongji Univ.</i> Feng Lin, <i>Tongji Univ.</i>
9:00-9:20	TueA03-4	ConfConv: A Confidence Measure for Disparity Estimation Based on Deep Learning 1360 Hao Wang, <i>Beijing Institute of Techn.</i> Yaping Dai, <i>Beijing Institute of Techn.</i> Kaizheng Chen, <i>Beijing Institute of Techn.</i> Zhiyang Jia, <i>Beijing Institute of Techn.</i> Yongkang Nie, <i>Chinese PLA General Hospital</i>
9:20-9:40	TueA03-5	A Classification Method for Small Sample Multi-label Images 1365 Ruohan Li, <i>Beijing Institute of Techn</i> Zengru Jiang, <i>Beijing Institute of Techn</i> Wei Dai, <i>Beijing Quanshi Yunan Technology Co., Ltd</i> Yongkang Nie, <i>Chinese People's Liberation Army General Hospital</i> Liang Liu, <i>Chinese People's Liberation Army General Hospital</i> Yaping Dai, <i>Beijing Institute of Techn</i>
9:40-10:00	TueA03-6	An Improved GMM based Video Foreground Separation 1371 Caixia Zhang, <i>Weihai Vocational College</i> Qingyang Xu, <i>Shandong Univ</i>



Session	TueA04 : Fractional Calculus and Fractional-order Systems (I) (Special Session)	
Venue	Room04	
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00	
Chair	Dingyu Xue, <i>Northeastern Univ.</i>	
8:00-8:20	TueA04-1	The Stability of Fractional Singular Systems with Time Delay Under State Feedback 1375 Dazi Li, <i>Beijing Univ. of Chemical Techn.</i> Liming Wei, <i>Beijing Univ. of Chemical Techn.</i> Tianheng Song, <i>Beijing Univ. of Chemical Techn.</i> Qibing Jin, <i>Beijing Univ. of Chemical Techn.</i>
8:20-8:40	TueA04-2	Distributed Robust Adaptive Consensus Control for Uncertain Nonlinear Fractional-Order Multi-Agent Systems 1380 Ping Gong, <i>South China Normal Univ.</i>
9:00-9:20	TueA04-3	Adaptive Fuzzy DSC Design of Strict-Feedback Fractional-Order Nonlinear Systems 1386 Zhiyao Ma, <i>Northeastern Univ.</i> Hongjun Ma, <i>Northeastern Univ.</i>
9:00-9:20	TueA04-4	Hope Bifurcation of a Fractional-order Neural Network with Mixed Delays 1392 Lingzhi Si, <i>Nanjing Univ. of Posts and Telecommunications</i> Shuo Shi, <i>Nanjing Univ. of Posts and Telecommunications</i> Min Xiao, <i>Nanjing Univ. of Posts and Telecommunications</i>
9:20-9:40	TueA04-5	Fractal Dimension of Katugampola Fractional Integral of Continuous Functions with Unbounded Variation 1398 Wenliang Peng, <i>Army Univ. of Engin.</i> Kui Yao, <i>Army Univ. of Engin.</i> Yongshun Liang, <i>Nanjing Univ. of Scie. and Techn.</i>
9:40-10:00	TueA04-6	Fractional Order Sliding Mode Control for Nano-positioning of Piezoelectric Actuator 1403 Zicheng Li, <i>Wuhan Institute of Techn.</i> Sai Zhang, <i>Wuhan Institute of Techn.</i> Houneng Wang, <i>Wuhan Institute of Techn.</i> Mengxiong Ruan, <i>Wuhan Institute of Techn.</i>



Session	TueA05 : Signal Processing and Information Fusion (I)
Venue	Room05
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00
Chair	Huan Wang , <i>Chongqing Univ. of Posts and Telecommunications</i>
Co-Chair	Bo Li , <i>Liaoning Univ. of Techn.</i>

8:00-8:20	TueA05-1	A Novel Image Fusion Framework based on Non-Subsampled Shearlet Transform (NSST) Domain 1409 Penghua Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Huan Wang, <i>Chongqing Univ. of Posts and Telecommunications</i> Xiaofei Li, <i>China Electronics Techn. Group Corporation</i> Hexu Hu, <i>Chongqing Univ. of Posts and Telecommunications</i> Hongyan Wei, <i>Chongqing Univ. of Posts and Telecommunications</i> Yupeng Yuan, <i>China Electronics Techn. Group Corporation</i> Zuwei Zhang, <i>China Electronics Techn. Group Corporation</i> Guanqiu Qi, <i>Mansfield Univ. of Pennsylvania</i>
8:20-8:40	TueA05-2	A sEMG-Based Hand Motions Recognition System With Dimension-Reduced FFT 1415 Yang Zhao, <i>Nankai Univ. Tianjin Key Laboratory of Intelligent Robotics</i> Fenglei Li, <i>Nankai Univ. Tianjin Key Laboratory of Intelligent Robotics</i> Lin Xu, <i>Nankai Univ. Tianjin Key Laboratory of Intelligent Robotics</i>
8:40-9:00	TueA05-3	Detection and Tracking Method for Maneuvering Targets Using Improved Gradient-based Optical Flow Field 1421 Bo Li, <i>Liaoning Univ. of Techn.</i> Shanshan Zan, <i>Liaoning Univ. of Techn.</i> Qingyang Jing, <i>Liaoning Univ. of Techn.</i> Xiaohui Li, <i>Liaoning Univ. of Techn.</i>
9:00-9:20	TueA05-4	Speech Emotion Recognition Based on Deep Learning and Kernel Nonlinear PSVM 1426 Zhiyan Han, <i>Bohai Univ.</i> Jian Wang, <i>Bohai Univ.</i>
9:20-9:40	TueA05-5	Removing of Salt-and-pepper Noise in Images Based on Adaptive Median Filtering and Improved Threshold Function 1431 Ying Qian, <i>North Minzu Univ.</i>
9:40-10:00	TueA05-6	Weighted Fusion Incremental Kalman Filter 1437 Bo Xiao, <i>Heilongjiang Univ.</i> Xiaojun Sun, <i>Heilongjiang Univ.</i> Mingbo Zhang, <i>Heilongjiang Univ.</i>



Session	TueA06 : Optimal Control and Optimization (II)	
Venue	Room06	
Date/Time	Tuesday, 4 June, 2019 / 08:00-10:00	
Chair	Yihe Zhong , <i>Jilin Univ.</i>	
Co-Chair	Xiaoguang Gao , <i>Northwestern Polytechnical Univ.</i>	
08:20-08:40	TueA06-1	A Self-reflection Teaching-Learning-Based Optimization Algorithm and Its Application 1446 Junchang Zhai, <i>Bohai Univ.</i> Yuping Qin, <i>Bohai Univ.</i> Zhen Zhao, <i>Bohai Univ.</i>
08:40-09:00	TueA06-2	Command Behavior Evaluation Based on Statistical Learning Modeling 1452 Xiao bo Niu, <i>Naval Petty Officer Academy.</i> Qun Fang, <i>Naval Petty Officer Academy.</i> Xiao Shao, <i>Naval Petty Officer Academy.</i>
09:00-09:20	TueA06-3	Approximate Optimal tracking Control for Nonlinear Discrete-time Switched Systems via Approximate Dynamic Programming 1456 Chunbin Qin, <i>Henan Univ.</i> Yizhe Huang, <i>Henan Univ.</i> Yabin Yang, <i>Henan Univ.</i> Jishi Zhang, <i>Henan Univ.</i> Xianxing Liu, <i>Henan Univ.</i>
09:20-09:40	TueA06-4	Multi-objective Placement of Unmanned Aerial Vehicles as Communication Relays Based on Clustering Method 1462 Gaofeng Wu, <i>Northwestern Polytechnical Univ.</i> Xiaoguang Gao, <i>Northwestern Polytechnical Univ.</i> Kun Zheng, <i>Science and Tech. on Electronic Information Control Laboratory, ChengDu.</i> Xiaowei Fu, <i>Northwestern Polytechnical Univ.</i>
09:40-10:00	TueA06-5	Optimal Lane Change Control of Intelligent Vehicle Based on MPC 1468 Yihe Zhong, <i>Jilin Univ.</i> Lulu Guo, <i>Jilin Univ.</i> Yuxiang Zhang, <i>Jilin Univ.</i> Qifang Liu, <i>Jilin Univ.</i> Hong Chen, <i>Jilin Univ.</i>



Session	TueA07 : Space Vehicle Control (I)	
Venue	Room07	
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00	
Chair	Siqi Wang , <i>Northwestern Polytechnical Univ.</i>	
Co-Chair	Yuanli Cai , <i>Xi'an Jiaotong Univ.</i>	
8:00-8:20	TueA07-1	Adaptive Fault Tolerant Control of Hypersonic Flight Vehicle with State Constraints using Barrier Lyapunov Function 1474 <i>Zhiyu Peng, Nanjing Univ. of Aeronautics & Astronautics</i> <i>Ruiyun Qi, Nanjing Univ. of Aeronautics & Astronautics</i> <i>Bin Jiang, Nanjing Univ. of Aeronautics & Astronautics</i>
8:20-8:40	TueA07-2	Modeling and Robust Attitude Controller Design of a Distributed Propulsion Tilt-Wing UAV in Hovering Flight 1480 <i>Siqi Wang, Northwestern Polytechnical Univ.</i> <i>Bifeng Song, Northwestern Polytechnical Univ.</i> <i>Lei He, Northwestern Polytechnical Univ.</i> <i>Xinyu Lang, Northwestern Polytechnical Univ.</i>
8:40-9:00	TueA07-3	A Compensative Fault Tolerant Control Algorithm for Quadrotor's Attitude Control System 1486 <i>Tang Renjie, Beijing Inst. of Tech.</i> <i>Xu Yizheng, Beijing Inst. of Tech.</i> <i>Zheng Qingqing, Beijing Inst. of Tech.</i> <i>Chen Xiaopeng, Beijing Inst. of Tech.</i> <i>Zhang Weizhong, Beijing Inst. of Tech.</i>
9:00-9:20	TueA07-4	Thrust Vector Control for Powered Flight of the Upper Stages 1492 <i>Zhaohui Wang, The 28th Research Inst. of China Electronics Tech. Group Corporation</i> <i>Zhen Zhang, The 28th Research Inst. of China Electronics Tech. Group Corporation</i> <i>Yongcheng Sun, The 28th Research Inst. of China Electronics Tech. Group Corporation.</i> <i>Ming Xu, Beihang Univ.</i>
9:20-9:40	TueA07-5	Research on Attitude Control Algorithm Based on Improved Linear Active Disturbance Rejection Control for Unmanned Helicopter 1498 <i>Jiyang Dai, Nanchang Hangkong Univ.</i> <i>Feng Hu, Nanchang Hangkong Univ.</i> <i>Jin Ying, Nanchang Hangkong Univ.</i> <i>Yunxia Wang, Nanchang Hangkong Univ.</i>
9:40-10:00	TueA07-6	A Cooperative Guidance Law for Multiple Missiles with Impact Time and Terminal Angle Constraints 1504 <i>Ye Tian, Xi'an Jiaotong Univ.</i> <i>Yuanli Cai, Xi'an Jiaotong Univ.</i>



Session	TueA08 : Motion Control (I)	
Venue	Room08	
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00	
Chair	KeKe Geng , <i>Southeast Univ.</i>	
Co-Chair	Zhiping Liu , <i>Xian Tech. Univ.</i>	
8:00-8:20	TueA08-1	Trajectory Planning for Ground Service Robot 1511 Zhiping Liu, <i>Xian Tech. Univ.</i> Yawen Wang, <i>Xian Tech. Univ.</i>
8:20-8:40	TueA08-2	Trajectory Tracking of Mobile Service Robot 1516 Zhiping Liu, <i>Xian Tech. Univ.</i> Yawen Wang, <i>Xian Tech. Univ.</i>
8:40-9:00	TueA08-3	Position Regulation of Quadrotor Aircraft Based on Internal Model Principle 1521 Haibin Shi, <i>Northeastern Univ.</i> Yuanbin Zou, <i>Northeastern Univ.</i> Chuanping Wu, <i>Northeastern Univ.</i> Zhi Xu, <i>Northeastern Univ.</i> Menghao Guo, <i>Northeastern Univ.</i>
9:00-9:20	TueA08-4	A New Path Tracking Algorithm for Four-Wheel Differential Steering Vehicle 1527 YongJun Yan, <i>Southeast Univ.</i> KeKe Geng, <i>Southeast Univ.</i> Shuaipeng Liu, <i>Southeast Univ.</i> YanJun Ren, <i>Southeast Univ.</i>
9:20-9:40	TueA08-5	Design of Iterative Learning Controller for Permanent Magnet Linear Synchronous Motor Based on MEEMD Algorithm 1533 Limei Wang, <i>Shenyang Univ. of Tech.</i> Hongmei Song, <i>Shenyang Univ. of Tech.</i> Longxiang Liu, <i>Shenyang Univ. of Tech.</i>
9:40-10:00	TueA08-6	Global Sliding Mode Control Based on Recurrent Wavelet Fuzzy Neural Network Control for H-type Platform 1539 Limei Wang, <i>Shenyang Univ. of Tech.</i> Longxiang Liu, <i>Shenyang Univ. of Tech.</i> Hongmei Song, <i>Shenyang Univ. of Tech.</i>



Session	TueA09 : Adaptive Control and Learning Control (I)	
Venue	Room09	
Date/Time	Tuesday, 4 June, 2019 / 08:00-10:00	
Chair	Fuqiang You , <i>Northeastern Univ.</i>	
Co-Chair	Honghong Wang , <i>Qingdao Univ.</i>	
08:00-08:20	TueA09-1	Iterative Learning Control for Linear Systems with Fading Channels 1545 Dong Shen, <i>Beijing Univ. of Chemical Tech.</i> Gangui Qu, <i>Beijing Univ. of Chemical Tech.</i> Chen Liu, <i>Beijing Univ. of Chemical Tech.</i>
08:20-08:40	TueA09-2	Fuzzy-approximation-based Decentralized Adaptive Control for Nonlinear Large-scale Systems with Unknown Interconnections by Output Feedback 1551 Honghong Wang, <i>Qingdao Univ.</i> Bing Chen, <i>Qingdao Univ.</i> Chong Lin, <i>Qingdao Univ.</i> Yumei Sun, <i>Shandong Univ. of Science and Tech.</i> Junhang Ding, <i>Qingdao Univ.</i>
08:40-09:00	TueA09-3	Neuro-adaptive Sliding Mode Fault-tolerant Control of Hypersonic Vehicle under Actuator Fault 1558 Ping Zhu, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Ju Jiang, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Chaojun Yu, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Chengyu Wen, <i>Nanjing Univ. of Aeronautics and Astronautics</i>
09:00-09:20	TueA09-4	Adaptive Neural Networks Control for Uncertain Nonlinear State Constrained Systems With Input Delay 1564 Fuqiang You, <i>Northeastern Univ.</i> Nan Chen, <i>Northeastern Univ.</i> Shiya Cheng, <i>Northeastern Univ.</i> Mingxing Jia, <i>Northeastern Univ.</i>
09:20-09:40	TueA09-5	V-REP-based Virtual Platform on Multi-pattern Neural Control of Robotic Manipulator 1570 Shengzhao Huang, <i>South China Univ. of Tech.</i> Min Wang, <i>South China Univ. of Tech.</i> Yongtao Zou, <i>South China Univ. of Tech.</i>
09:40-10:00	TueA09-6	Quick-Switch Adaptive Droop Control of MMC-MTDC for Large-Scale Renewable Energy Integration 1576 Kaiqi Liu, <i>Lanzhou Jiaotong Univ.</i> Haiying Dong, <i>Lanzhou Jiaotong Univ.</i>



Session	TueA10 : New Energy Management and Energy-saving Technologies on Control System (I)
Venue	Room10
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00
Chair	Bin Liu , <i>Hunan Univ. of Tech.</i>
Co-Chair	Yonghui Sun , <i>Hohai Univ.</i>
8:00-8:20	TueA10-1 A Kind of Digital Controlled Electro-Optical Switch Power Source with Variable Voltage and Variable Frequency 1582 Anguo Liu, <i>Fuzhou Univ.</i> Zhezhuang Xu, <i>Fuzhou Univ.</i> Wu Wang, <i>Fuzhou Univ.</i>
8:20-8:40	TueA10-2 Steady State Analysis of Cold-Heat-Power-Gas-Steam Optimization in Integrated Energy System Considering Energy Storage Devices 1588 Tao Wang, <i>State Grid Liaoning Electric Power Co. Ltd.</i> Weichun Ge, <i>State Grid Liaoning Electric Power Co. Ltd.</i> Zhanjun Li, <i>State Grid Liaoning Electric Power Co. Ltd.</i> Mo Zhou, <i>State Grid Liaoning Electric Power Co. Ltd.</i> Changyong Yu, <i>State Grid Liaoning Electric Power Co. Ltd.</i> Dongliang Xie, <i>NARI Group Corporation/State Grid Electric Power Research Inst.</i> Feng Xue, <i>NARI Group Corporation/State Grid Electric Power Research Inst.</i> Yonghui Sun, <i>Hohai Univ.</i>
8:40-9:00	TueA10-3 Study on an Optimum Design for DC and Doubly-Controlled DFIG System 1594 Shaomin Yan, <i>Qufu Normal Univ.</i> Shan Wang, <i>Qufu Normal Univ.</i> Yanfei Zhou, <i>Qufu Normal Univ.</i> Xiaoting Sun, <i>Qufu Normal Univ.</i> Guoxiu Jing, <i>Xi'an Jiaotong Univ.</i>
9:00-9:20	TueA10-4 Research and Design of Data Acquisition and Processing Algorithm Based on Improved FFT 1599 Chenhu Luo, <i>Wuhan Univ. of Tech.</i> Xianglian Xu, <i>Wuhan Univ. of Tech.</i> Mengqiang An, <i>Wuhan Univ. of Tech.</i> Lukai Mao, <i>Wuhan Univ. of Tech.</i> Wei Zhou, <i>Wuhan Univ. of Tech.</i>
9:20-9:40	TueA10-5 Event-triggered Dual-mode Control of Maximum Power Point Tracking for Photovoltaic Arrays 1605 Gonghe PANG, <i>Hunan Univ. of Tech.</i> Bin Liu, <i>Hunan Univ. of Tech.</i> Jun Li, <i>Hunan Univ. of Tech.</i> Min Lei, <i>Hunan Univ. of Tech.</i>
9:40-10:00	TueA10-6 Real-time Traffic Information Based Load Forecasting and Economical Dispatch of Electric Vehicles 1611 Chunxia Dou, <i>Inst. of Advanced Tech. Nanjing Univ. of Posts and Telecommunications</i> Yong Zhang, <i>Inst. of Advanced Tech. Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications</i> Tengfei Zhang, <i>Inst. of Advanced Tech. Nanjing Univ. of Posts and Telecommunications Nanjing Univ. of Posts and Telecommunications</i>



Session	TueA11 : Image Processing and Robot Vision (III)	
Venue	Room11	
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00	
Chair	Zhongxiang Zhou , <i>Beijing Univ. of Tech. Beijing Key Laboratory of Computational Intelligence and Intelligent System</i>	
Co-Chair	Zhigang Liu , <i>Northeastern Univ.</i>	
8:00-8:20	TueA11-1	Target Bounding Box Adjustment Method Based on Feature Matching and Improved Three-channel RANSAC Filtering 1618 Jing Zhang, <i>Kunming Univ. of Science and Tech. Yunnan Xiaorun Technology Service Co. Ltd.</i> Xiaoyu Xiong, <i>Kunming Univ. of Science and Tech.</i> Qingyi Luo, <i>Kunming Univ. of Science and Tech.</i>
8:20-8:40	TueA11-2	A 3D Point Correspondences Uncertainty Aware RGB-D SLAM System 1623 Fujun Pei, <i>Beijing Univ. of Tech. Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Zhongxiang Zhou, <i>Beijing Univ. of Tech. Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Mingjun Zhu, <i>Beijing Univ. of Tech. Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Ning Zhao, <i>Beijing Univ. of Tech. Beijing Key Laboratory of Computational Intelligence and Intelligent System</i>
8:40-9:00	TueA11-3	SSM-Based Joint Dictionary Learning for Cross-View Action Recognition 1628 Lei Wang, <i>Northeastern Univ.</i> Zhigang Liu, <i>Northeastern Univ.</i> Ruoshi Wang, <i>Northeastern Univ.</i> Haoyang Qi, <i>Northeastern Univ.</i>
9:00-9:20	TueA11-4	An Enhanced Neural Network Based on Deep Metric Learning for Skin Lesion Segmentation 1633 Xinhua Liu, <i>Wuhan Univ. of Tech.</i> Gaoqiang Hu, <i>Wuhan Univ. of Tech.</i> Xiaolin Ma, <i>Wuhan Univ. of Tech.</i> Hailan Kuang, <i>Wuhan Univ. of Tech.</i>
9:20-9:40	TueA11-5	Multimodel Facial Makeup Translation with Generative Adversarial Networks 1639 Hailan Kuang, <i>Wuhan Univ. of Tech.</i> Zhenhua Zhong, <i>Wuhan Univ. of Tech.</i> Zhuo Chen, <i>Wuhan Univ. of Tech.</i> Xinhua Liu, <i>Wuhan Univ. of Tech.</i> Xiaolin Ma, <i>Wuhan Univ. of Tech.</i>
9:40-10:00	TueA11-6	Railway Clearance Intrusion Detection in Aerial Video Based on Convolutional Neural Network 1644 Haoran Huang, <i>Nanjing Univ. of Science and Tech.</i> Lidong Liang, <i>Guangzhou Metro</i> Gaopeng Zhao, <i>Nanjing Univ. of Science and Tech.</i> Yi Yang, <i>Guangzhou Metro</i> Kai Ou, <i>Guangzhou Metro</i>



Session	TueAIS : Interactive Session
Venue	Room12
Date/Time	Tuesday, 4 June, 2019 / 8:00-10:00
TueAIS-01	Incremental Recursive Least-squares Identification for the Systems under Poor Observation Condition 1649 Han Zhou, <i>Heilongjiang Univ.</i> Guangpeng Ma, <i>Heilongjiang Univ.</i> Guangming Yan, <i>Heilongjiang Univ.</i> Xiaojun Sun, <i>Heilongjiang Univ.</i>
TueAIS-02	Dynamic Modeling and Identification of Electric Power Plant on Agile UAVs 1653 An Siqi, <i>Civil Aviation Flight Univ. of China.</i> Xue Zhuang, <i>Civil Aviation Flight Univ. of China.</i>
TueAIS-03	SOC Estimation Algorithm Based on Dynamic Online Identification of Battery Model Parameters 1658 Fang Liu, <i>Tianjin Qingyuan Electric Vehicle Limited Liability Company.</i> Jie Ma, <i>Tianjin Polytechnic Univ.</i> Weixing Su, <i>Tianjin Polytechnic Univ.</i> Ruzhen Dou, <i>Tianjin Univ.</i> Chaoying Xia, <i>China Automotive Technology & Research Center.</i>
TueAIS-04	An Inverse Model of Magnetorheological Elastomer Isolator with Neural Network 1664 Zening Yang, <i>Chongqing Univ.</i> Jie Fu, <i>Chongqing Univ.</i> Junfeng Bai, <i>Chongqing Univ.</i> Guanyao Liao, <i>Chongqing Univ.</i> Miao Yu, <i>Chongqing Univ.</i>
TueAIS-05	Angle of Attack Identification of a Miniature Guided Munition 1668 Junfang Fan, <i>Beijing Information Science & Tech Univ.</i> Xiang Tian, <i>Beijing Information Science & Tech Univ.</i>
TueAIS-06	Research on Identification Process of Nonlinear System Based on An Improved Recursive Least Squares Algorithm 1673 Zilong Tan, <i>Liaoning Science and Tech. Museum.</i> Huaguang Zhang, <i>Northeastern Univ.</i> Jiayue Sun, <i>Northeastern Univ.</i> Kai Du, <i>Northwest engineering corporation limited, Xian.</i>
TueAIS-07	Hypothetical Analytic Filter for the Tracking with Bearing and Range Mixture Measurements 1679 Haotian Wu, <i>Zhejiang Univ.</i> Ji Xiang, <i>Zhejiang Univ.</i>



- TueAIS-08** **Guaranteed Cost Robust Kalman Estimators for Systems with Uncertain-Variance Multiplicative and Colored Measurements Noises** 1685
 Chunshan Yang, *Guilin Univ. of Aerospace Tech.*
 Ying Zhao, *Guilin Univ. of Aerospace Tech.*
 Jianbo Ji, *Guilin Univ. of Aerospace Tech.*
 Wenjuan Qi, *Heilongjiang Univ.*
- TueAIS-09** **Identification of Added Mass and Added Damping Coefficient for an Underwater Shaking Table Based on Gradient Algorithm** 1691
 Jianjun Yao, *Harbin Engineering Univ.*
 Yue Zhao, *Harbin Engineering Univ.*
 Tang Sheng, *Harbin Engineering Univ.*
 Qian Chen, *Harbin Engineering Univ.*
 Wangeng Mai, *Harbin Engineering Univ.*
- TueAIS-10** **Parameter Identification of Box-Jenkins Systems based on the Particle Swarm Optimization** 1696
 Tiancheng Zong, *Nantong Univ.*
 Junhong Li, *Nantong Univ.*
 Xiao Li, *Nantong Univ.*
 Liangliang Shang, *Nantong Univ.*
 Xiaojiao Zhang, *Nanchang Normal Univ.*
- TueAIS-11** **Self-adaptive Chaotic Local Search Particle Swarm Optimization for Propylene Explosion Region Parameter Identification** 1702
 Shuting Liu, *Northeastern Univ. Shenyang Inst. of Tech.*
 Xianwen Gao, *Northeastern Univ.*
 Hangfeng He, *Ningbo Univ.*
 Shumei Zhang, *Tianjin Univ.*
- TueAIS-12** **Parameter Identification of a Novel Controllable Excitation Feeding Platform Based on Improved Particle Swarm Optimization** 1708
 Wei Wu, *Shenyang Univ. of Tech.*
 Yi Zhao, *Shenyang Univ. of Tech.*
- TueAIS-13** **Comparative Study of Latent Structure Modeling Approaches with Its Application to Prediction Dioxin Emission Concentration** 1714
 Jian Tang, *Beijing Univ. of Tech.*
 Junfei Qiao, *Beijing Univ. of Tech.*
 Zhe Xu, *Beijing Univ. of Tech.*
 Wen Yu, *Departamento de Control Automatico.*
- TueAIS-14** **Algebraic Parameter Estimation Approaches for Process Control Systems from Sine Responses** 1720
 Ling Xu, *Wuxi Vocational Inst. of Commerce. Jiangnan Univ.*
 Feng Ding, *Wuxi Vocational Inst. of Commerce.*
 Feng Ding, *Jiangnan Univ.*



- TueAIS-15** **Lateral Spread Prediction Based on Generalized Additive Model for Hot Strip Finishing Mill** 1726
 Jiabo Li, *Northeastern Univ. Baosteel Research Inst., Baoshan Iron and Steel Co., Ltd., Shanghai.*
 Weigang Li, *Wuhan Univ. of Science and Tech.*
 Zhaohui Guo, *Northeastern Univ.*
 Zhaozhun Zhong, *Soochow Univ.*
 Xiongjun Wu, *The Eighth Academy of China Aerospace Science and Tech. Corporation.*
- TueAIS-16** **Passive Control for a Class of Nonlinear Systems by Using Backstepping Method and GDOB Technique** 1731
 Jinglai Qiao, *Liaoning Univ.*
 Li Yang, *Liaoning Univ.*
 Jiawei Yao, *Liaoning Univ.*
- TueAIS-17** **The Research of Handheld Stabilization System Based on Active Disturbance Rejection Control Strategy** 1737
 Zerui Qi, *Beijing Inst. of Tech.*
 Lei Dong, *Beijing Inst. of Tech.*
 Hao Zhang, *Beijing Inst. of Tech.*
 Feng Wang, *Beijing Inst. of Tech.*
 Zhigang Gao, *Beijing Inst. of Tech.*
- TueAIS-18** **A New Weighting Method based on Gap Metric for Multi-model Predictive Control** 1743
 Jingjing Du, *Hohai Univ.*
 Lei Zhang, *Nanjing Univ. of Posts and Telecommunications.*
 JunFeng Chen, *Hohai Univ.*
- TueAIS-19** **Non-fragile Output Tracking Control for T-S Fuzzy Systems** 1747
 Quancheng Cheng, *Liaoning Mechatronics College.*
 Baoying Cui, *Liaoning Mechatronics College.*
 Yanli Song, *Liaoning Mechatronics College.*
 Haibin Ouyang, *Guangzhou Univ.*
- TueAIS-20** **Transient Analysis of Starting and Stopping for Single-axis Inertia Vibration Machine** 1753
 Danxia Wu, *Shenyang Jianzhu Univ.*
 Xianglin Hou, *Shenyang Jianzhu Univ.*
 Tielin Liu, *Shenyang Jianzhu Univ.*
- TueAIS-21** **PM2.5 Concentration Prediction Model Based on Chaotic Genetic Neural Network** 1759
 Xiao-min Wang, *Beijing Forestry Univ.*
 Yutong Zheng, *Beijing Forestry Univ.*
 Ting Lei, *Beijing Forestry Univ.*
- TueAIS-22** **Characteristic Analysis and Prediction of Runoff Based on Chaotic Wavelet Neural Network** 1765
 Yu-tong Zheng, *Beijing Forestry Univ.*
 Xiao-min Wang, *Beijing Forestry Univ.*
 Ting Lei, *Beijing Forestry Univ.*
- TueAIS-23** **Support Degree Evaluation of Cyberspace Operation to Joint Combat System** 1770
 Xuanru Chen, *Information Engineering Uni.*
 Jianjing Shen, *Information Engineering Uni.*
 Jichao Xing, *Information Engineering Uni.*
 Yaorong Dai, *Information Engineering Uni.*
- TueAIS-24** **Modeling and Stability Analysis of Parallel-connected PFC Boost Converter** 1775
 Cheng Xue, *Anhui Univ.*
 Yufei Zhou, *Anhui Univ.*
 Wenbin Xu, *Anhui Univ.*



- TueAIS-25** **Multi-model Switching Control for the Refueling Boom** 1780
Yaohong Qu, *Northwestern Polytechnical Univ.*
Wenbi Zhao, *Northwestern Polytechnical Univ.*
Xue Mu, *Northwestern Polytechnical Univ.*
- TueAIS-26** **Research on the Structural Effectiveness of Overseas Anti-terrorism Operational Command System Supported by Space Information** 1786
Yang Li, *Space Engineering Uni. Special Police Academy of China*
Xiaoming Luo, *Space Engineering Uni.*
Yanqiu Wang, *Institute of Disaster Prevention*
- TueAIS-27** **Research on the Coupling Vibration of Middle-Speed Maglev Vehicle and Track Beams** 1792
Jiewei Zeng, *National Univ. of Defense Tech.*
zhiqiang Long, *National Univ. of Defense Tech.*
zhiqiang Wang, *National Univ. of Defense Tech.*
- TueAIS-28** **Robust State Estimation for Switched Systems with Unstable Subsystems** 1798
YueE Wang, *Shaanxi Normal Univ.*
Di Wu, *Dalian Univ. of Tech.*
Caiyun Wu, *Shenyang Ligong Univ.*
Xiaoying Wang, *Tianjin Railway Technical and Vocational Coll.*
- TueAIS-29** **Asynchronous Control of Markov Jump Linear Systems with Incomplete Transition Descriptions** 1804
Hangfeng He, *Ningbo Univ.*
Xianwen Gao, *Northeastern Univ.*
Wenhai Qi, *Qufu Normal Univ.*
Shuting Liu, *Shenyang Inst. of Tech.*
- TueAIS-30** **The Synchronization of the Different Dimensional Rabinovich Systems using Passive Control and Sliding Mode Control Methods** 1810
Xue Chen, *Hubei Univ.*
Zhili Xiong, *Huanggang Normal Univ.*
Jing Luo, *Central China Normal Univ.*
Jun Zhang, *Hubei Univ.*
- TueAIS-31** **Absolute Stability for a Class of Switched Delay System with Stable and Unstable Subsystems** 1816
Juan Liu, *JiLin Univ.*
Qingdao Huang, *ShenYang Univ.*
- TueAIS-32** **Output Feedback Reliable Control for a Class of Uncertain Switched Fuzzy Systems with Control Delays** 1822
Le Zhang, *Shenyang Univ.*
Meiyu Jia, *Shenyang Univ.*
Hong Yang, *Shenyang Univ.*
Xiangping Su, *Shenyang Univ.*
Hao Zhu, *Shenyang Univ.*
Wenxin Jiang, *Shenyang Univ.*



- TueAIS-33** **Memory State Feedback and Robust Fault-tolerant Control for a Class of Time-delays Switched Fuzzy Systems with Nonlinear Perturbation** 1828
 Le Zhang, *Shenyang Univ.*
 Meiyu Jia, *Shenyang Univ.*
 Hong Yang, *Shenyang Univ.*
 Nuo Shi, *Shenyang Univ.*
 Siqing Qin, *Shenyang Univ.*
- TueAIS-34** **A Multi-objective Switching Control Strategy for Aero-engines Considering Sensor Dynamic** 1834
 Chao Chen, *AECC Shenyang Engine Research Inst.*
 Lijun Long, *Northeastern Univ.*
 Xiaoqi Mao, *AECC Shenyang Engine Research Inst.*
 Linghan Li, *AECC Shenyang Engine Research Inst.*
- TueAIS-35** **Opacity of Fuzzy Discrete Event Systems** 1840
 Weilin Deng, *Sun Yat-sen Univ.*
 Jingkai Yang, *Sun Yat-sen Univ. Yulin Normal Univ.*
 Cheng Jiang, *Sun Yat-sen Univ.*
 Daowen Qiu, *Sun Yat-sen Univ.*
- TueAIS-36** **Fault Diagnosis in Unknown Discrete Event Systems via Critical Tree** 1846
 Cheng Jiang, *Sun Yat-sen Univ.*
 Weilin Deng, *Sun Yat-sen Univ.*
 Daowen Qiu, *Sun Yat-sen Univ.*
- TueAIS-37** **Stabilization of Networked Control Systems via Switching and Impulsive Controllers** 1852
 Qing Zhang, *Wuhan Univ. of Science and Tech.*
 Fenglin Qu, *Wuhan Univ. of Science and Tech.*
- TueAIS-38** **Exponential Stability of Hybrid Stochastic Differential Systems with Uncertain Parameters** 1857
 Xingcheng Pu *Chongqing Univ. of Posts and Telecommunications.*
 Kunpeng Huang, *Chongqing Univ. of Posts and Telecommunications.*
- TueAIS-39** **Regulation Control for a Class of Stochastic Nonlinear Cascaded Systems** 1863
 Liqiang Yao, *Yantai Univ. Shandong Univ. of Science and Tech.*
 Weihai Zhang, *Shandong Univ. of Science and Tech.*
- TueAIS-40** **Modeling and Bullwhip Effects Control of Internet+ Supply Chain** 1869
 Yiwei Xiong, *China Jiliang Univ.*
 Jianru Wang, *China Jiliang Univ.*
 Yongwei Yang, *China Jiliang Univ.*
 Li Wei, *China Jiliang Univ.*
- TueAIS-41** **A High-Efficiency Stochastic Stability Evaluation Method for Aircraft Attitude Control System** 1873
 Yu Zhang, *Beijing Aerospace Automatic Control Inst.*
 Xiaodong Liu, *Beijing Aerospace Automatic Control Inst.*
 Huiping Zhang, *Beijing Aerospace Automatic Control Inst.*
- TueAIS-42** **Robust Filtering for Nonlinear Stochastic Delay Systems with Multiplicative Noise and Jumps** 1878
 Linlin Zhang, *Shandong Univ. of Science and Tech.*
 Ting Hou, *Shandong Univ. of Science and Tech.*



- TueAIS-43** **Linear Quadratic Pareto Game Problem: A Case of Deterministic Controller** 1884
Panpan Nie, *Shandong Univ.*
- TueAIS-44** **Analysis and Design of 3D Printing Equipment for Removable Site Buildings** 1889
Hongqian Lu, *Qilu Univ. of Tech.*
Qian Li, *Qilu Univ. of Tech.*
Renren Wang, *Qilu Univ. of Tech.*
Hongwei Chen, *Ji Nan Building Source Cement Products Co.LTD, P. R. China.*
- TueAIS-45** **On-board Rapid Planning for Booster Trajectory of Multistage Rocket Based on SQP and Surrogate Model** 1893
Yun Chen, *Huazhong Univ. of Science and Tech.*
Yongji Wang, *Huazhong Univ. of Science and Tech.*
Lei Liu, *Huazhong Univ. of Science and Tech.*
Zhongtao Chen, *Huazhong Univ. of Science and Tech.*
Ye Yang, *Beijing Aerospace Automatic Control Inst.*
- TueAIS-46** **Intelligent Space-Based Radio Telescope and Communication System** 1899
Yubo Wang, *Shanghai Aerospace Control Tech. Inst.*
Pengfei Wu, *Shanghai Aerospace Control Tech. Inst.*
Fei Han, *Shanghai Aerospace Control Tech. Inst.*
Ran Shi, *Shanghai Aerospace Control Tech. Inst.*
Fengdan Zu, *Shanghai Aerospace Control Tech. Inst.*
Jingyuan Chen, *Shanghai Aerospace Control Tech. Inst.*
- TueAIS-47** **Research on Improved Stochastic Robust Attitude Control Technology** 1906
Liantao Xu, *Huazhong Univ. of Science and Tech.*
Yongji Wang, *Huazhong Univ. of Science and Tech.*
Lei Liu, *Huazhong Univ. of Science and Tech.*
Zhongtao Cheng, *Huazhong Univ. of Science and Tech.*
Ye Yang, *Beijing Aerospace Automatic Control Inst.*
- TueAIS-48** **Adaptive Backstepping Control of Nonlinear Systems** 1912
Xia Chen, *Univ. of Jinan*
Qiang Zhang, *Univ. of Jinan*
Subing Liu, *Zhengzhou profession technical institute of electronic and information*
- TueAIS-49** **Model Predictive Control for Satellite Formation Keeping Based on Genetic Algorithm** 1918
Nuo Xu, *Nanjing Univ. of Posts and Telecommunications*
Jinxing Lin, *Nanjing Univ. of Posts and Telecommunications*
Yuhang Miao, *Nanjing Univ. of Posts and Telecommunications*
Zhifeng Gao, *Nanjing Univ. of Posts and Telecommunications*
- TueAIS-50** **Attitude Control of Quadrotor UAV Based on LADRC Method** 1924
Xuehui Liang, *Tianjin Univ. of Tech.*
Jingtao Li, *Tianjin Univ. of Tech.*
Fei Zhao, *Tianjin Univ. of Tech.*



- TueAIS-51** **Coverage Flight Path Planning for Multi-rotor UAV in Convex Polygon Area** 1930
Zhao Kang, *Army Engineering Univ. of PLA*
Haifeng Ling, *Army Engineering Univ. of PLA*
Tao Zhu, *Army Engineering Univ. of PLA*
Hongchuan Luo, *Army Engineering Univ. of PLA*
- TueAIS-52** **Finite-time Output Feedback Attitude Control for Double Tethered Satellite System in Deep Space** 1938
Mingmin Liu, *Shanghai Aerospace Control Tech. Inst.*
Junyu Yao, *Beihang Univ.*
Qinglei Hu, *Beihang Univ.*
- TueAIS-53** **Vision Based Autonomous Landing of the Quadrotor Using Fuzzy Logic Control** 1943
Shubao He, *Nankai Univ.*
Hongpeng Wang, *Nankai Univ.*
Shiyong Zhang, *Nankai Univ.*
- TueAIS-54** **A Simplified Path Tracking Design for Stratospheric Airship with Linear Active Disturbance Rejection Control Approach** 1949
Bin Han, *Xiamen Univ.*
Huiyu Jin, *Xiamen Univ.*
Weiyao Lan, *Xiamen Univ.*



Session	TueB02 : Fault Diagnosis and Self-healing Control (II)	
Venue	Room02	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Bin Jiang , <i>Nanjing Univ. of Aeronautics & Astronautics</i>	
Co-Chair	Wen Shi , <i>Nanjing Univ. of Aeronautics & Astronautics</i>	
10:20-10:40	TueB02-1	An Unsupervised Anomaly Detection Method Based on Density Peak Clustering for Rail Vehicle Door System 1954 <i>Wen Shi, Nanjing Univ. of Aeronautics & Astronautics</i> <i>Ningyun Lu, Nanjing Univ. of Aeronautics & Astronautics</i> <i>Bin Jiang, Nanjing Univ. of Aeronautics & Astronautics</i> <i>Youran Zhi, Nanjing Kangni Mechanical & Electrical Co., Ltd</i> <i>Zhixing Xu, Nanjing Kangni Mechanical & Electrical Co., Ltd</i>
10:40-11:00	TueB02-2	Supervisory Fault Tolerant Control for a Class of Parabolic PDEs System 1960 <i>Yacun Guan, Nanjing Univ. of Aeronautics and Astronautics</i> <i>Hao Yang, Nanjing Univ. of Aeronautics and Astronautics</i> <i>Bin Jiang, Nanjing Univ. of Aeronautics and Astronautics</i>
11:00-11:20	TueB02-3	Crack and Noncrack Damage Automatic Classification from Concrete Surface Images using Broad Network Architecture 1966 <i>Li Guo, Hubei Univ. for Nationalities</i> <i>Runze Li, Hubei Univ. for Nationalities</i> <i>Xing Shen, Nanjing Univ. of Aeronautics and Astronautics</i> <i>Bin Jiang, Nanjing Univ. of Aeronautics and Astronautics</i>
11:20-11:40	TueB02-4	Finite Frequency Fault Estimation Observer Design for Discrete-time Liner Parameter-varying Descriptor Systems 1972 <i>Yimin Liu, Wuhan Univ. of Science and Tech.</i> <i>Yayu Tian, Wuhan Univ. of Science and Tech.</i> <i>Jianliang Chen, Wuhan Univ. of Science and Tech.</i> <i>Xiaohui Chen, Wuhan Univ. of Science and Tech.</i>
11:40-12:00	TueB02-5	Application of Wavelet Threshold Denoising on Bearing Fault Diagnosis 1980 <i>Kai Wang, Xi'an Univ. Of Tech.</i> <i>Shaobo Dong, Xi'an Univ. Of Tech.</i> <i>Zilin Yu, Xi'an Univ. Of Tech.</i> <i>Shijie Shan, Xi'an Univ. Of Tech.</i>
12:00-12:20	TueB02-6	An Active Fault Tolerant Control for a Class of Time Delayed Singularly Perturbed Systems 1986 <i>Ping Mei, Nanjing Univ. of Information Science and Tech.</i> <i>Guoying Miao, Nanjing Univ. of Information Science and Tech.</i> <i>Yunping Liu, Nanjing Univ. of Information Science and Tech.</i> <i>Bochao Zheng, Nanjing Univ. of Information Science and Tech.</i> <i>Le Yan, Nanjing Univ. of Information Science and Tech.</i>



Session	TueB03 : Control and Management on Smart City (II) (Special Session)	
Venue	Room03	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Yahui Wang, Beijing Univ. of Civil Engineering and Architecture	
10:20-10:40	TueB03-1	Application and Design of Wireless Community Alarm System Based on nRF24L01 Module 1991 Gui Wu, <i>Jiangnan Univ.</i> Jun Tao, <i>Jiangnan Univ.</i> Xun Xu, <i>Jiangnan Univ.</i>
10:40-11:00	TueB03-2	Research on Detection and Recognition Algorithm of Road Traffic Signs 1996 Jiayuan Yu, <i>Beijing Univ. of Civil Engin. and Architecture</i> Huiling Liu, <i>Beijing Univ. of Civil Engin. and Architecture</i> Huayan Zhang, <i>Beijing Univ. of Civil Engin. and Architecture</i>
11:00-11:20	TueB03-3	Intelligent Building Fire Control System Based on Internet of Things 2002 Guangliang Pan, <i>Qilu Univ. of Tech.</i> Jun Li, <i>Qilu Univ. of Tech.</i> Tingting Sun, <i>Weihai Ocean Vocational College</i>
11:20-11:40	TueB03-4	Face Gesture Recognition based on Clustering Algorithm 2008 Jinyu Li, <i>Beijing Univ. of Architecture & Civil Engin.</i> De Zhang, <i>Beijing Univ. of Architecture & Civil Engin.</i>
11:40-12:00	TueB03-5	Parameter Identification of Gas Pressure Regulator Based on Recursive Least 2013 Ruocheng Liu, <i>Beijing Univ. of Architecture & Civil Engin.</i> Yahui Wang, <i>Beijing Univ. of Architecture & Civil Engin.</i>
12:00-12:20	TueB03-6	Gas Pressure Regulator Fault Diagnosis Model Based on Support Vector Machine 2019 Xiaoye Zhi, <i>Beijing GAS Ltd</i> Yahui Wang, <i>Beijing Univ. of Architecture & Civil Engin.</i> Yun An, <i>Beijing Univ. of Architecture & Civil Engin.</i>



Session	TueB04 : Fractional Calculus and Fractional-order Systems (II) (Special Session)	
Venue	Room04	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Dingyu Xue, <i>Northeastern Univ.</i>	
10:20-10:40	TueB04-1	The Classification of Functions of Unbounded Variation on Closed Intervals 2023 Yahui Zhu, <i>Nanjing Univ. of Scie. and Tech.</i> Wei Xiao, <i>Nanjing Univ. of Scie. and Tech.</i>
10:40-11:00	TueB04-2	Study on a Class of Robust Fractional Interference Observers 2031 Pan Song, <i>Beijing Univ. of Chemical Tech.</i> Dazi Li, <i>Beijing Univ. of Chemical Tech.</i> Qibing Jin, <i>Beijing Univ. of Chemical Tech.</i>
11:00-11:20	TueB04-3	A Weighted Split Bregman Iteration for Adaptive Fractional Order Total Variation Model 2036 Dazi Li, <i>Beijing Univ. of Chemical Tech.</i> Daozhong Jiang, <i>Beijing Univ. of Chemical Tech.</i> Qibing Jin, <i>Beijing Univ. of Chemical Tech.</i>
11:20-11:40	TueB04-4	The Solution Properties for a Four-component Degenerated Camassa-Holm Equation 2042 Wenjun Cui, <i>Zhengzhou Normal Univ.</i> Zhijuan Jia, <i>Zhengzhou Normal Univ.</i> Lipeng Wang, <i>Zhengzhou Normal Univ.</i> Yanfang Lei, <i>Zhengzhou Normal Univ.</i> Jialei Zhang, <i>Zhengzhou Normal Univ.</i> Yage Cheng, <i>Zhengzhou Normal Univ.</i>
11:40-12:00	TueB04-5	Hybrid Gray Model Based on Fractional order Gray Model and Verhulst model 2048 Yitong Liu, <i>Northeastern Univ.</i> Dingyu Xue, <i>Northeastern Univ.</i> Feng Pan, <i>Northeastern Univ.</i> Xue Hu, <i>Northeastern Univ.</i>
12:00-12:20	TueB04-6	An Unscented Kalman Filter for Continuous-time Nonlinear Fractional-order Systems with Correlated Noises 2054 Xiaojiao Chen, <i>Liaoning Univ.</i> Zhe Gao, <i>Liaoning Univ.</i> Fanghui Liu, <i>Liaoning Univ.</i> Xiaomin Huang, <i>Liaoning Univ.</i>



Session	TueB05 : Signal Processing and Information Fusion (II)	
Venue	Room05	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Yuxia Sheng , <i>Wuhan Univ. of Science and Techn.</i>	
Co-Chair	Yonghui Sun , <i>Hohai Univ.</i>	
10:20-10:40	TueB05-1	Ultra Short Term Probability Prediction of Wind Power based on Wavelet Decomposition and Long Short-term Memory Network 2061 Peng Wang, <i>Hohai Univ.</i> Yonghui Sun, <i>Hohai Univ.</i> Suwei Zhai, <i>Hohai Univ.</i> Xiaopeng Wu, <i>Hohai Univ.</i> Yan Zhou, <i>Hohai Univ.</i> Dongchen Hou, <i>Hohai Univ.</i>
10:40-11:00	TueB05-2	Reduced-Reference Image Quality Assessment for Single-Image Super-Resolution Based on Wavelet Domain 2067 Qian Hu, <i>Wuhan Univ. of Science and Techn.</i> Yuxia Sheng, <i>Wuhan Univ. of Science and Techn.</i> Liangkang Yang, <i>Wuhan Univ. of Science and Techn.</i> Qingmin Li, <i>Wuhan Univ. of Science and Techn.</i> Li Chai, <i>Wuhan Univ. of Science and Techn.</i>
11:00-11:20	TueB05-3	Research on Speed Measurement Algorithm Based on LMS Adaptive Filtering and d-Step Prediction 2072 Zengde Peng, <i>National Univ. of Defense Techn.</i> Zhiqiang Long, <i>National Univ. of Defense Techn.</i> Fengshan Dou, <i>National Univ. of Defense Techn.</i>
11:20-11:40	TueB05-4	Line-of-Sight Rate Estimation Based on Attitude Dynamics for Strap-down Seeker 2078 Yingchao Xiao, <i>Northwestern Polytechnical Univ.</i> Jun Zhou, <i>Northwestern Polytechnical Univ.</i> Bin Zhao, <i>Northwestern Polytechnical Univ.</i>
11:40-12:00	TueB05-5	Prediction for Gyros output based on EMD-SVR 2084 Shaowu Dai, <i>Naval Aviation Univ.</i> Qiangqiang Chen, <i>Naval Aviation Univ.</i> Hongde Dai, <i>Naval Aviation Univ.</i>
12:00-12:20	TueB05-6	Passenger Flow Monitoring of Elevator Video Based on Computer Vision 2089 Jiayu Zhao, <i>Zhejiang Univ.</i> Gangfeng Yan, <i>Zhejiang Univ.</i>



Session	TueB06 : Complex Networks and Systems (I)	
Venue	Room06	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Min Xiao, <i>Nanjing Univ. of Posts and Telecommunications.</i>	
Co-Chair	Hongchao Li, <i>Hebei Univ. of Tech.</i>	
10:20-10:40	TueB06-1	Research Progress on Joint Operation Modeling Based on Complex Networks 2095 Jichao Xing, <i>Information Engineering Univ.</i> Chuxiang Chen, <i>Information Engineering Univ.</i> Xuanru Chen, <i>Information Engineering Univ.</i>
10:40-11:00	TueB06-2	Improving Dynamics of the Single-Genetic Regulatory Networks with Delays via PD Controller 2100 Huaifei Wang, <i>Nanjing Univ. of Posts and Telecommunications.</i> Qiu Lu, <i>Nanjing Univ. of Posts and Telecommunications.</i> Min Xiao, <i>Nanjing Univ. of Posts and Telecommunications.</i> Guoping Jiang, <i>Nanjing Univ. of Posts and Telecommunications.</i>
11:00-11:20	TueB06-3	Event-triggered Stabilization for Discrete-time Markov Jump Systems with Time-varying Delay 2105 Xinzhou Liu, <i>Hebei Univ. of Tech.</i> Hongchao Li, <i>Hebei Univ. of Tech.</i> Peng Yang, <i>Hebei Univ. of Tech.</i> Jiao Liu, <i>Hebei Univ. of Tech.</i> Jie Wang, <i>Hebei Univ. of Tech.</i>
11:20-11:40	TueB06-4	Comprehensive Modeling and Model Correction of Circulating Cooling Water System Based on Hierarchical Superstructure 2112 Xiaochen Zhu, <i>Northeastern Univ.</i> Fuli Wang, <i>Northeastern Univ.</i> Dapeng Niu, <i>Northeastern Univ.</i> Mingxing Jia, <i>Northeastern Univ.</i>
11:40-12:00	TueB06-5	Ollivier-Ricci Curvature Approach to Cost-Effective Power Grid Congestion Management 2118 Edmond Jonckheere, <i>Univ. of Southern California.</i> Eugenio Grippo, <i>Univ. of Southern California.</i>
12:00-12:20	TueB06-6	Cluster Synchronization for Nonlinearly Time-varying Delayed Coupling Complex Networks with Non-identical Dynamic Systems via Aperiodically Intermittent Control 2124 Ke Cheng, <i>Shenzhen Univ.</i> Jianwen Feng, <i>Shenzhen Univ.</i> Jingyi Wang, <i>Shenzhen Univ.</i> Yi Zhao, <i>Shenzhen Univ.</i>



Session	TueB07 : Space Vehicle Control (II)	
Venue	Room07	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Jizhang Xiong , <i>Huazhong Univ.of Science and Tech.</i>	
Co-Chair	Xiaoran Chen , <i>Northwestern Polytechnical Univ.</i>	
10:20-10:40	TueB07-1	Simulation of Two-satellite Reconnaissance System with Intelligent Decision based on Object Detection 2130 Zhihuan Wu, <i>Space Engineering Univ.</i> Lei Li, <i>Space Engineering Univ.</i> Yuntao Li, <i>Space Engineering Univ.</i> Yongming Gao, <i>Space Engineering Univ.</i>
10:40-11:00	TueB07-2	Design of Lateral Flight Control Law for a Double Vertical Tail UAV 2136 Haoran Gui, <i>Northwestern Polytechnical Univ.</i> Xiaojun Xing, <i>Northwestern Polytechnical Univ.</i> Yingzhe Cai, <i>Northwestern Polytechnical Univ.</i> Xiaoran Chen, <i>Northwestern Polytechnical Univ.</i> Yaqing Zhao, <i>AVIC Optonics</i>
11:00-11:20	TueB07-3	A Control Strategy for Near-Ground Flying Aircrafts Based On Terrain Tracking 2142 Shouyan Li, <i>Science and Tech. on Complex and Intelligent Agent Cooperation Laboratory.</i> Yao Chen, <i>Science and Tech. on Complex and Intelligent Agent Cooperation Laboratory Harbin Inst. of Tech.</i> Yiyin Wei, <i>China Aerospace Science and Industry Corporation Harbin Inst. of Tech.</i> Guangren Duan, <i>Harbin Inst. of Tech.</i> Zidu Chen, <i>Science and Tech. on Complex and Intelligent Agent Cooperation Laboratory.</i>
11:20-11:40	TueB07-4	Stability of Dynamic Quantized UAV Airborne System With Packet Losses and Time-varying Delay 2148 Mu Li, <i>The First Research Inst.e of The Ministry of Public Security of RPC</i> Jian Sun, <i>Beijing Inst. of Tech.</i> Qing Wang, <i>The First Research Inst.e of The Ministry of Public Security of RPC</i>
11:40-12:00	TueB07-5	Adaptive attitude control for Supersonic Aircraft based on Backstepping and Neural Networks Controller 2154 Lilin Zhou, <i>Huazhong Univ. of Science and Tech.</i> Lei Liu, <i>Huazhong Univ. of Science and Tech.</i> Zhongtao Cheng, <i>Huazhong Univ. of Science and Tech.</i> Yongji Wang, <i>Huazhong Univ. of Science and Tech.</i> Ye Yang, <i>Beijing Aerospace Automatic Control Inst.</i>
12:00-12:20	TueB07-6	Design of LPV Control System Based on Intelligent Optimization 2160 Jizhang Xiong, <i>Huazhong Univ.of Science and Tech.</i> Zhongtao Cheng, <i>Huazhong Univ.of Science and Tech.</i> Jiashi Gao, <i>Huazhong Univ.of Science and Tech.</i> Yongji Wang, <i>Huazhong Univ.of Science and Tech.</i> Lei Liu, <i>Huazhong Univ.of Science and Tech.</i> Ye Yang, <i>Beijing Aerospace Automatic Control Inst.</i>



Session	TueB08 : Motion Control (II)	
Venue	Room08	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Jianghua Sui , <i>Dalian Ocean Univ.</i>	
Co-Chair	Yi Yang , <i>Nantong Univ.</i>	
10:20-10:40	TueB08-1	Neural Network Sliding Mode Path Following Control Based on the DVS Algorithm of Underactuated Ships 2166 <i>Jianghua Sui, Dalian Ocean Univ.</i> <i>He Zhang, Dalian Ocean Univ.</i>
10:40-11:00	TueB08-2	Design of Filter Rod Pushing System based on Fuzzy PID Control 2172 <i>Xiaolin Ren, Nantong Univ.</i> <i>Yi Yang, Nantong Univ.</i> <i>Xiao Wu, Nantong Univ.</i> <i>Long Gao, Nantong Univ.</i> <i>Tianxiang Mei, Nantong Univ.</i> <i>Jianbo Chen, Nantong Univ.</i> <i>Guihong Zhang, Nantong Univ.</i> <i>Jingya Yu, Nantong Univ.</i> <i>Xueqi Gui, Nantong Univ.</i>
11:00-11:20	TueB08-3	Multiple Marine Vessels Formation Control with Collision Avoidance 2178 <i>Quan Shi, Dalian Maritime Univ.</i> <i>Tieshan Li, Dalian Maritime Univ.</i> <i>Jingqi Li, Dalian Maritime Univ.</i> <i>Qihe Shan, Dalian Maritime Univ.</i> <i>Yuchi Cao, Dalian Maritime Univ.</i> <i>Xiaoqing Fan, Dalian Univ.of Technology</i> <i>Shengrui Tang, Dalian Maritime Univ.</i>
11:20-11:40	TueB08-4	Study on Electric Actuator Control System 2185 <i>Yong Zhou, Northwestern Polytechnical Univ.</i> <i>Yueming Wu, Northwestern Polytechnical Univ.</i> <i>Tianhao Yang, Northwestern Polytechnical Univ.</i>
11:40-12:00	TueB08-5	Simulation Research of PMSM Speed Regulating System based on Pan-Boolean Algebra PID Control 2191 <i>Jin Chen, Shanghai Second Polytechnic Univ.</i> <i>XinXin Cai, Engineering, Shanghai Maritime Univ.</i> <i>JiaBin Zhang, Shanghai Second Polytechnic Univ.</i> <i>Chong WANG, Engineering, Shanghai Maritime Univ.</i>
12:00-12:20	TueB08-6	Axial Switched Reluctance Wheel Motor Control System with the Direct Torque Based on Fractional Order Sliding Mode 2195 <i>Jie Gao, Civil Aviation Univ. of China</i> <i>Bing Gao, CAUC Simulator engineering tech. Co. Ltd.</i>



Session	TueB09 : Production Planning and Scheduling	
Venue	Room09	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Xiaojun Li , <i>Tianjin Research Inst. for Water Transport Engineering M.O.T.</i>	
Co-Chair	Xuelong Hu , <i>Nanjing Univ. of Posts and Telecommunications</i>	
10:20-10:40	TueB09-1	The Users-Demand-Oriented Stochastic Scheduling Method on Seawater Desalination System 2201 <i>Jiapei Yu, Zhejiang Univ Zhejiang Univ. Robotics Inst.</i> <i>Li Xu, Zhejiang Univ Zhejiang Univ. Robotics Inst.</i>
10:40-11:00	TueB09-2	Study on Port Efficiency in Different Storage Strategies of Container Yard 2207 <i>Xiaojun Li, Tianjin Research Inst. for Water Transport Engineering M.O.T.</i> <i>Ran Zhou, Tianjin Research Inst. for Water Transport Engineering M.O.T.</i> <i>Lequn Zhu, Tianjin Research Inst. for Water Transport Engineering M.O.T.</i> <i>Yisheng Wang, Tianjin Research Inst. for Water Transport Engineering M.O.T.</i> <i>Lin Zheng, Tianjin Research Inst. for Water Transport Engineering M.O.T.</i>
11:00-11:20	TueB09-3	Evaluation of the Run Rules Median Chart with Estimated Parameters 2213 <i>Teng Huang, Hohai Univ.</i> <i>Xuelong Hu, Nanjing Univ. of Posts and Telecommunications</i> <i>Anan Tang, Nanjing Univ. of Science and Tech.</i> <i>Min Zhao, Hohai Univ.</i>
11:20-11:40	TueB09-4	The Research of Sintering Ore Blending Based on Profit Maximization 2220 <i>Dingsen Zhang, Northeastern Univ.</i> <i>Xianwen Gao, Northeastern Univ.</i> <i>Mingshun Wang, Northeastern Univ.</i> <i>Yanjun Ye, Northeastern Univ.</i> <i>Junlin Tong, Northeastern Univ.</i>
11:40-12:00	TueB09-5	Automatic Selecting Strategy in Demand Response Considering User Desire and Load Characteristics 2226 <i>Dongchen Hou, Hohai Univ.</i> <i>Shuai Lv, Hohai Univ.</i> <i>Yongjie Zhong, Hohai Univ.</i> <i>Zhe Nan, State Grid Liaoning Electric Power Company Limited</i> <i>Bo Yang, State Grid Liaoning Electric Power Company Limited</i> <i>Yonghui Sun, Hohai Univ.</i>



Session	TueB10 : New Energy Management and Energy-saving Technologies on Control System (II)	
Venue	Room10	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Kai Qu, Xian Jiaotong Univ.	
Co-Chair	Hong Wang, Shanghai DianJi Univ. Univ. of Strathclyde	
10:20-10:40	TueB10-1	Analysis of Photovoltaic Carrying Capacity of Distribution Network Based on Voltage Sensitivity 2232 Xiaotong Zhang, <i>Power Science Research Institute of Liaoning electric power company</i> Xuke Cheng, <i>Power Science Research Institute of Liaoning electric power company</i> Yao Fu, <i>Power Science Research Institute of Liaoning electric power company</i> Jiabin Zhang, <i>Power Science Research Institute of Liaoning electric power company</i> Xiaowei Gong, <i>Power Science Research Institute of Liaoning electric power company</i> Qingsong Zhao, <i>Power Science Research Institute of Liaoning electric power company</i>
10:40-11:00	TueB10-2	Research on Active Control Method of Double-fed Wind Turbine 2238 Xiaolin Fu, <i>Shanghai DianJi Univ.</i> Hong Wang, <i>Shanghai DianJi Univ. Univ. of Strathclyde</i> Zhijie Wang, <i>Shanghai DianJi Univ.</i> Yongxin Li, <i>Shanghai DianJi Univ.</i>
11:00-11:20	TueB10-3	Short-term Wind Speed Prediction Based on CNN_GRU Model 2243 Huai Nana, <i>Beijing Inst. of Tech.</i> Lei Dong, <i>Beijing Inst. of Tech.</i> Lijie Wang, <i>Beijing Information Science and Techn. Univ.</i> Ying Hao, <i>Beijing Inst. of Tech.</i> Zhongjian Dai, <i>Beijing Inst. of Tech.</i> Bo Wang, <i>China Electric Power Research Inst.</i>
11:20-11:40	TueB10-4	A Novel Wind Power Time Series Modeling Method for Multiple Wind Farms Based on Copulas 2248 Kai Qu, <i>Xian Jiaotong Univ.</i> Gangquan Si, <i>Xian Jiaotong Univ.</i> Yuehui Huang, <i>China Electric Power Research Inst.</i> Chi Li, <i>China Electric Power Research Inst.</i>
11:40-12:00	TueB10-5	Self-protective Performance Analysis on DC-based DFIG System 2254 Shaomin Yan, <i>Qufu Normal Univ.</i> Shan Wang, <i>Qufu Normal Univ.</i> Yanfei Zhou, <i>Qufu Normal Univ.</i> Xiaoting Sun, <i>Qufu Normal Univ.</i> Guoxiu Jing, <i>Xi'an Jiaotong Univ.</i>
12:00-12:20	TueB10-6	Switch Controlled Charge Recovery Technique for Piezoelectric Fan 2259 Yumei Ren, <i>Northwestern Polytechnical Univ.</i> Wei Tang, <i>Northwestern Polytechnical Univ.</i> Yu Wang, <i>Northwestern Polytechnical Univ.</i> Lijian Wang, <i>Northwestern Polytechnical Univ.</i> Mao Cui, <i>Northwestern Polytechnical Univ.</i> Ze Li, <i>Northwestern Polytechnical Univ.</i>



Session	TueB11 : Image Processing and Robot Vision (IV)	
Venue	Room11	
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20	
Chair	Kai Cheng , <i>Wuhan Univ. of Tech.</i>	
Co-Chair	Hua Bao , <i>Anhui Univ.</i>	
10:20-10:40	TueB11-1	Research on Image Processing Technology Based on Analog Head Reading 2265 Kai Cheng, <i>Wuhan Univ. of Tech.</i> Ying Zhang, <i>National Univ. of Defense Tech.</i> HuaJun Zhang, <i>Wuhan Univ. of Tech.</i> Jing Huang, <i>Wuhan Univ. of Tech.</i>
10:40-11:00	TueB11-2	Reliable Tracking via Adaptive Correlation Filter and Local Patches 2270 Hua Bao, <i>Anhui Univ.</i> Yixiang Lu, <i>Anhui Univ.</i>
11:00-11:20	TueB11-3	Improved Rectangle Template Matching Based Feature Point Matching Algorithm 2275 Zhiyuan Liu, <i>Harbin Inst. of Tech.</i> Yanning Guo, <i>Harbin Inst. of Tech.</i> Zhen Feng, <i>Harbin Inst. of Tech.</i> Shaojiang Zhang, <i>Harbin Inst. of Tech.</i>
11:20-11:40	TueB11-4	Research on Detection and Recognition Algorithm of Optical Fiber for Surface Defects 2281 Song Gao, <i>Chengdu Univ. of Tech.</i> Xisi Dou, <i>Chengdu Univ. of Tech.</i> Lizhuo Bai, <i>Chengdu Univ. of Tech.</i> Xun Liu, <i>Chengdu Univ. of Tech.</i>
11:40-12:00	TueB11-5	A Novel Deep Learning Method for Red Lesions Detection Using Hybrid Feature 2287 Yao Yan, <i>Northeastern Univ.</i> Jun Gong, <i>Northeastern Univ.</i> Yangyang Liu, <i>Northeastern Univ.</i>
12:00-12:20	TueB11-6	A Visual Detection System Design of Multi-region Segmentation Based on Embedded System Framework 2293 Qian Zhang, <i>Guangdong Univ. of Education</i> Yilin Wu, <i>Guangdong Univ. of Education</i>



Session	TueBIS : Interactive Session
Venue	Room12
Date/Time	Tuesday, 4 June, 2019 / 10:20-12:20
TueBIS-01	Fast Design and Optimization of Low Energy Moon Return Orbit via STK/Astrogator 2299 Yue Liu, <i>DFH Satellite Co. Ltd.</i> Yingjing Qian, <i>Beijing Univ. of Tech.</i> Wuxing Jing, <i>Harbin Inst. of Tech.</i>
TueBIS-02	Synchronization for Two-dimensional Continuous Coupled Dynamical Networks with Delays 2304 Zhaoxia Duan, <i>Hohai Univ.</i> Jinna Fu, <i>Hohai Univ.</i> Zhixing Zhang, <i>Hohai Univ.</i> Yuming Tian, <i>Hohai Univ.</i> Xiao Yu, <i>Hohai Univ.</i>
TueBIS-03	Stabilization of the Cascaded ODE-Heat Equations with Time Delay in Boundary Observation 2310 Aye Aye Than, <i>Beijing Inst. of Tech.</i> JunMin Wang, <i>Beijing Inst. of Tech.</i> Weiwei Liu, <i>Beijing Inst. of Tech.</i>
TueBIS-04	Observer-Based H_∞ Fuzzy Control for 1-D Parabolic PDEs Using Point Measurements 2316 Shan Li, <i>Univ. of Science and Tech. Beijing</i> Wen Kang, <i>Univ. of Science and Tech. Beijing</i> Da-Wei Ding, <i>Univ. of Science and Tech. Beijing</i>
TueBIS-05	Observer-based H_∞ Controller Design for Discrete-time Nonlinear System with Mixed Time-delay 2322 Jinshuo Li, <i>Wuhan Univ. of Science and Tech.</i>
TueBIS-07	Event-triggered H_2 Output Feedback Control for Discrete Markov Jump Systems with Quantizations 2330 Tingting Zhang, <i>Zhejiang Sci-Tech Univ.</i> Jinfeng Gao, <i>Zhejiang Sci-Tech Univ.</i> Zhen Zhao, <i>Zhejiang Sci-Tech Univ.</i>
TueBIS-08	Fuzzy H_∞ Control for T-S Model-Based Nonlinear Systems with Randomly Occurred Packet Losses and Transmission Delays 2336 Baojun Wang, <i>Heilongjiang Univ.</i> Xiuying Li, <i>Heilongjiang Univ.</i>
TueBIS-09	Power Control with Quantized Feedback in Wireless Networks: Stability Analysis of Foschini-Miljanic Algorithm 2342 Na Li, <i>Beijing Univ. of Posts and Telecommunication</i> Rongrong Qian, <i>Beijing Univ. of Posts and Telecommunication</i>



- TueBIS-10** **Design and Verification of Integrated Ship Monitoring Network with High Reliability and Zero-time Self-healing** 2348
 Zhikun Liu, *System Engineering Research Inst.*
 Canzhi Gui, *System Engineering Research Inst.*
 Chao Ma, *System Engineering Research Inst.*
- TueBIS-11** **Design of New High Availability Ship Platform Monitoring Network Architecture** 2352
 Zhikun Liu, *System Engineering Research Inst.*
 Canzhi Gui, *System Engineering Research Inst.*
 Gang Zhao, *System Engineering Research Inst.*
- TueBIS-12** **Synchronization of Complex Networks with Memristive Neural Network Nodes via Impulsive Control** 2355
 Yuangui Bao, *Nanjing Univ. of Science and Technology*
 Yijun Zhang, *Nanjing Univ. of Science and Technology*
- TueBIS-13** **Research on Vehicle Anti-collision Algorithm Based on Fuzzy Control** 2361
 Dandan Wang, *Liaoning Univ. of Tech.*
 Chunbao Huo, *Liaoning Univ. of Tech.*
 Zhibo Tong, *State Grid Jinzhou Electric Power Supply Company*
 Yanan Yang, *Liaoning Univ. of Tech.*
 Yan Wang, *Beijing Inst. of Graphic Communication*
- TueBIS-14** **Stability Analysis for Variable Sampling Networked Control Systems with Data Packet Dropout and Partly Unknown Transition Probabilities** 2367
 Li Jie, *Nanjing Uni. of Posts and Telecommunications*
 Zhou Ying, *Nanjing Uni. of Posts and Telecommunications*
 Fan Chunxia, *Nanjing Uni. of Posts and Telecommunications*
- TueBIS-15** **Exponential Stability for Event-triggered Consensus Control of Heterogeneous Multi-Agent Systems** 2373
 Irfan Qaisar, *Nanjing Univ. of Science and Tech.*
 Chuan Zhou, *Nanjing Univ. of Science and Tech.*
 Zhengqing Shi, *Nanjing Univ. of Science and Tech.*
 Wei Xu, *North Vehicle Research Inst.*
 Peng Xu, *North Vehicle Research Inst.*
- TueBIS-16** **Formation Tracking Control for Multiple Surface Vessels Systems** 2379
 Jin Ma, *Systems Engineering Research Inst.*
 Jie Tao, *Systems Engineering Research Inst.*
 Yuan Yang, *Systems Engineering Research Inst.*
 Yaqi Deng, *Systems Engineering Research Inst.*
 Mingyang Zhao, *Systems Engineering Research Inst.*
 Zhaojun Hao, *Systems Engineering Research Inst.*
- TueBIS-17** **Event-triggered Control Strategy for Distributed UAVs with Time-delay and Disturbances** 2385
 Lili Wei, *Nanjing Univ. of Aeronautics and Astronautics*
 Mingsuo Li, *Luoyang Inst. of Electro-Optical Equipment of Avic*
 Mou Chen, *Nanjing Univ. of Aeronautics and Astronautics*



- TueBIS-18** **Finite-Time H_∞ Analysis and Application on the Design of Sliding Mode and Consensus Protocol of Multi-Agent Systems** 2391
 Han Zhuang, *Peking Univ.*
 Yuezun Lv, *Peking Univ.*
 Zhisheng Duan, *Peking Univ.*
- TueBIS-19** **Cooperative Search Strategy for UAVs with Frontal Image Sensor** 2397
 Minqiang Zhang, *Beijing Inst. of Tech.*
 Jianmei Song, *Beijing Inst. of Tech.*
 Chunyan Zhang, *Beijing Inst. of Tech.*
- TueBIS-20** **Weighted Group Consensus Analysis of Multi-agent Networks with Different Time Delays** 2401
 Jimin Yu, *Chongqing Univ. of Posts and Telecommunications*
 Dakang Teng, *Chongqing Univ. of Posts and Telecommunications*
- TueBIS-21** **Active Disturbance Rejection Time-varying Formation Control for Multi-agent Systems with Disturbances** 2407
 Le Wang, *Rocket Force Univ. of Engineering*
 Hui Yao, *Rocket Force Univ. of Engineering*
 Cheng Wang, *Rocket Force Univ. of Engineering*
 Jianxiang Xi, *Rocket Force Univ. of Engineering*
 Guangbin Liu, *Rocket Force Univ. of Engineering*
- TueBIS-22** **Synchronous Control Method of Multiple Under-actuated USVs based on Leader-Follower Mode** 2413
 Zefang Li, *Naval Univ. of Engineering*
 Zhong Liu, *Naval Univ. of Engineering*
 Dechao Zhou, *Naval Univ. of Engineering*
 Jianqiang Zhang, *Naval Univ. of Engineering*
- TueBIS-23** **Design of Distributed Time-Cooperative Guidance of Multiple Flight Vehicles with Un-Controllable Velocity** 2419
 Wen Li, *Beijing Aerospace Automatic Control Inst.*
 Liang Wang, *Beijing Aerospace Automatic Control Inst.*
 Huabin Li, *Beijing Inst. of Astronautical Systems Engineering*
- TueBIS-24** **Distributed Event-Triggered Control With Functional Observers for Linear Multi-Agent Systems Consensus** 2426
 Long Jian, *Univ. of Electronic Science and Tech. of China*
 Jiangping Hu, *Univ. of Electronic Science and Tech. of China*
 Jun Wang, *Southwest Minzu Univ.*
 Kaibo Shi, *Univ. of Electronic Science and Tech. of China*
- TueBIS-25** **Design of Intelligent Hive and Intelligent Bee Farm Based on Internet of Things Technology** 2432
 Jiangyi Zhang, *Shenyang Aerospace Univ.*
 Danhong Chen, *Shenyang Aerospace Univ.*
 Tianyu Yi, *Univ. of New South Wales*



- TueBIS-26** **Congestion Control of Wireless Sensor Networks based on $L_{1/2}$ Regularization** 2436
 Xin Jin, *Changchun Univ. of Science and Tech.*
 Yang Yang, *Changchun Univ. of Science and Tech.*
 Jinrong Ma, *Changchun Univ. of Science and Tech.*
 Zhenxing Li, *Changchun Univ. of Science and Tech.*
- TueBIS-27** **The NLOS Localization Algorithm Based on the Linear Regression Model of Hybrid Filter** 2442
 Ziyi Zhang, *Shenyang Jianzhu Univ.*
 Nan Hu, *Shenyang Jianzhu Univ.*
 Yinhong Guo, *Shenyang Jianzhu Univ.*
 Xin Yang, *Northeastern Univ.*
- TueBIS-28** **Distributed Access Control with Outsourced Computation in Fog Computing** 2446
 Qihua Wang, *Jining Medical Univ.*
 Gaoyan Lv, *Jining Medical Univ.*
 Xiuling Sun, *Jining Medical Univ.*
- TueBIS-29** **A 3D Adaptive Coverage Optimization Algorithm in Wireless Multi-media Sensor Networks** 2451
 Peng Ji, *Northeastern Univ.*
 Hao Chu, *Northeastern Univ.*
 Jianning Chi, *Northeastern Univ.*
 Jingqi Jiang, *Northeastern Univ.*
- TueBIS-30** **Design of Monitoring System Based on Vibrating Wire Sensor** 2457
 Hongli Liu, *Tianjin Univ. of Tech.*
 Zipeng Gao, *Tianjin Univ. of Tech.*
 Lei Shao, *Tianjin Univ. of Tech.*
 Ji Li, *Tianjin Univ. of Tech.*
- TueBIS-31** **Congestion Control of Wireless Sensor Networks using Discrete Sliding Mode Control** 2462
 Liang Zhao, *Central China Normal Univ.*
 Shaocheng Qu, *Central China Normal Univ.*
 Xin Huang, *Central China Normal Univ.*
 Jing Luo, *Central China Normal Univ.*
- TueBIS-32** **Design of Deformation Monitoring System of Arch Rib of Steel Arch Bridge Based on Inclination** 2467
 JinHui Ye, *Guangzhou City Annual Ticket Project Construction Co., Ltd.*
 MingDa Huang, *Guangzhou City Annual Ticket Project Construction Co., Ltd.*
 YuFeng Xu, *South China Univ. of Tech.*
 ZhaoFeng Li, *South China Univ. of Tech.*
- TueBIS-33** **Quadrilateral Weighted Localization for Wireless Sensor Networks Based on Bayesian Filtering** 2471
 Bo Yang, *Shanxi Univ.*
 Miaomiao Zhao, *Shanxi Univ.*
 Luyao Guo, *Shanxi Univ.*
 Ruijie Guo, *Shanxi Univ.*
 Tiantian Zhao, *Shanxi Univ.*



- TueBIS-34** **An Improved Jump Point Search Algorithm for Home Service Robot Path Planning** 2477
Li Ma, *North China Univ. of Tech.*
Xiang Gao, *North China Univ. of Tech.*
Yingxun Fu, *North China Univ. of Tech.*
Dongchao Ma, *North China Univ. of Tech.*
- TueBIS-35** **Research on Self-adaptive Fuzzy Speed Control Strategy of Brushless DC Motor for Stronger Robustness** 2483
Hong Zhao, *Dalian Maritime Univ.*
Yiting Wang, *Dalian Maritime Univ.*
Chen Guo, *Dalian Maritime Univ.*
Peng Luo, *Dalian Maritime Univ.*
Derun Zhao, *Dalian Maritime Univ.*
- TueBIS-36** **Robust Stabilization of Pendulum Spray Boom Suspension System of Plant Protection Machine** 2489
Shujiang Li, *Shenyang Univ. of Tech.*
Dongyou Wang, *Shenyang Univ. of Tech.*
Xiangdong Wang, *Shenyang Univ. of Tech.*
- TueBIS-38** **Quaternion-based Robust Sliding Mode Control for Spacecraft Attitude Tracking** 2495
Zhigang Yu, *Heilongjiang Univ.*
Guiying Li, *Heilongjiang Univ.*
- TueBIS-39** **H-infinity Stability Criteria for Memrisitive Neural Networks With Time Delays** 2501
Sanbo Ding, *Hebei Univ. of Tech.*
Jie Wang, *Hebei Univ. of Tech.*
- TueBIS-40** **H-infinity Functional Observer Design for One-Sided Lipschitz Nonlinear Systems with Time-Delay** 2508
Yujie Zhao, *Zhejiang Normal Univ.*
Cong Lin, *Zhejiang Normal Univ.*
Xiushan Cai, *Zhejiang Normal Univ.*
- TueBIS-41** **Application of Intelligent Control in Raw Meal Quality Control** 2514
Yupeng Pan, *Univ. of Jinan*
Hongliang Yu, *Univ. of Jinan*
Ping Jiang, *Univ. of Jinan*
- TueBIS-42** **Path Tracking Control of Mobile Robot Based on the Motion Compensation Method** 2520
Yu Meng, *Univ. of Science and Tech. Beijing.*
Xin Gan, *Univ. of Science and Tech. Beijing.*
Guoxing Bai, *Univ. of Science and Tech. Beijing.*
- TueBIS-43** **Harmonic Analysis and Suppression Method of Train Network Side Based on Multiplex Control Strategy** 2526
Jiangang Cao, *Northeastern Univ.*
Jian Feng, *Northeastern Univ.*



- TueBIS-44** **Decoupling Predictive Control of Reheat Steam Temperature of USC Double Reheat Unit** 2530
 Rongqiang Su, *NR Electric Co.,Ltd*
 Zhiliang Shi, *NR Electric Co.,Ltd*
 Kai Xie, *NR Electric Co.,Ltd*
- TueBIS-45** **Optimal Control of Heating Process with Weather Forecast Compensation** 2535
 Shi Li, *Univ. of Jinan*
 Wenbin Pan, *Diehl Metering (Jinan) Co., Ltd.*
 Wenxue Xu, *Diehl Metering (Jinan) Co., Ltd.*
 Yu Qin, *Diehl Metering (Jinan) Co., Ltd.*
 Wenxiao Xu, *Diehl Metering (Jinan) Co., Ltd.*
 Chenxi Ju, *Univ. of Jinan*
- TueBIS-46** **Performance Evaluation of Dual-Motor Driving System for Pipe Belt Conveyor Based on Current Tracking Master-Slave Control** 2540
 Dongming Xiao, *Hunan Univ. of Science and Tech.*
 Huiya Shan, *Hunan Univ. of Science and Tech.*
- TueBIS-47** **Research of Fuzzy Control System Simulation Based on Internet** 2546
 Tongying Li, *Nanjing Univ. of Posts and Telecommunications*
 Hongbo Zhu, *Nanjing Univ. of Posts and Telecommunications*
- TueBIS-48** **Research of Fuzzy Logic Control Simulation of Ethylene Production** 2550
 Tongying Li, *Nanjing Univ. of Posts and Telecommunications*
 Hongbo Zhu, *Nanjing Univ. of Posts and Telecommunications*
- TueBIS-49** **A Fuzzy Time Series Model Study Based on Principle Component Analysis** 2554
 Chen Gang, *Dalian Maritime Univ.*
 Dong Chun, *Dalian Maritime Univ.*
- TueBIS-50** **Relaxed Fuzzy Model Predictive Control of Discrete-Time** 2560
 Yuchen Xu, *Nanjing Univ. of Posts and Telecommunications*
 Xiangpeng Xie, *Nanjing Univ. of Posts and Telecommunications*
 Dong Yue, *Nanjing Univ. of Posts and Telecommunications*
- TueBIS-51** **Control Synthesis of Markovian Jump Nonlinear System via A New Fuzzy Switching Controller** 2566
 Dongting Wang, *Nanjing Univ. of Posts and Telecommunications*
 Xiangpeng Xie, *Nanjing Univ. of Posts and Telecommunications*
 JuH.Park, *Yeungnam Univ.*
- TueBIS-52** **H-infinity Filtering for Nonlinear Networked Control Systems with Mixed Random Delays and Packet Dropouts** 2572
 Zhongda Lu, *Qiqihar Univ.*
 Junxiao Lu, *Qiqihar Univ.*
 Guangtao Ran, *Qiqihar Univ.*
 Fengxia Xu, *Qiqihar Univ.*



- TueBIS-53** **Fuzzy Proportional Resonant Control of Vibration Testing System with Model Uncertainties** 2578
Ping He, *Harbin Inst. of Tech., Harbin*
Shilun Li, *Harbin Inst. of Tech., Harbin*
Rui Cui, *Harbin Inst. of Tech., Harbin*
Luya He, *Harbin Inst. of Tech., Harbin*
Houhao Wang, *Shanghai Aerospace Control Techn. Inst.*
Hui Chen, *Shanghai Aerospace Control Techn. Inst.*
- TueBIS-54** **Identification Method of Cement Clinker Composition Change Based on Locality Preserving Projections and K-medoids** 2584
Shizeng Lu, *Univ. of Jinan*
Hongliang Yu, *Univ. of Jinan*
Xiaohong Wang, *Univ. of Jinan*
Fanjun Li, *Univ. of Jinan*
Peirui Zhao, *Univ. of Jinan*
Qiangya Li, *Univ. of Jinan*
- TueBIS-55** **Reentry Trajectory Optimization based on Deep Reinforcement Learning** 2588
Jiashi Gao, *Huazhong Univ. of Science & Tech.*
Xinming Shi, *Huazhong Univ. of Science & Tech.*
Zhongtao Cheng, *Huazhong Univ. of Science & Tech.*
Jizhang Xiong, *Huazhong Univ. of Science & Tech.*
Lei Liu, *Huazhong Univ. of Science & Tech.*
Yongji Wang, *Huazhong Univ. of Science & Tech.*
Ye Yang, *Beijing Aerospace Automatic Control Inst.*



Session	TueC01 : Intelligent Control, Computation and Optimization (III)	
Venue	Room01	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Wei Li, <i>Northeastern Univ.</i>	
Co-Chair	Zihao Wang, <i>Nanjing Univ. of Science and Tech.</i>	
13:30-13:50	TueC01-1	Multi-objective Optimization Based Self Tuning Robot Manipulator Controller 2593 Qiang Liu, <i>NingBo Univ.</i> Xuhua Shi, <i>NingBo Univ.</i> Ting Lan, <i>NingBo Univ.</i> Xiaoxia Chen, <i>NingBo Univ.</i> Jianpei Zhuang, <i>NingBo Univ.</i>
13:50-14:10	TueC01-2	Reagent Dosage Intelligent Optimal Setting for Iron Ore Flotation Process based on CBR 2599 Bojian Liu, <i>Northeastern Univ.</i> Xianwen Gao, <i>Northeastern Univ.</i> Xiuli Cui, <i>Northeastern Univ.</i>
14:10-14:30	TueC01-3	An Improved Gravitational Search Algorithm for Optimization Problems 2605 Wei Li, <i>Xi'an University of Tech.</i>
14:30-14:50	TueC01-4	The Forecasting Model of Wheelset Size Based on PSO-SVM 2609 Zihao Wang, <i>Nanjing Univ. of Science and Tech.</i> Lan Liu, <i>Guangzhou Metro Group Co.</i> Zongyi Xing, <i>Nanjing Univ. of Science and Tech.</i> Guangtao Cong, <i>Nanjing Univ. of Science and Tech.</i>
14:50-15:10	TueC01-5	Global Path Planning Algorithm for USV Based on IPSO-SA 2614 Jiao Dong, <i>Naval Univ. of Engineering</i> Xiao Chen, <i>Military Academy of Sciences</i> Jianqiang Zhang, <i>Naval Univ. of Engineering</i> Zefang Li, <i>Naval Univ. of Engineering</i>
15:10-15:30	TueC01-6	Coupling Matrix Extraction of Coaxial Cavity Filter Using Chaotic Ant Colony Algorithm 2620 Shengbiao Wu, <i>China University of Geoscience</i> Kaifeng Huang, <i>Nanchang Key Laboratory of Applied Research of DME photoelectric Engineering</i> Chunlin Li, <i>Nanchang Key Laboratory of Applied Research of DME photoelectric Engineering</i> Fenglian Yuan, <i>Nanchang Key Laboratory of Applied Research of DME photoelectric Engineering</i>



Session	TueC02 : Fault Diagnosis and Self-healing Control (III)	
Venue	Room02	
Date/Time	Tuesday, 4 June, 2019 /	
Chair	Hongxia Li , <i>North Automatic Control Tech. Institute</i>	
Co-Chair	Hao Yang , <i>Nanjing Univ. of Aeronautics and Astronautics</i>	
13:30-13:50	TueC02-1	Fault Tolerant Control for Coupled Hyperbolic Linear Systems and Its Application 2624 Yongyuan Xu, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Hao Yang, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Bin Jiang, <i>Nanjing Univ. of Aeronautics and Astronautics</i>
15:50-14:10	TueC02-2	An Ensemble Hybrid Model with Outlier Detection for Prediction of Lithium-ion Battery Remaining Useful Life 2630 Zheng Li, <i>Huazhong Univ. of Science and Tech.</i> Huajing Fang, <i>Huazhong Univ. of Science and Tech.</i> Yan Yan, <i>Huazhong Univ. of Science and Tech.</i>
14:10-14:30	TueC02-3	Deep Forest-based Fault Diagnosis for Railway Turnout Systems in The Case of Limited Fault Data 2636 Zhizhe Zhang, <i>Beijing Jiaotong Univ.</i> Bo Li, <i>China Railway Electrification Bureau Intelligent Transportation Technology Branch</i> Tianhua Xu, <i>Beijing Jiaotong Univ.</i> Cong Chen, <i>Beijing Jiaotong Univ.</i> Feng Wang, <i>Beijing Jiaotong Univ.</i>
14:30-14:50	TueC02-4	Fault Estimation in Finite Frequency Domain for Uncertain Networked Control Systems with Sensor Fault 2642 Hongxia Li, <i>North Automatic Control Tech. Institute</i> Weiwei Du, <i>North Automatic Control Tech. Institute</i> Haixia Li, <i>North Automatic Control Tech. Institute</i> Peng Tan, <i>North Automatic Control Tech. Institute</i> Haiyan Chang, <i>North Automatic Control Tech. Institute</i>
14:50-15:10	TueC02-5	A Process Monitoring Method Based on Robust Collective Non-negative Matrix Factorization 2650 Xiaogang Wang, <i>Northeastern Univ.</i> Jianwei Zhao, <i>Northeastern Univ.</i> Xiaoran Guo, <i>Northeastern Univ.</i>
15:10-15:30	TueC02-6	A Fault Monitoring Method Based on Transfer Subspace Learning 2656 Xiaogang Wang, <i>Northeastern Univ.</i> Jianwei Zhao, <i>Northeastern Univ.</i> Dehui Li, <i>Northeastern Univ.</i>



Session	TueC03 : Fault Diagnosis and Self-healing Control (VIII)	
Venue	Room03	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Dazhong Ma, <i>Northeastern Univ.</i>	
Co-Chair	Jingqi Fu, <i>Shanghai Univ.</i>	
13:30-13:50	TueC03-1	Detection and Location for In-pipe Detector Block Accident Based on Image Edge Processing 2662 Jun Zheng, <i>Northeastern Univ.</i> Dazhong Ma, <i>Northeastern Univ.</i> Xuguang Hu, <i>Northeastern Univ.</i>
13:50-14:10	TueC03-2	Fault Diagnosis for a Class of Sampled-data Systems via Deterministic Learning 2668 Shaoyan Wang, <i>Guangdong Univ. of Tech</i> Tianrui Chen, <i>Guangdong Univ. of Tech</i> Cong Wang, <i>South China Univ. of Tech.</i>
14:10-14:30	TueC03-3	Research on Fuzzing Test Case Generation Method Based on Gaussian Mixture Model 2674 Jingqi Fu, <i>Shanghai Univ.</i> Yifan Cao, <i>Shanghai Univ.</i> Mubai Yi, <i>Shanghai Univ.</i>
14:30-14:50	TueC03-4	Leakage Detection in Pipelines Based on Synchrosqueezed Wavelet Transform 2679 Zhigang Chen, <i>Beijing Univ. of Civil Engineering and Architecture</i> Xu Xu, <i>Beijing Univ. of Civil Engineering and Architecture</i> Xiaolei Du, <i>Beijing Univ. of Civil Engineering and Architecture</i> Junling Zhang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Nan Zhang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
14:50-15:10	TueC03-5	Wastewater Treatment Sensor Fault Detection Using RBF Neural Network with Set Membership Estimation 2685 Binbin Chi, <i>Beijing Univ. of Tech.</i> Longhang Guo, <i>Beijing Univ. of Tech.</i>
15:10-15:30	TueC03-6	Robust Adaptive Trajectory Tracking Control of Mobile Robots with Actuator Faults 2691 Xiaozheng Jin, <i>HeFei Univ. of Tech.</i> Jizhou Yu, <i>HeFei Univ. of Tech.</i> Li Zhou, <i>China National Institute of Standardization</i> Yongyue Zheng, <i>Liaoning Institute of standardization</i>



Session	TueC04 : Pattern Recognition and Deep Learning (II)	
Venue	Room04	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Tianzhi Wang , <i>Shanghaijiaotong Univ.</i>	
Co-Chair	Shurong Li , <i>Beijing Univ. of Posts and Telecommunications</i>	
13:30-13:50	TueC04-1	A Neural Conversational Model Using MMI-WMD Decoder Based on the Seq2Seq with Attention Mechanism 2696 Tianzhi Wang, <i>Shanghaijiaotong Univ.</i> Meng Cai, <i>Luoyang Inst. of Electro-optical Equipment</i> Jianxun Li, <i>Shanghaijiaotong Univ.</i>
13:50-14:10	TueC04-2	An Improved Model for Image Selective Segmentation Based on Local and Global Statistics 2701 Shurong Li, <i>Beijing Univ. of Posts and Telecommunications</i> Yu Meng, <i>China Univ. of Petroleum (East China)</i> Minyi Zhang, <i>China Univ. of Petroleum (East China)</i>
14:10-14:30	TueC04-3	Hippocampus Segmentation in MR image based on Atlas Registration and Broad Learning 2707 Yue Liu, <i>Northeastern Univ.</i> Chuyuan Wang, <i>Northeastern Univ.</i> Ying Wei, <i>Northeastern Univ. Key Laboratory of Medical Imaging Calculation of the Ministry of Education</i>
14:30-14:50	TueC04-4	An Improved Adaptive Weighted Gaussian Nearest Neighbor Classification Method 2712 Yanna Yue, <i>Zhengzhou Univ.</i> Jinyuan Shen, <i>Zhengzhou Univ.</i> Runjie Liu, <i>Zhengzhou Univ.</i>
14:50-15:10	TueC04-5	Unmanned Boat Target Detection Based on Improved SSD 2716 Yang Yin, <i>Naval Engineering Univ.</i> Fan Gui, <i>Naval Engineering Univ.</i> Shuai Chen, <i>Naval Engineering Univ.</i>
15:10-15:30	TueC04-6	Abnormal Gait Recognition Based on RBF Neural Network 2722 Xiangyu Chen, <i>Univ. of Ji'nan</i> Jinliang Liu, <i>Univ. of Ji'nan</i> Xiuli Sun, <i>Univ. of Ji'nan</i>



Session	TueC05 : Signal Processing and Information Fusion (III)	
Venue	Room05	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Dan Luo , <i>Beijing Information Science and Techn. Univ.</i>	
Co-Chair	Shubin Si , <i>Harbin Engineering Univ.</i>	
13:30-13:50	TueC05-1	Distributed Receding Horizon Estimation in Sensor Networks with Scalar Packet Losses 2727 Chaochao Li, <i>Univ. of Jinan</i> Chunyan Han, <i>Univ. of Jinan</i> Fang He, <i>Univ. of Jinan</i>
13:50-14:10	TueC05-2	Design of Attitude and Heading Reference System Based on DSP and STM32 2733 Dan Luo, <i>Beijing Information Science and Techn. Univ.</i> Guowei Gao, <i>Beijing Information Science and Techn. Univ.</i>
14:10-14:30	TueC05-3	Vessel Segmentation using Principal Component based Threshold Algorithm 2739 Ting Liu, <i>Dalian Maritime Univ.</i> Zirun He, <i>Dalian Maritime Univ.</i>
14:30-14:50	TueC05-4	A New Underwater All Source Positioning and Navigation(ASPN) Algorithm Based on Factor Graph 2742 Shubin Si, <i>Harbin Engineering Univ.</i> Yonggang Zhang, <i>Harbin Engineering Univ.</i> Li Luo, <i>Harbin Engineering Univ.</i> Ning Li, <i>Harbin Engineering Univ.</i>
14:50-15:10	TueC05-5	Research on Landing Environment System of Carrier-Based Aircraft 2747 Xiaodong Su, <i>Harbin Univ. of Commerce</i> Hui Li, <i>Harbin Univ. of Commerce</i> Yuru Zhang, <i>Harbin Univ. of Commerce</i> Haitao Jiang, <i>Harbin Univ. of Commerce</i> Ming Zhao, <i>Harbin Univ. of Commerce</i>
15:10-15:30	TueC05-6	Research on Gear Signal Denoising Method Based on CEEMD and SSA 2751 Liyang Jiang, <i>Shenyang Aerospace Univ.</i> Shaoyou Wang, <i>Shenyang Aerospace Univ.</i> Jianguo Cui, <i>Shenyang Aerospace Univ.</i> Mingyue Yu, <i>Shenyang Aerospace Univ.</i> Jinglin Wang, <i>Aviation Key Laboratory of Science and Technology on Fault Diagnosis and Health Management</i>



Session	TueC06 : Complex Networks and Systems (II)	
Venue	Room06	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Jie Lian , <i>Dalian Univ. of Tech.</i>	
Co-Chair	Lianghao Ji , <i>Chongqing Univ. of Posts and Telecommunications.</i>	
13:30-13:50	TueC06-1	Distributed Event-triggered Synchronization of General Networked Systems with Directed Topology 2757 Jiaming Xie, <i>Shenzhen Univ.</i> Jianwen Feng, <i>Shenzhen Univ.</i> Yi Zhao, <i>Shenzhen Univ.</i>
13:50-14:10	TueC06-2	Improve the Cooperative Level of Population via Individual Recognition Model 2763 Hui Zhang, <i>Dalian Univ. of Tech.</i> Jie Lian, <i>Dalian Univ. of Tech.</i> Hongwei Wang, <i>Dalian Univ. of Tech.</i>
14:10-14:30	TueC06-3	Group Consensus for Discrete-time Heterogeneous Multi-agent Systems in the Competition Networks with Input Time Delays 2769 Lianghao Ji, <i>Chongqing Univ. of Posts and Telecommunications.</i> Yue Zhang, <i>Chongqing Univ. of Posts and Telecommunications.</i> Yiliu Jiang, <i>Chongqing Univ. of Posts and Telecommunications.</i> Yang Zou, <i>Chongqing Univ. of Posts and Telecommunications.</i>
14:30-14:50	TueC06-4	Connotation Analysis and Simulation Research of PQ Decomposition Method 2775 Youjie Ma, <i>Tianjin Univ. of Tech.</i> Luyong Yang, <i>Tianjin Univ. of Tech.</i> Xuesong Zhou, <i>Tianjin Univ. of Tech.</i>
14:50-15:10	TueC06-5	Finite-time Synchronization of Complex Dynamic Networks with Nonlinear Uncertainty and Output Coupling 2781 Changmin Hu, <i>Harbin Univ. of Scie. and Tech.</i> Yujing Shi, <i>Harbin Univ. of Scie. and Tech.</i>
15:10-15:30	TueC06-6	Distributed Filtering with Communication Constraints, Randomly Occurring Nonlinearities and Correlated Noises Over Sensor Networks 2787 Tianqi Liu, <i>Harbin Univ. of Scie. and Tech.</i> Dongyan Chen, <i>Harbin Univ. of Scie. and Tech.</i>



Session	TueC07 : Space Vehicle Control (III)	
Venue	Room07	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Xiaoxi Cui, <i>Norinco Group Inst. of Navigation and Control Tech.</i>	
Co-Chair	Junfang Fan, <i>Beijing Information Science & Tech. Univ.</i>	
13:30-13:50	TueC07-1	Initial Alignment of Shoulder-launched Miniature Munitions 2793 Zhijing Zhang, <i>Beijing Key Laboratory of High Dynamic Navigation Tech. Beijing Information Science & Tech. Univ.</i> Junfang Fan, <i>Beijing Key Laboratory of High Dynamic Navigation Tech. Beijing Information Science & Tech. Univ.</i>
13:50-14:10	TueC07-2	Fast Convergent Lyapunov Vector Field Guidance for Standoff Target Tracking 2799 Shun Sun, <i>Naval Aviation Univ.</i> Kai Dong, <i>Naval Aviation Univ.</i> Jun Liu, <i>Naval Aviation Univ.</i> Chen Guo, <i>Naval Aviation Univ.</i>
14:10-14:30	TueC07-3	Autonomous Decision-making for Satellites Surveillance 2805 Kuai Yu, <i>China Academy of Space Tech.</i> Fengjing Liu, <i>China Academy of Space Tech.</i> Yunhe Liu, <i>China Academy of Space Tech.</i> Guo Li, <i>China Academy of Space Tech.</i>
14:30-14:50	TueC07-4	Attack-of-Angle Convergence Control Design and Decision Method Analysis for Surface-to-Ground Missiles 2811 Xiaoxi Cui, <i>Norinco Group Inst. of Navigation and Control Tech.</i> Yongbo Xuan, <i>Beijing Aeronautical Tech. Research Center</i> Kainan Sheng, <i>Beijing JingHang Research Inst. of Computing and Communication</i> Xieyu Xu, <i>Norinco Group Inst. of Navigation and Control Tech.</i> zhongyu Zhang, <i>Norinco Group Inst. of Navigation and Control Tech.</i>
14:50-15:10	TueC07-5	Trajectory Planning for De-tumbling Space Debris Using Tethers Based on Radau Pseudospectral Method 2816 Zhiping Zhang, <i>Harbin Inst. of Tech.</i> Zhiwei Yu, <i>Harbin Inst. of Tech.</i> Ming Zeng, <i>Harbin Inst. of Tech.</i> Shunli Li, <i>Harbin Inst. of Tech.</i>
15:10-15:30	TueC07-6	Finite-time Fault-tolerant Attitude-tracking Control for Rigid Spacecraft 2822 Shihong Gao, <i>Northeastern Univ. Shanxi Univ.</i> Yuanwei Jin, <i>Northeastern Univ.</i>



Session	TueC08 : Adaptive Control and Learning Control (II)	
Venue	Room08	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Huijin Fan , <i>Huazhong Univ. of Science and Tech.</i>	
Co-Chair	Wei Tong , <i>North China Univ. of Tech.</i>	
13:30-13:50	TueC08-1	An Adaptive Compensation Circuitry Design for a Class of Disturbed Systems 2828 Xiaozheng Jin, <i>HeFei Univ. of Tech.</i> Chengwei Yang, <i>HeFei Univ. of Tech.</i> Shaofan Wang, <i>HeFei Univ. of Tech.</i> Jinyu Tang, <i>HeFei Univ. of Tech.</i>
13:50-14:10	TueC08-2	Adaptive Congestion Control for Uncertain Networks with Unmatched Nonlinearities 2834 Cunwu Han, <i>North China Univ. of Tech.</i> Wei Tong, <i>North China Univ. of Tech.</i> Mengqi Li, <i>North China Univ. of Tech.</i> Lei Liu, <i>North China Univ. of Tech.</i> Dehui Sun, <i>North China Univ. of Tech.</i>
14:10-14:30	TueC08-3	A Learning Control Algorithm for Networked Stochastic Systems Under Fading Channels 2839 GangGui Qu, <i>Beijing Univ. of Chemical Tech.</i> Dong Shen, <i>Beijing Univ. of Chemical Tech.</i>
14:30-14:50	TueC08-4	Adaptive Fault-tolerant Control of Six-rotor Unmanned Aerial Vehicles 2845 Wei Guan, <i>Shenyang Aerospace Univ.</i> Shanwen Ding, <i>Shenyang Aerospace Univ.</i>
14:50-15:10	TueC08-5	A Sliding-mode Iterative Learning Control for a Nonlinear Discrete-time System via a Data-driven Design Method 2850 Ronghu Chi, <i>Qingdao Univ. of Science and Tech.</i> Rongrong Wang, <i>Qingdao Univ. of Science and Tech.</i> Yangchun Wei, <i>Qingdao Univ. of Science and Tech.</i>
15:10-15:30	TueC08-6	Event-triggered Adaptive Attitude Tracking Control of a Quadrotor UAV 2855 Weiquan Zeng, <i>Huazhong Univ. of Science and Tech.</i> Huijin Fan, <i>Huazhong Univ. of Science and Tech.</i> Wei Wang, <i>Beihang Univ.</i>



Session	TueC09 : Intelligent Manufacturing and Industrial Intelligence (I)	
Venue	Room09	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Qian Xui , <i>Beijing Aerospace Automatic Control Inst.</i>	
Co-Chair	Min Zheng , <i>Mechatronics Engineering and Automation College of Shanghai Univ. Shanghai Key Laboratory of Power Plant Automation Tech.</i>	
13:30-13:50	TueC09-1	Industrial Reactor Material Separation based on Image Recognition 2861 <i>Ze Wu, Hangzhou Dianzi Univ.</i> <i>Jiuwen Cao, Hangzhou Dianzi Univ.</i> <i>Jianzhong Wang, Hangzhou Dianzi Univ.</i>
13:50-14:10	TueC09-2	Industrial APP Design for Data Dynamic Monitoring of Strip Production Process 2865 <i>Yinghua Han, Northeastern Univ. at Qinhuangdao.</i> <i>Deshui Yu, Northeastern Univ. at Qinhuangdao.</i> <i>Fengquan Han, Northeastern Univ. at Qinhuangdao.</i> <i>Yin Liu, Northeastern Univ. at Qinhuangdao.</i> <i>Qiang Zhao, Northeastern Univ. at Qinhuangdao.</i>
14:10-14:30	TueC09-3	The Design of Intelligent Experimental System for Hardware-in-the-loop Simulation of Aircraft Control System 2870 <i>Qian Xu, Beijing Aerospace Automatic Control Inst.</i> <i>Gang Hu, Beijing Aerospace Automatic Control Inst.</i> <i>Kai Yang, Beijing Aerospace Automatic Control Inst.</i> <i>Ya Ban, Beijing Aerospace Automatic Control Inst.</i> <i>Cheng Wang, Beijing Aerospace Automatic Control Inst.</i> <i>Yao Zhao, Beijing Aerospace Automatic Control Inst.</i> <i>Deqing Kong, Beijing Aerospace Automatic Control Inst.</i>
14:30-14:50	TueC09-4	An Intelligent Prediction Strategy of the Maximum Thinning Rate of Cylindrical Part with Flange during Sheet Metal Drawing Process 2876 <i>Hao Li, Univ. of Jinan</i> <i>Qiang Wang, Univ. of Jinan</i> <i>Fang He, Univ. of Jinan</i> <i>Yayun Zheng, Univ. of Jinan Univ.</i>
14:50-15:10	TueC09-5	A Method for Post-processing of the Robotic Fibre Placement 2882 <i>Lina Li, Taiyuan Univ. of Tech.</i> <i>De Xu, Inst of Automation, Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i> <i>Linkai Niu, Taiyuan Univ. of Tech.</i> <i>Xiaoyan Xiong, Taiyuan Univ. of Tech.</i>
15:10-15:30	TueC09-6	A Review of Active Magnetic Bearing Control Technology 2888 <i>Tao Huang, Mechatronics Engineering and Automation College of Shanghai Univ.</i> <i>Min Zheng, Mechatronics Engineering and Automation College of Shanghai Univ.</i> <i>Guangfeng Zhang, Mechatronics Engineering and Automation College of Shanghai Univ.</i>



Session	TueC10 : New Energy Management and Energy-saving Technologies on Control System (III)	
Venue	Room10	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Yonggao Zhang , <i>East China Jiaotong Univ.</i>	
Co-Chair	Dazhong Ma , <i>Northeastern Univ.</i>	
13:30-13:50	TueC10-1	A Novel Topology for Power Decoupling of Two-stage Inverter Based on Buck/Boost Circuit 2894 Yonggao Zhang, <i>East China Jiaotong Univ.</i> Lingtao Kong, <i>East China Jiaotong Univ.</i> Xiaochen Wang, <i>East China Jiaotong Univ.</i> Weidong Fu, <i>East China Jiaotong Univ.</i>
13:50-14:10	TueC10-2	Power Management Strategy of AC-DC Hybrid Microgrid in Island Mode 2900 Heng Du, <i>Northeastern Univ.</i> Xuemeng Zhang, <i>Northeastern Univ.</i> Qiuye Sun, <i>Northeastern Univ.</i> Dazhong Ma, <i>Northeastern Univ.</i>
14:10-14:30	TueC10-3	Vibration Energy Harvest and Storage Management System Based on MSMA 2906 Jing Yang, <i>Shenyang Aerospace Univ. Automation Inst.</i> Luping Wang, <i>Shenyang Aerospace Univ. Automation Inst.</i> Yunhong Gao, <i>Shenyang Aerospace Univ. Automation Inst.</i>
14:30-14:50	TueC10-4	Decoupling Modulation Strategy for Three-Level Four-Leg Inverters Based on Independent Control of Fourth Leg 2910 Hongjun Shao, <i>Northeastern Univ. at Qinhuangdao</i> Weiqiang Chen, <i>Northeastern Univ. at Qinhuangdao</i> Peijie Hu, <i>Northeastern Univ. at Qinhuangdao</i>
14:50-15:10	TueC10-5	SOC Estimation of Lithium Battery Based on N-2RC Model in Electric Vehicle 2916 Dan Liu, <i>Dalian Maritime Univ.</i> Xingcheng Wang, <i>Dalian Maritime Univ.</i> Min Zhang, <i>Qoros automotive research institute</i> Mingxuan Gong, <i>Dalian Maritime Univ.</i>
15:10-15:30	TueC10-6	Study on Total Factor Energy Efficiency of the Silk Road Economic Zone Based on the Environmental Effects 2922 Baozhong Wang, <i>Xi'an Polytechnic Univ.</i> Xi Lu, <i>Xi'an Polytechnic Univ.</i>



Session	TueC11 : Image Processing and Robot Vision (V)	
Venue	Room11	
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30	
Chair	Huilin Liu , <i>Northeastern Univ.</i>	
Co-Chair	Wei Huang , <i>Chongqing Univ. of Posts and Telecommunications</i>	
13:30-13:50	TueC11-1	A Game Model based Distributed Power Dispatch for Wind Generators in Wind Farm with Variable Communication N/A Jianliang Zhang, <i>College of Electrical Engineering, Zhejiang University, Hangzhou, China</i> Donglian Qi, <i>College of Electrical Engineering, Zhejiang University, Hangzhou, China</i>
13:50-14:10	TueC11-2	Image Stitching Based on Improved Gradual Fusion Algorithm 2933 Chunbo Xiu, <i>Tianjin Polytechnic Univ.</i> Yunfei Ma, <i>Tianjin Polytechnic Univ.</i>
14:10-14:30	TueC11-3	Mesh Segmentation Algorithm of the Nephogram in Four-node Quadrilateral Mesh 2938 Xiaofu Du, <i>Northeastern Univ. Xiamen Univ. Tan Kah Kee College</i> Huilin Liu, <i>Northeastern Univ.</i>
14:30-14:50	TueC11-4	Vehicle Type Recognition using Capsule Network 2944 Zhiyong Zhang, <i>Zhengzhou Univ.</i> Duanjin Zhang, <i>Zhengzhou Univ.</i> Hongbin Wei, <i>Zhengzhou Univ.</i>
14:50-15:10	TueC11-5	Real-Time Target Detection and Tracking System Based on Stereo Camera for Quadrupe Robots 2949 Ziyang Jiang, <i>Shandong Univ.</i> Hui Zhang, <i>Qilu Univ. of Tech. (Shandong Academy of Sciences)</i> Jianxing Xu, <i>Northwestern Polytechnical Univ.</i> Guohui Tian, <i>Shandong Univ.</i> Xuewen Rong, <i>Shandong Univ.</i>
15:10-15:30	TueC11-6	Measurement and Optimization of Spatial Target Position Using Three Monocular CMOS Cameras 2955 Li Kai, <i>Harbin Inst. of Tech.</i> Yuan Feng, <i>Harbin Inst. of Tech.</i>



Session	TueCIS : Interactive Session
Venue	Room12
Date/Time	Tuesday, 4 June, 2019 / 13:30-15:30
TueCIS-01	Comparative Study of Wave-Variables and Smith Predictor for Teleoperator Force-Position Control 2960 Baocun Chen, <i>Nanjing Univ. of Science and Tech.</i> Yu Guo, <i>Nanjing Univ. of Science and Tech.</i> Yifei Wu, <i>Nanjing Univ. of Science and Tech.</i>
TueCIS-02	Design of Repetitive Control with a Novel Structure Based on Sensitivity Analysis 2965 Aijing Wu, <i>Harbin Inst. of Tech.</i> Xin Huo, <i>Harbin Inst. of Tech.</i> Xingang Tong, <i>Harbin Inst. of Tech.</i> Mengyu Wang, <i>Shanghai Electro-Mechanical Engineering Inst.</i>
TueCIS-03	Study on Tracing Algorithm of TDOA-based AIEKF 2970 Liang Sheng, <i>Naval Univ. of Engineering</i> Ning Su, <i>Jinxi Industrial School</i> Xiangyao Meng, <i>Naval Research Academy</i> Meng Liu, <i>Naval Univ. of Engineering</i>
TueCIS-04	Field-of-View Limited Guidance with Constrained Impact via Line-of-Sight Shaping Approach 2974 Yong Xi, <i>Shanghai Aerospace Control Tech. Inst.</i> Tuo Han, <i>Beihang Univ.</i> Qinglei Hu, <i>Beihang Univ.</i> Kewei Zhong, <i>Shanghai Aerospace Control Tech. Inst.</i>
TueCIS-05	Path Following Control of the Asymmetric USV via Backstepping Sliding Mode Technique 2979 Mingcong Li, <i>Dalian Maritime Univ.</i> Chen Guo, <i>Dalian Maritime Univ.</i> Yi Yuan, <i>Dalian Maritime Univ.</i> Muzhuang Guo, <i>Dalian Maritime Univ.</i>
TueCIS-06	Study on Ship Dynamic Positioning with Stochastic Backstepping Nonlinear Controller 2985 Yanan Song, <i>Guangdong Univ. of Tech.</i> Ronghua Xu, <i>Guangdong Univ. of Tech.</i> Qinruo Wang, <i>Guangdong Univ. of Tech.</i> Ziyin Song, <i>Guangdong Univ. of Tech.</i> Birong Zhao, <i>Guangzhou Univ.</i> Mei Zhang, <i>South China Univ. of Tech.</i>
TueCIS-07	An Improved Method Based on CPG to Achieve Trotting Gait of Quadrupedal Robot 2990 Houde Liu, <i>Shenzhen Engineering Laboratory of Geometry Measurement Tech</i> Xiaoyong Wang, <i>Shenzhen Engineering Laboratory of Geometry Measurement Tech</i> Bin Liang, <i>Shenzhen Engineering Laboratory of Geometry Measurement Tech</i> XueQian Wang, <i>Shenzhen Engineering Laboratory of Geometry Measurement Tech</i>
TueCIS-08	Research on Marine Refrigeration Simulation and Its Application 2996 Jie Yang, <i>Dalian Maritime Univ.</i> Hongtao Gao, <i>Dalian Maritime Univ.</i>
TueCIS-09	Co-simulation of Electromagnetic Field for Solenoid Control System Using Three Kinds of Software 3002 Zengzeng Fan, <i>Univ. of Jinan</i> Fang He, <i>Univ. of Jinan</i>



- TueCIS-10** **Discussion on the Innovative Mixed Model of Automatic Control Experiment MOOC Teaching** 3008
 Zengru Jiang, *Beijing Inst. of Tech.*
 Yaping Dai, *Beijing Inst. of Tech.*
- TueCIS-11** **Design of Analog Signal Detection System for Vehicle Control Unit** 3012
 Anyu Cheng, *Chongqing Univ. of Posts and Telecommunications*
 Ling Wang, *Chongqing Univ. of Posts and Telecommunications*
 Qiuhan Xiong, *Chongqing Univ. of Posts and Telecommunications*
 Yulei Zhang, *Chongqing Univ. of Posts and Telecommunications*
 Yi Feng, *Chongqing Univ. of Posts and Telecommunications*
- TueCIS-12** **On Regularization Schemes for Data-Driven Optimization** 3016
 Wei Ni, *Nanchang Univ.*
 Zhong-Ping Jiang, *New York Univ.*
- TueCIS-13** **River Water Quality Parameters Prediction Method Based on LSTM-RNN Model** 3024
 Qiangqiang Ye, *Xi'an Technological Univ.*
 Xueqin Yang, *Shanghai Jiaotong Univ. Xi'an Univ. of Post and Telecommunications*
 Chaobo Chen, *Xi'an Technological Univ.*
 Jingcheng Wang, *Xi'an Technological Univ. Shanghai Jiaotong Univ.*
- TueCIS-14** **Data Driven Intersection Signal Control Strategy Considering State Controllability** 3029
 Li Wang, *North China Univ. of Tech.*
 Lili Zhang, *North China Univ. of Tech.*
 Lingyu Zhang, *North China Univ. of Tech.*
- TueCIS-15** **Data-driven Unmanned Surface Vessel Path Following Control Method based on Reinforcement Learning** 3035
 Weinan Deng, *Wuhan Univ. of Tech.*
 Hao Li, *Wuhan Univ. of Tech.*
 Yuanqiao Wen, *Wuhan Univ. of Tech., Hubei Key Laboratory of Inland Shipping Tech.*
- TueCIS-16** **Quality-related Fault Detection Method Based on Adapt Recursive MPLS** 3041
 Jiayu Luo, *Xi'an Research Inst. of High Tech.*
 Xiangyu Kong, *Xi'an Research Inst. of High Tech.*
 Zhongying Xu, *Xi'an Research Inst. of High Tech.*
 Boyang Du, *Xi'an Research Inst. of High Tech.*
 Zhikan Chen, *Central Theater Command of PLA*
- TueCIS-17** **Research of M&S Ecosystem based on Data Driven** 3046
 Zheng Zhao, *National Key Laboratory of Science&Technology on Test physics and Numerical mathematics*
 Chao Zhang, *National Key Laboratory of Science&Technology on Test physics and Numerical mathematics*
 Jiaqi Liu, *National Key Laboratory of Science&Technology on Test physics and Numerical mathematics*
 Shengjun Zhang, *National Key Laboratory of Science&Technology on Test physics and Numerical mathematics*
- TueCIS-18** **Self-Adaption FOPID Controller Design for Internal Temperature in Roller System Based on Data-Driven Technique** 3052
 Xiangyu Chen, *Univ. of Jinan*
 Jinliang Liu, *Univ. of Jinan*
 Xiuli Sun, *Univ. of Jinan*



- TueCIS-19** **Efficient Recursive Kernel Principal Component Analysis for Nonlinear Time-Varying Processes Monitoring** 3057
 Liangliang Shang, *Nantong Univ.*
 Ze Yan, *Nantong Univ.*
 Aibing Qiu, *Nantong Univ.*
 Fei Li, *Anhui Univ. of Tech.*
 Xinyi Zhou, *Nantong Univ.*
- TueCIS-20** **Optimal Control for Complex Systems under Multi-granularity Based on Data Mining** 3063
 Zhengguang Xu, *Univ. of Science and Tech. Beijing*
 Lingli Guo, *Univ. of Science and Tech. Beijing Changzhi College*
 Mushu Wang, *Univ. of Science and Tech. Beijing*
 Yanrong Lu, *Univ. of Science and Tech. Beijing*
- TueCIS-21** **A Compact Memristor-based GAN Architecture with a Case Study on Single Image Super-Resolution** 3069
 Zhekang Dong, *Zhejiang Univ.*
 Yixiao Fang, *Zhejiang Univ.*
 Ling Huang, *State Grid Beijing Electric Power Corporation Fengtai Power Supply Bureau*
 Jidong Li, *State Grid Beijing Electric Power Corporation Fengtai Power Supply Bureau*
 Donglian Qi, *Zhejiang Univ.*
- TueCIS-22** **Robust Adaptive Control of Output-constrained Linear Motor** 3075
 Guoqi Li, *Beijing Jiaotong Univ.*
 Xiangbin Liu, *Beijing Jiaotong Univ.*
 Daming Jiang, *Beijing Jiaotong Univ.*
- TueCIS-23** **Three-parameter Control Scheme based on Adaptive Pole Assignment for an Underwater Shaking Table System** 3081
 Jianjun Yao, *Harbin Engineering Univ.*
 Yue Zhao, *Harbin Engineering Univ.*
 Jiaqi Wang, *Harbin Engineering Univ.*
 Bingyi Miao, *Harbin Engineering Univ.*
 Jie Yu, *Harbin Engineering Univ.*
 Zhenxing Su, *Harbin Engineering Univ.*
- TueCIS-24** **Path Tracking for Wheeled Mobile Robot Based on Adaptive Robust Control** 3086
 Wenrui Shi, *Sichuan Agricultural Univ.*
 Lijia Xu, *Sichuan Agricultural Univ.*
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 Yuan Liang, *Sichuan Agricultural Univ.*
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 Chenfa Shi, *Tianjin Univ. of Tech.*
 Lei Shao, *Tianjin Univ. of Tech.*
 Hongli Liu, *Tianjin Univ. of Tech.*
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 Songyan Wang, *Harbin Inst. of Tech.*
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 Jun Hu, *Univ. of South Wales*
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 Xinqi Li, *Tianjin Univ. of Tech. and Education Tianjin Key Laboratory of Information Sensing and Intelligent Control*
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- TueCIS-42** **Electromechanical Impedance Based Damage Assessment Approach for Metal-nonmetal Complex Structure** 3185
 Sainan Zhang, *Nanjing Univ. of Posts and Telecommunications*
 Qiang Wang, *Nanjing Univ. of Posts and Telecommunications*
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 Lei Gu, *Nanjing Univ. of Posts and Telecommunications*
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- TueCIS-44** **A Sensor-less Active Voltage Equalization Method for Series-Connected Supercapacitors** 3196
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 Fawei Ge, *Bohai Univ.*
 Kun Li, *Bohai Univ.*
- TueCIS-45** **An Automatic Reading Recognition Method for Pointer Spring Tube Pressure Instrument** 3202
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- TueCIS-46** **Novel Two-electrode Excitation Mode for 3D Electrical Capacitance Tomography** 3206
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- TueCIS-47** **Simultaneous Reconstruction of Conductivity and Permittivity in Electrical Impedance Tomography** 3211
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 Haijiang Zhu, *Beijing Univ. of Chemical Tech.*
- TueCIS-51** **Improved Modbus/TCP Multi-dimensional Fuzzing Test Method** 3233
 Mubai Yi, *Shanghai Univ.*
 Jingqi Fu, *Shanghai Univ.*
- TueCIS-52** **Detection of False Data Injection Attack in Smart Grids via Interval Observer** 3238
 Xinyu Wang, *Yanshan Univ.*
 Xiaoyuan Luo, *Yanshan Univ.*
 Mingyue Zhang, *Shandong Huayu Univ. of Tech.*
 Zhongping Jiang, *New York Univ.*
 Xiping Guan, *Shanghai Jiaotong Univ.*



TueCIS-53 Resilient Event-triggered H_∞ Filtering for Delayed Neural Networks Under Nonperiodic DoS Jamming Attacks 3244
 Ping Yuan, *Nanjing Univ. of Posts and Telecommunications*
 Songlin Hu, *Nanjing Univ. of Posts and Telecommunications*
 Xiaoli Chen, *Nanjing Univ. of Posts and Telecommunications*
 Zihao Cheng, *Nanjing Univ. of Posts and Telecommunications*

Session	TueD01 : Intelligent Control, Computation and Optimization (IV)	
Venue	Room01	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Yali Qu, <i>Jilin Univ.</i>	
Co-Chair	Guoliang Zhao, <i>Dalian Univ. of Technology</i>	
15:50-16:10	TueD01-1	The Realization and Optimization of Static Gesture Recognition System Based on Representation Learning 3250 Jianjun Yu, <i>Univ. of Technology</i> Shuo An, <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Xiaogang Ruan, <i>Univ. of Technology</i> Naigong Yu, <i>Univ. of Technology</i> Daoxiong Gong, <i>Univ. of Technology</i>
16:10-16:30	TueD01-2	Multi-step Finite Set Model Predictive Control for Modular Multilevel Converters 3257 Yali Qu, <i>Jilin Univ.</i> Fang Xu, <i>Jilin Univ.</i> Zhimin Ma, <i>Zhejiang VIE Science & Technology Co.,Ltd</i> Hong Chen, <i>Jilin Univ.</i>
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16:50-17:10	TueD01-4	ANN-based Soft Sensing of Oxygen Content in Boiler Air-flue Gas System 3268 Liangyu Ma, <i>North China Electric Power Univ.</i> Yongjun Wang, <i>North China Electric Power Univ.</i> Xiaotong Zuo, <i>North China Electric Power Univ.</i>
17:10-17:30	TueD01-5	Design of Morse Message Transmission Control Algorithm Based on Machine Learning 3273 Xu Zhang, <i>Naval Univ. of Engineering</i> Hongbo Liu, <i>Naval Univ. of Engineering</i> Shanhu Qu, <i>Naval Univ. of Engineering</i>
17:30-17:50	TueD01-6	Tensor-based Type-2 Random Vector Functional Link Network 3278 Guoliang Zhao, <i>Dalian Univ. of Technology</i> Wei Wu, <i>Dalian Univ. of Technology</i>



Session	TueD02 : Fault Diagnosis and Self-healing Control (IV)	
Venue	Room02	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Qida Li , <i>Northeastern Univ.</i>	
Co-Chair	Weimin Liu , <i>Nanjing Univ. of Aeronautics & Astronautics</i>	
15:50-16:10	TueD02-1	Performance Evaluation of Generalized Minimum Variance Multi-disturbance Control System 3286 Qida Li, <i>Northeastern Univ.</i> Shubin Tan, <i>Northeastern Univ.</i> Yongkuan Yang, <i>Northeastern Univ.</i>
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16:30-16:50	TueD02-3	Security Inspection of Suspension System in Urban Rail Track based on Track-side Signal Detection 3297 Yanqin Teng, <i>Beijing Jiaotong Univ.</i> Xiukun Wei, <i>Beijing Jiaotong Univ.</i>
16:50-17:10	TueD02-4	Multi-feature Extraction for Bearing Fault Diagnosis Using Binary-tree Mahalanobis-Taguchi System 3303 Zhaiming Peng, <i>Nanjing Univ. of Science and Tech.</i> Longsheng Cheng, <i>Nanjing Univ. of Science and Tech.</i> Qifeng Yao, <i>Nanjing Univ. of Science and Tech.</i>
17:10-17:30	TueD02-5	A Recurrent Neural Networks based Method for Fault Diagnosis of Three-way Catalytic Converter 3309 Penghua Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Guan Wang, <i>Chongqing Univ. of Posts and Telecommunications</i> Mingyao Zheng, <i>Chongqing Univ. of Posts and Telecommunications</i> Huan Wang, <i>Chongqing Univ. of Posts and Telecommunications</i>
17:30-17:50	TueD02-6	Aero-engine Sensor Fault Diagnosis Based on Convolutional Neural Network 3314 Weimin Liu, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Zhongzhi Hu, <i>Nanjing Univ. of Aeronautics and Astronautics</i>



Session	TueD03 : Pattern Recognition and Deep Learning (III)	
Venue	Room03	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Zhigang Zhou , <i>Guangdong Inst. of Intelligent Manufacturing</i>	
Co-Chair	Guoliang Zhao , <i>Dalian Univ. of Tech. Inner Mongolia Univ.</i>	
15:50-16:10	TueD03-1	Face Recognition Method Based on Enhanced Edge Cosine Loss Function and Residual Network 3320 Nan Wang, <i>Guangdong Inst. of Intelligent Manufacturing</i> Zhigang Zhou, <i>Guangdong Inst. of Intelligent Manufacturing</i> Jingqi Ma, <i>Guangdong Inst. of Intelligent Manufacturing</i> Huan Lei, <i>Guangdong Inst. of Intelligent Manufacturing</i> Junyi Li, <i>Guangdong Science and Tech. Basic Condition Platform Center</i> Zhenyu Zhong, <i>Guangdong Inst. of Intelligent Manufacturing</i>
16:10-16:30	TueD03-2	Triangular Type-2 Fuzzy Sets Based Weighted Regularized Extreme Learning Algorithm 3325 Guoliang Zhao, <i>Dalian Univ. of Tech. Inner Mongolia Univ.</i> Wei Wu, <i>Dalian Univ. of Tech.</i>
16:30-16:50	TueD03-3	Human Behavior Recognition Based on IC3D 3333 Pengcheng Ding, <i>Guangdong Univ. of Techn.</i> Siyuan Cheng, <i>Guangdong Univ. of Techn.</i> Zhenyu Zhong, <i>Guangdong Inst. of Intelligent Manufacturing</i> Zhigang Zhong, <i>Guangdong Inst. of Intelligent Manufacturing</i> Jingqi Ma, <i>Guangdong Inst. of Intelligent Manufacturing</i> Huan Lei, <i>Guangdong Inst. of Intelligent Manufacturing</i>
16:50-17:10	TueD03-4	The Research of Random Sample Consensus Matching Algorithm in PCA-SIFT Stereo Matching Method 3338 Jun Li, <i>Wuhan Inst. of Techn.</i> Haihui Wang, <i>Wuhan Inst. of Techn.</i> Liubin Zhang, <i>Wuhan Inst. of Techn.</i> Ziwei Wang, <i>Wuhan Inst. of Techn.</i> Meng Wang, <i>Wuhan Inst. of Techn.</i>
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17:30-17:50	TueD03-6	Improving ADNet for Robust Tracking 3347 Tiansa Zhang, <i>Beijing Inst. of Techn.</i> Bo Wang, <i>Beijing Inst. of Techn.</i> Zhiqiang Zhou, <i>Beijing Inst. of Techn.</i> Zhe An, <i>State Key Laboratory of Advanced Power Transmission Techn.</i>



Session	TueD05 : Signal Processing and Information Fusion (IV)	
Venue	Room05	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Cuicui Huang , <i>National Univ. of Defense Techn.</i>	
Co-Chair	Wei Tian , <i>Naval Univ. of Engineerings</i>	
15:50-16:10	TueD05-1	Design and Implementation of Signal Processing for Position and Speed Detection System of High Speed Maglev Train 3352 Cuicui Huang, <i>National Univ. of Defense Techn.</i> Chunhui Dai, <i>National Univ. of Defense Techn.</i> Guibin Luo, <i>National Univ. of Defense Techn.</i> Zhiqiang Long, <i>National Univ. of Defense Techn.</i>
16:10-16:30	TueD05-2	An Improved Image Fusion Approach Via Wavelet and Whale Optimization Algorithm 3357 Haiyan Jin, <i>Xi'an Univ. of Techn.</i> Jing Peng, <i>Xi'an Univ. of Techn.</i> Yang Yu, <i>Xi'an Univ. of Techn.</i> Zhaolin Xiao, <i>Xi'an Univ. of Techn.</i> Bin Wang, <i>Xi'an Univ. of Techn.</i>
16:30-16:50	TueD05-3	An Improved Multipoint Interpolation DFT Algorithm for High-frequency Underwater Acoustic Communication 3363 Yefan Bao, <i>Zhejiang Univ.</i> Zhifeng Sun, <i>Zhejiang Univ.</i> Ji Xiang, <i>Zhejiang Univ.</i>
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17:10-17:30	TueD05-5	Robust Sensor Bias Estimation Based on the Bounded Variables Least Trimmed Squares 3374 Wei Tian, <i>Naval Univ. of Engineering</i> Gaoming Huang, <i>Naval Univ. of Engineering</i> Huafu Peng, <i>Naval Univ. of Engineering</i> Haibin Wang, <i>Naval Aviation Univ.</i> Xiaohong Lin, <i>Naval Univ. of Engineering</i> Xuebao Wang, <i>Naval Univ. of Engineering</i>
17:30-17:50	TueD05-6	Anti-jamming of Range-velocity Synchronous False Targets under the Ultra-high Speed Targets Detection of Radar 3380 Qin Guo, <i>The Eighth Academy of China Aerospace Science and Techn. Corporation</i> Sujie Liu, <i>The Eighth Academy of China Aerospace Science and Techn. Corporation</i> Xiongjun Wu, <i>The Eighth Academy of China Aerospace Science and Techn. Corporation</i> Liechen Yu, <i>The Eighth Academy of China Aerospace Science and Techn. Corporation</i>



Session	TueD06 : Complex Networks and Systems (III)	
Venue	Room06	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Longge Zhang , <i>North China Electric Power Univ.</i>	
Co-Chair	Li Yan , <i>Xidian Univ.</i>	
15:50-16:10	TueD06-1	Architectural Design and Implementation Method for Joint Operations Simulation System 3385 Kui Geng, <i>Academy of Military Scie., Center of Assessment and Demonstration Research, Beijing.</i> Xin Zhang, <i>Academy of Military Scie., Center of Assessment and Demonstration Research, Beijing.</i> Zongren Xie, <i>Academy of Military Scie., Center of Assessment and Demonstration Research, Beijing.</i>
16:10-16:30	TueD06-2	Discrete Active Model Predictive Control of Continuous Unified Chaotic System 3390 Longge Zhang, <i>North China Electric Power Univ.</i> Yan Yan, <i>North China Electric Power Univ.</i>
16:30-16:50	TueD06-3	Non-fragile Set-membership State Estimation for Memristive Neural Networks with Incomplete Measurements via Round-robin Protocol 3395 Yu Yang, <i>Harbin Univ. of Scie. and Tech.</i> Jun Hu, <i>Univ. of South Wales.</i> Ning Yang, <i>Harbin Univ. of Scie. and Tech.</i> Junhua Du, <i>Qiqihar Univ.</i>
16:50-17:10	TueD06-4	Modeling and Optimization of Glucose Separation based on MPSO-SVR 3401 Hongjun Duan, <i>Northeastern Univ. at Qinhuangdao.</i> Jiaheng Sun, <i>Northeastern Univ. at Qinhuangdao.</i> Keshu Wang, <i>Northeastern Univ. at Qinhuangdao.</i>
17:10-17:30	TueD06-5	Finite Time Synchronization for Complex Dynamical Networks with Actuator Faults 3406 Nannan Ma, <i>Southwest Petroleum Univ.</i> Zhibin Liu, <i>Southwest Petroleum Univ.</i> Lin Chen, <i>Southwest Petroleum Univ.</i>
17:30-17:50	TueD06-6	Exponential Synchronization for Second-order Linear Systems in Complex Dynamical Networks with Cooperatively Directed Spanning Tree Topology 3412 Li Yan, <i>Xidian Univ.</i> Chenxi Li, <i>Xidian Univ.</i> Hao Dai, <i>Xidian Univ.</i> Weisheng Chen, <i>Xidian Univ.</i>



Session	TueD07: Multi-agent Systems and Co-operative Control (II)	
Venue	Room07	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Lixin Gao , <i>Wenzhou Univ.</i>	
Co-Chair	Chenglin Liu , <i>Jiangnan Univ.</i>	
15:50-16:10	TueD07-1	Distributed Min-max Optimization over Digraphs 3418 Pei Xie, <i>Tsinghua Univ.</i> Keyou You, <i>Tsinghua Univ.</i> Cheng Wu, <i>Tsinghua Univ.</i>
16:10-16:30	TueD07-2	Flexible Formation Control through Time-Varying Weighting Multi-Agent Flocking 3424 Rong Huang, <i>Hohai Univ.</i> Jun Zhou, <i>Hohai Univ.</i> Haoqian Huang, <i>Hohai Univ.</i>
16:30-16:50	TueD07-3	Observer-based Distributed Optimization for Linear Multi-agent Systems 3430 Yu Zhang, <i>Wenzhou Univ.</i> Wenhai Chen, <i>Wenzhou Univ.</i> Lixin Gao, <i>Wenzhou Univ.</i>
16:50-17:10	TueD07-4	Distributed Consensus Protocol for General Third-order Multi-Agent Systems with Communication Delay 3436 Yuan Li, <i>Southwest Jiaotong Univ.</i> Fei Yan, <i>Southwest Jiaotong Univ.</i> Wenbo Liu, <i>Southwest Jiaotong Univ.</i>
17:10-17:30	TueD07-5	Average-consensus Tracking of Ramp Inputs via Second-order Multi-agent Systems 3442 Chenglin Liu, <i>Jiangnan Univ.</i> Xiaoyu Gu, <i>Jiangnan Univ.</i> Liang Shan, <i>Jiangnan Univ.</i>
17:30-17:50	TueD07-6	Containment of Linear Multi-agent Systems with Multiple Leaders of Bounded Input and Exogenous Disturbances 3448 Xuxi Zhang, <i>Harbin Engineering Univ.</i> Miao Yu, <i>Harbin Engineering Univ.</i> Desalegn D. Liranso, <i>Harbin Engineering Univ.</i>



Session	TueD08 : Adaptive Control and Learning Control (III)	
Venue	Room08	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Fancheng Meng , <i>Lanzhou Univ. of Tech.</i>	
Co-Chair	Yeguo Sun , <i>Huainan Normal Univ.</i>	
15:50-16:10	TueD08-1	Learning Consensus for Nonlinear Multi-Agent Systems with Iteration-Switching Topologies 3453 Chen Liu, <i>Beijing Univ. of Chemical Tech.</i> Dong Shen, <i>Beijing Univ. of Chemical Tech.</i>
16:10-16:30	TueD08-2	Uniformly Quantized ILC with Encoding and Decoding Mechanism under Random Data Dropouts 3459 Niu Huo Beijing, <i>Univ. of Chemical Tech.</i> Chao Zhang, <i>Beijing Univ. of Chemical Tech.</i> Dong Shen, <i>Beijing Univ. of Chemical Tech.</i>
16:30-16:50	TueD08-3	Cooperative Strategies with Boundary Conditions for Optimal Aircraft Simultaneous Attack 3465 Xiaoqian Wei, <i>Peking Univ.</i> Jiaying Yang, <i>Peking Univ.</i> Xiangru Fan, <i>Clarkson Univ.</i>
16:50-17:10	TueD08-4	Adaptive Event-based Reinforcement Learning Control 3471 Fancheng Meng, <i>Lanzhou Univ. of Tech</i> Aimin An, <i>Lanzhou Univ. of Tech.</i> Erchao Li, <i>Lanzhou Univ. of Tech.</i> Shuo Yang, <i>Lanzhou Univ. of Tech</i>
17:10-17:30	TueD08-5	Adaptive Fuzzy Control for a Class of Nonlinear Fractional-Order Systems 3477 Yeguo Sun, <i>Huainan Normal Univ.</i> Ling Li, <i>Huainan Normal Univ.</i>
17:30-17:50	TueD08-6	SMC-based Data-driven Terminal ILC for Nonlinear Discrete-time Systems with Unavailable Intermediate Measurements 3483 Ronghu Chi, <i>Qingdao Univ. of Science and Tech.</i> Yangchun Wei, <i>Qingdao Univ. of Science and Tech.</i> Rongrong Wang, <i>Qingdao Univ. of Science and Tech.</i>



Session	TueD09 : Intelligent Manufacturing and Industrial Intelligence (II)	
Venue	Room09	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Hongqian Lu , <i>Qilu University of Tech. (Shandong Academy of Sciences)Univ.</i>	
Co-Chair	Hongkui , <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i>	
15:50-16:10	TueD09-1	Research on CNC Machine Tool Monitoring System Based on OPC UA 3489 Haoyu Yu, <i>Univ. of Chinese Academy of Sciences Shenyang Inst. of Computing Tech.</i> Dong Yu, <i>Shenyang Inst. of Computing Tech.</i> Yi Hu, <i>Shenyang Inst. of Computing Tech. Shenyang Golding NC Tech. Company Limited</i> Chuting Wang, <i>Univ. of Chinese Academy of Sciences</i>
16:10-16:30	TueD09-2	Research on Condition-based Maintenance Technology for Power Transformer 3494 Yisong Zhao, <i>Electric Power Research Institute of State Grid Liaoning Electric Power Company, Limited</i> Fucheng Lang, <i>Electric Power Research Institute of State Grid Liaoning Electric Power Company, Limited</i> Tongzhe Li, <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i> Xiaoli Liu, <i>Liaoning Dongke Electric Power Company, Limited</i>
16:30-16:50	TueD09-3	Design of Temperature Monitoring and Data Transmission System for High-voltage Cable Connector 3499 Yi-song Zhao, <i>Electric Power Research Inst. of State Grid Liaoning Electric Power Company, Limited</i> Tongzhe Li, <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i> Fucheng Lang, <i>Electric Power Research Inst. of State Grid Liaoning Electric Power Company, Limited</i> Wenlong Yi, <i>Liaoning Dongke Electric Power Company, Limited</i>
16:50-17:10	TueD09-4	Research on Temperature Rise Inspection Technology of Low-voltage Cable Junction Box Used in Mine 3503 Hongkui Zhang, <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i> Ziyun Yuan, <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i> Cunhu Duan, <i>Sany Heavy Equipment Company, Limited</i> Bo Li, <i>Liaoning Inspection, Examination & Certification Centre</i> Xin Jin, <i>Liaoning Inspection, Examination & Certification Centre</i>
17:10-17:30	TueD09-5	Design of Mining Isolation Switch Action Torque Test System 3507 Hongkui Zhang, <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i> Ziyun Yuan, <i>CCTEG Shenyang Research Inst. State Key Laboratory of Coal Safety</i> Bo Li, <i>Liaoning Inspection, Examination & Certification Centre</i> Xin Jin, <i>Liaoning Inspection, Examination & Certification Centre</i>
17:30-17:50	TueD09-6	Application Design of 3D Printing Technology in the Field of Architecture 3511 Yuang Zhang, <i>Qilu University of Tech. (Shandong Academy of Sciences)</i> Hongqian Lu, <i>Qilu University of Tech. (Shandong Academy of Sciences)Univ.</i> Hongwei Chen, <i>Ji Nan Building Source Cement Products Company, Limited</i> Meiyu Sun, <i>Electrical and Mechanical College Shandong Management Univ.</i>



Session	TueD10 : Robot Control (I)	
Venue	Room10	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Dechao Chen, <i>Hangzhou Dianzi Univ.</i>	
Co-Chair	Dinghui Wu, <i>Jiangnan Univ.</i>	
15:50-16:10	TueD10-1	FAT-Based Robot Adaptive Control with Position Measurements Only 3516 An-Chyau Huang, <i>National Taiwan Univ. of Science and Tech.</i> Chi-Ting Huang, <i>National Taiwan Univ. of Science and Tech.</i>
16:10-16:30	TueD10-2	A Heuristic Iterative Method for Solving the Inverse Solution of Kinematics of Manipulators 3521 Ren Xiao, <i>Jiangnan Univ.</i> Dinghui Wu, <i>Jiangnan Univ.</i> Haibo Huang, <i>Jiangnan Univ.</i>
16:30-16:50	TueD10-3	Robust Zhang Neural Network for Tracking Control of Parallel Robot Manipulators With Unknown Parameters 3527 Dechao Chen, <i>Hangzhou Dianzi Univ.</i> Yunong Zhang, <i>Sun Yat-sen Univ.</i> Shuai Li, <i>The Hong Kong Polytechnic Univ.</i> Yihong Ling, <i>Sun Yat-sen Univ.</i>
16:50-17:10	TueD10-4	Activity Theory Based Model for Robotics Tasks Learning and Functional Reflection 3533 Mohamad El Maouch, <i>Chinese Academy of Scie. Northeast Normal Univ.</i> Shuo Wang, <i>Chinese Academy of Scie.</i> Xiaosong Gai, <i>Northeast Normal Univ.</i> Yinghao Cai, <i>Chinese Academy of Scie.</i> Tao Lu, <i>Chinese Academy of Scie.</i> Marwa Saab, <i>Northeast Normal Univ.</i>
17:10-17:30	TueD10-5	Design and Implementation of Humanoid Robot Behavior Imitation System Based on Skeleton Tranking 3541 Zhifu Wang, <i>Shandong Univ.</i> Xianfeng Yuan, <i>Shandong Univ.</i> Chengjin Zhang, <i>Shandong Univ.</i>
17:30-17:50	TueD10-6	Adaptive Non-singular Terminal Sliding Mode Control with High-gain Observers for Robotic Manipulators 3547 Haitao Liu, <i>Guangdong Ocean Univ.</i> Jian Sun, <i>Guangdong Ocean Univ.</i> Jianhao Nie, <i>Guangdong Ocean Univ.</i> Guangjun Chen, <i>Guangdong Ocean Univ.</i> Lanping Zou, <i>Guangdong Ocean Univ.</i>



Session	TueD11 : Image Processing and Robot Vision (VI)	
Venue	Room11	
Date/Time	Tuesday, 4 June, 2019 / 15:50-17:50	
Chair	Ling Bai , <i>Chongqing Univ. of Posts and Telecommunications</i>	
Co-Chair	Lei Sun , <i>Tianjin Univ. of Tech.</i>	
15:50-16:10	TueD11-1	Region-proposal Convolutional Network-driven Point Cloud Voxelization and Over-segmentation for 3D Object Detection 3553 Ling Bai, <i>Chongqing Univ. of Posts and Telecommunications</i> Yinguo Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Fangchao Hu, <i>Chongqing Univ. of Posts and Telecommunications</i> Fen Zhao, <i>Chongqing Univ. of Posts and Telecommunications</i>
16:10-16:30	TueD11-2	Pedestrian Detection Algorithm Based on the Improved SSD 3559 Shu-an Liu, <i>Northeastern Univ.</i> Shi Lv, <i>Northeastern Univ.</i> Hailin Zhang, <i>Northeastern Univ.</i> Jun Gong, <i>Northeastern Univ.</i>
16:30-16:50	TueD11-3	Visual-based Tracking and Control Algorithm Design for Quadcopter UAV 3564 Xiangdong Qin, <i>Hohai Univ.</i> Tingting Wang, <i>Hohai Univ.</i>
16:50-17:10	TueD11-4	The key Frame Extracting Algorithm for Record and Analysis of Psychological Sand-play Therapy Video 3570 Haoyu Qin, <i>Northeastern Univ.</i> Jiayuan Zhao, <i>Northeastern Univ.</i> Junyu Long, <i>Northeastern Univ.</i> Mingxiu Lin, <i>Northeastern Univ.</i>
17:10-17:30	TueD11-5	Deep Convolutional Neural Networks Features For Robust Foreground Segmentation 3576 Jianfang Dou, <i>Shanghai Polytechnic Univ.</i> Qin Qin, <i>Shanghai Polytechnic Univ.</i> Zimei Tu, <i>Shanghai Polytechnic Univ.</i>
17:30-17:50	TueD11-6	Algorithm Research on Improving Activation Function of Convolutional Neural Networks 3582 Yanhua Guo, <i>Tianjin Univ. of Tech.</i> Lei Sun, <i>Tianjin Univ. of Tech.</i> Zhihong Zhang, <i>Tianjin Inst. of Electrical Tech.</i> Hong He, <i>Tianjin Univ. of Tech.</i>



Session	TueDIS : Interactive Session
Venue	Room12
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50
TueDIS-01	Anti-quantum Generalized Signcryption Scheme based on Multivariate and Coding 3587 Zhong Wang, <i>Engineering Univ. of PAP</i> Yiliang Han, <i>Engineering Univ. of PAP</i> Wenchao Liu, <i>Engineering Univ. of PAP</i> Lin Chen, <i>Engineering Univ. of PAP</i>
TueDIS-02	Real-time Implementation of the Cerebellum Neural Network 3595 Xinyu Hao, <i>Tianjin Univ.</i> Jiang Wang, <i>Tianjin Univ.</i> Shuangming Yang, <i>Tianjin Univ.</i> Bin Deng, <i>Tianjin Univ.</i> Xile Wei, <i>Tianjin Univ.</i> Guosheng Yi, <i>Tianjin Univ.</i>
TueDIS-03	Stimulation Pulse Optimization of Deep Brain Stimulation 3600 Yuqiao Li, <i>Tianjin Univ.</i> Jiang Wang, <i>Tianjin Univ.</i> Fei Su, <i>Agricultural Univ.</i>
TueDIS-04	A New Machine Learning Based Framework to Identify Protein Glycation Sites Using Comprehensive Features and the mRMR Method 3605 Jingui Chen, <i>Shandong Univ.</i> Chengjin Zhang, <i>Shandong Univ.</i> Runtao Yang, <i>Shandong Univ.</i> Lina Zhang, <i>Shandong Univ.</i>
TueDIS-05	Prediction Models for Hyperglycemia Concentrations of Cardiac Conduction System 3610 Feng Yu, <i>Chang'an Univ.</i>
TueDIS-06	T-S Fuzzy Control for Blood Glucose Regulation in Type-1 Diabetes 3616 Juntao Pan, <i>North Minzu Univ.</i> Zigui Kang, <i>North Minzu Univ.</i> Weiwei Zhang, <i>North Minzu Univ.</i> Bai Zhang, <i>North Minzu Univ.</i> Hongtao Shi, <i>North Minzu Univ.</i>
TueDIS-07	Digital Implementation of the Spiking Neural Network and Its Digit Recognition 3621 Zaibo Kuang, <i>Tianjin Univ.</i> Jiang Wang, <i>Tianjin Univ.</i> Shuangming Yang, <i>Tianjin Univ.</i> Guosheng Yi, <i>Tianjin Univ.</i> Bin Deng, <i>Tianjin Univ.</i> Xile Wei, <i>Tianjin Univ.</i>



- TueDIS-08** **Analysis of Airway Model of Tumor Patients based on CFD** 3626
 Yingbo Wang, *Shanghai Univ.*
 Xin Sun, *Shanghai Univ.*
 Yue Lou, *Shanghai Univ.*
- TueDIS-09** **Real-time Implementation of the Purkinje Network on Digital Neuromorphic System** 3632
 Huiyan Li, *Tianjin Univ. of Tech. and Educations*
 Shuangming Yang, *Tianjin Univ.*
 Xinyu Hao, *Tianjin Univ.*
 Jiang Wang, *Tianjin Univ.*
 Bin Deng, *Tianjin Univ.*
 Guosheng Yi, *Tianjin Univ.*
- TueDIS-10** **Stability in Distribution and Optimal Control in an Impulsive Toxin Input Bioeconomic System with Stochastic Fluctuations and Time Delays** 3638
 Chengshuai An, *Northeastern Univ. at Qinhuangdao*
 Chao Liu, *Northeastern Univ.*
 Shuai Bi, *Northeastern Univ.*
- TueDIS-11** **Blood Glucose Prediction Based on Empirical Mode Decomposition and GA-BP Neural Network** 3643
 Tianqi Zhao, *Northeastern Univ.*
 Xia Yu, *Northeastern Univ.*
 Yue Cui, *Northeastern Univ.*
 Jianchang Liu, *Northeastern Univ.*
- TueDIS-12** **Dynamic Analysis of Microbial Fuel Cell Electrochemical Model** 3649
 Fengying Ma, *Qilu Univ. of Tech.*
 Yankai Yin, *Qilu Univ. of Tech.*
 Kai Sun, *Qilu Univ. of Tech.*
- TueDIS-13** **Stability Analysis of a Four-dimensional Energy Demand-supply System Under Delayed Feedback Control** 3654
 Kunyi Yang, *North China Univ. of Tech.*
 Yunning Dong, *North China Univ. of Tech.*
- TueDIS-14** **Wind Estimation with UAVs Using Improved Adaptive Kalman Filter** 3660
 Yaohong Qu, *Northwestern Polytechnical Univ.*
 Kai Wang, *Northwestern Polytechnical Univ.*
 Xiwei Wu, *Northwestern Polytechnical Univ.*
- TueDIS-15** **Path Planning of UAV for Oilfield Inspection Based on Improved Grey Wolf Optimization Algorithm** 3666
 Fawei Ge, *Bohai Univ.*
 Kun Li, *Bohai Univ.*
 Wensu Xu, *Bohai Univ.*
 Yi'an Wang, *Bohai Univ.*



- TueDIS-16** **An Optimal Path Planning Method for UCAV in Terminal of Target Strike** 3672
 Hongbo Xin, *National Univ. of Defense Tech.*
 Qingyang Chen, *National Univ. of Defense Tech.*
 Yujie Wang, *National Univ. of Defense Tech.*
 Gaowei Jia, *National Univ. of Defense Tech.*
 Zhongxi Hou, *National Univ. of Defense Tech.*
- TueDIS-17** **PID Trajectory Tracking Control of Autonomous Ground Vehicle Based on Genetic Algorithm** 3677
 Bin Zhao, *Univ. of Science and Tech. Beijing*
 Heng Wang, *Univ. of Science and Tech. Beijing*
 Qing Li, *Univ. of Science and Tech. Beijing*
 Jingkai Li, *Univ. of Science and Tech. Beijing*
 Yuefei Zhao, *Univ. of Science and Tech. Beijing*
- TueDIS-18** **A Pre-calibration Method for Concrete Distributor** 3683
 Peng Zhou, *Shenyang Jianzhu Univ.*
 Jingjing Guo, *Shenyang Jianzhu Univ.*
 Dong Li, *Shenyang Jianzhu Univ.*
 Ke Zhang, *Shenyang Jianzhu Univ.*
 Defang Zou, *Shenyang Jianzhu Univ.*
- TueDIS-19** **A Distributed and Modularised Coordination Framework for Mission Oriented Fixed-wing UAV Swarms** 3687
 Zhihong Liu, *National Univ. of Defense Tech.*
 Xiangke Wang, *National Univ. of Defense Tech.*
 Jie Li, *National Univ. of Defense Tech.*
 Yirui Cong, *National Univ. of Defense Tech.*
 Shulong Zhao, *National Univ. of Defense Tech.*
- TueDIS-20** **Analysis on Wind Resistance Index of Multi-rotor UAV** 3693
 Yongqiang Hou, *Northeastern Univ. Shenyang Inst. of Automation Inst. for Robotics and Intelligent Manufacturing*
 Wei Huang, *Northeastern Univ. Shenyang Inst. of Automation Inst. for Robotics and Intelligent Manufacturing*
 Hao Zhou, *Shenyang Inst. of Automation Inst. for Robotics and Intelligent Manufacturing*
 Feng Gu, *Shenyang Inst. of Automation Inst. for Robotics and Intelligent Manufacturing*
 Yanchun Chang, *Shenyang Inst. of Automation Inst. for Robotics and Intelligent Manufacturing*
 Yuqing He, *Shenyang Inst. of Automation Inst. for Robotics and Intelligent Manufacturing*
- TueDIS-21** **A Speed Estimation Method with Stator Resistance Online Identification based on MRAS** 3697
 Youlin Yang, *Bohai Univ.*
- TueDIS-22** **Effect of Rotation Rate Change of Rotary MIMU on System Navigation Accuracy** 3701
 Haifeng Xing, *Tsinghua Univ.*
 Meifeng Guo, *Tsinghua Univ.*
 Xinxi Zhang, *Army Academy of Armored Forces*
 Feng Ji, *Tsinghua Univ.*
 Wenming Zhang, *Tsinghua Univ.*



- TueDIS-23** **An Intelligent Adaptive Pedestrian Navigation Algorithm based on Support Vector Machine** 3706
Hengzhi Liu, *Beijing Information Science and Tech. Univ.*
Qing Li, *Beijing Information Science and Tech. Univ.*
Chao Li, *Beijing Information Science and Tech. Univ. Beijing Inst. of Tech.*
Hui Zhao, *Beijing Information Science and Tech. Univ. Beijing Inst. of Tech.*
- TueDIS-24** **Application of a Full-dimensional Observable Smoothing Algorithm in SINS** 3712
Tiansheng Wang, *Beijing Information Science & Technological Univ.*
Qing Li, *Beijing Information Science & Technological Univ.*
Chao Li, *Beijing Information Science & Technological Univ. Beijing Inst. of Tech.*
Hui Zhao, *Beijing Information Science & Technological Univ. Beijing Inst. of Tech.*
- TueDIS-25** **Research of Low-Power Low-Speed Squirrel-cage Motor** 3718
Bingxue Liang, *Northeastern Univ.*
Dazhi Wang, *Northeastern Univ.*
Bingyi Zhang, *Shenyang Univ. of Tech.*
Guangren Xu, *Shenyang Bluelight Drive Tech.*
- TueDIS-26** **Design of Electric Fixed Torque Wrench Based on Speed Difference Detection** 3724
Zhengcheng Xia, *Anhui Univ.*
Feng Xie, *Anhui Univ.*
Xiaowu Wang, *Anhui Univ.*
- TueDIS-27** **Path Planning of Escort Robot Based on Improved Quantum Particle Swarm Optimization** 3730
Minghai Jiao, *Northeastern Univ.*
Hexiang Wei, *Northeastern Univ.*
Bowen Zhang, *Northeastern Univ.*
Jiaqi Jin, *Northeastern Univ.*
Zhenqiang Jia, *Northeastern Univ.*
Junlang Yan, *Northeastern Univ.*
- TueDIS-28** **Research of Group Recommendation Based on Matrix Factorization** 3736
Shuang Zhang, *Northeastern Univ.*
Qinghe Hu, *Northeastern Univ.*
- TueDIS-29** **Cooperative Mission Planning for Heterogeneous UAVs with the Improved Multi-objective Quantum-behaved Particle Swarm optimization Algorithm** 3740
Jianfeng Wang, *National Univ. of Defense Tech.*
Gaowei Jia, *National Univ. of Defense Tech.*
Juncan Lin, *National Univ. of Defense Tech.*
Zhongxi Hou, *National Univ. of Defense Tech.*
- TueDIS-30** **Landing Peril Hybrid Decision Making Based on IFSSs** 3746
Hui Li, *Harbin Univ. of Commerce*
- TueDIS-31** **Threat Assessment of Air Target based on Dynamic Relative Entropy Ranking Method** 3750
Qiang Zhang, *Air Force Engineering Univ.*
Jinfu Feng, *Air Force Engineering Univ.*
Zongcheng Ma, *Air Force Engineering Univ.*
Guoming Chen, *Air Force Engineering Univ.*
- TueDIS-32** **Perpetual American Put Option with Default Risk** 3755
Huan Liu, *Xi'an Univ. of Tech.*
Wenxiu Hu, *Xi'an Univ. of Tech.*



- TueDIS-33** **Some New Operations on Triangular Fuzzy Number Intuitionistic Fuzzy Set** 3760
 Yongjie Xu, *Dongbei Univ. of Finance and Economics*
- TueDIS-34** **Application of Improved Grey GM (1, 1) Model in Power Prediction of Wind Farm** 3764
 Mengxiao Deng, *Tianjin Polytechnic Univ.*
 Yali Dong, *Tianjin Polytechnic Univ.*
- TueDIS-35** **An Auction-and-negotiation Based Procurement Strategy for Multiple Splittable Items** 3770
 Na Wang, *Shenyang Normal Univ. Northeastern Univ.*
 Hongfeng Wang, *Northeastern Univ.*
 Dingwei Wang, *Northeastern Univ.*
- TueDIS-36** **Research on Decision-making Optimization of Container MBPP Based on Evolutionary Strategy Algorithm** 3776
 Qiwei Zhang, *Wuhan Univ. of Science and Tech.*
 Zhixiong Liu, *Wuhan Univ. of Science and Tech.*
 Jialan Yan, *Wuhan Univ. of Science and Tech.*
- TueDIS-37** **Research on Complex Curriculum Arrangement Problem Based on Novel Quantum Genetic Evolutionary Algorithm** 3783
 Shuguang Liu, *Huangshan Univ.*
 Lin Ba, *Hong Kong Polytech Univ.*
- TueDIS-38** **A Simulation Model of Pedestrian Evacuation Considering the Fuzzy Visual Range by Fuzzy Cellular Automata** 3788
 Jiayang Li, *Shenyang Univ. Northeastern Univ.*
 Changkun Luo, *Shenyang Univ.*
 Xin Li, *Shenyang Univ.*
 Songqi Sun, *Shenyang Univ.*
- TueDIS-39** **Applications of Time-Series Hesitation Fuzzy Soft Sets in Group Decision Making** 3794
 Hang Yuan, *Northeastern Univ. at Qinhuangdao*
 Zhi Kong, *Northeastern Univ. at Qinhuangdao*
 Jie Zhao, *Northeastern Univ. at Qinhuangdao*
 Junjun Xiong, *Northeastern Univ. at Qinhuangdao*
- TueDIS-40** **The Efficiency Evaluation Study of "Creative Space" for Promoting the Development of Youth Innovation and Entrepreneurship Projects** 3797
 Zhiguo Liu, *Qingdao Univ. of Science and Tech.*
 Yumei Wang, *Qingdao Univ. of Science and Tech. Yantai Nanshan Univ.*
 Shaoqin Lin, *Qingdao Univ. of Science and Tech.*
 Beibei Liu, *Qingdao Univ. of Science and Tech.*
- TueDIS-41** **Research on Optimization Algorithm of the Supplier Determination Problem in E-Business Open Tendering Based on Rules of Supplier Quota Restraint** 3803
 Ning Qi, *Shenyang Aerospace Univ.*
- TueDIS-42** **Multi-criteria Project Selection using Fuzzy Preference Relations based AHP and TOPSIS** 3809
 Bing Han, *Army Logistics Univ.*
 Xiaoxiong Zhang, *National Univ. of Defense Technology*
 Yujiang Yi, *South-west Electronics Telecommunications Inst.*
- TueDIS-43** **An Adaptive EWMA Median Chart for Monitoring the Process Mean** 3817
 Huang Teng, *Hohai Univ.*
 Xuelong Hu, *Nanjing Univ. of Posts and Telecommunications*
 Anan Tang, *Nanjing Univ. of Science and Tech.*
 Wu Shu, *Wuhan Univ. of Tech.*
 Zhao Min, *Hohai Univ.*



- TueDIS-44** **An Adaptive Multi-population Artificial Bee Colony Algorithm for Multi-objective Flexible Job Shop Scheduling Problem** 3822
 Yang Cao, *Northeastern Univ.*
 Haibo Shi, *Shenyang Inst. of Automation, Chinese Academy of Sciences Manufacturing, Chinese Academy of Sciences Chinese Academy of Sciences*
- TueDIS-45** **An Innovative Approach to Improving the Production Capacity of Car-parts Supplier** 3828
 Longzhen Yu, *Qingdao Univ. Of Science & Tech.*
 Wencong Huang, *Qingdao Univ. Of Science & Tech. LG Electronics Yantai Subsidiary*
 Zhixian Wang, *LG Electronics Yantai Subsidiary*
- TueDIS-46** **Optimization of Parking Space Allocation for Automated Parking System of Paternoster Type by Genetic Algorithm** 3834
 Mingjun Zou, *Northeastern Univ.*
 Qing Wang, *Northeastern Univ.*
 Shu-an Liu, *Northeastern Univ.*
- TueDIS-47** **Optimizing Bus Bridging Routing in Response to Disruptions of Urban Transit Rail** 3839
 Yacui He, *Beijing Jiaotong Univ.*
 Jie Xu, *Beijing Jiaotong Univ.*
 Limin Jia, *Beijing Jiaotong Univ.*
 Yong Qin, *Beijing Jiaotong Univ.*
 Zhen Yuan, *Guangzhou Metro Group Company, Limited*
 Kunsheng Zhan, *Guangzhou Metro Group Company, Limited*
 Jian Zhang, *Guangzhou Metro Group Company, Limited*
- TueDIS-48** **Study on Maintenance Interval control of Heat Exchanger in Aircraft Systems Based on MSG-3 Philosophy** 3843
 Shiwei Zhao, *Civil Aviation Univ. of China*
 Peng Zhang, *Civil Aviation Univ. of China*
- TueDIS-49** **Modeling and Optimizing of Distributed Multi -Factory Production and Transportation Coordinative Scheduling Problem** 3848
 Hali Pang, *Northeastern Univ*
- TueDIS-50** **Integrated Energy Smart Management System Architecture Design Based on Plantwide Control** 3854
 Fei Hao, *NR Electric Company, Limited.*
 Zhen Yuan, *Power China Road Bridge Group Company, Limited.*
 Tao Liang, *NR Electric Company, Limited.*
 Ning Jia, *NR Electric Company, Limited.*
 Genjun Chen, *NR Electric Company, Limited.*
- TueDIS-51** **Reducing Waiting Time at An Airport Security Checkpoint Based on the Queuing Model** 3860
 Pan Yusheng, *Shenyang Jianzhu Univ.*
 Zhang Xicheng, *Shenyang Jianzhu Univ.*
 Xu Qicheng, *Shenyang Jianzhu Univ.*
 Liu Hongjiang, *Shenyang Jianzhu Univ.*
- TueDIS-52** **Research on the Construction of Digital Cement Production Line** 3866
 Yusen Geng, *Univ. of Jinan*
 Xiaohong Wang, *Univ. of Jinan*
 Ping Jiang, *Univ. of Jinan*
- TueDIS-53** **Design and Implementation of Intelligent Irrigation and Fertilization System in Greenhouse** 3873
 Jianwen Li, *Tianjin Univ. of Tech.*
 Man Zhang, *Tianjin Univ. of Tech.*
 Yan Zhao, *Tianjin Univ. of Tech.*



Session	WedA01 : Intelligent Control, Computation and Optimization (V)	
Venue	Room01	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Tan Liu, <i>Shenyang Agricultural Univ.</i>	
Co-Chair	Juntao Fei, <i>Hohai Univ.</i>	
8:00-8:20	WedA01-1	Recurrent Neural Network Global Sliding Mode Control Based on Fractional-order for Active Power Filter 3878 Huan Wang, <i>Hohai Univ.</i> Juntao Fei, <i>Hohai Univ.</i> Zhilin Feng, <i>Hohai Univ.</i>
8:20-8:40	WedA01-2	Predictive Control for Coke Oven Blowing Cooler System Based on SVR 3883 Zengwan Cheng, <i>Anhui Univ. of Technology</i> ShiFeng Zhang, <i>Anhui Univ. of Technology</i> ZhuWei Zhang, <i>Anhui Univ. of Technology</i>
8:40-9:00	WedA01-3	Design of Stereo Bicycle Library System Based on STM32 3889 Yong Sun, <i>Tianjin Univ. of Tech. and Education</i> Xinqi Li, <i>Tianjin Univ. of Tech. and Education</i> Yang Wang, <i>Tianjin Univ. of Tech. and Education</i>
9:00-9:20	WedA01-4	Analysis of Key Influencing Factors of Equipment Battlefield Damage Test Design 3894 Cai Chen, <i>Army Engineering Univ.</i> Quan Shi, <i>Army Engineering Univ.</i> Yadong Wang, <i>Army Engineering Univ.</i> Zhifeng You, <i>Army Engineering Univ.</i>
9:20-9:40	WedA01-5	An Improved Plant-wide Hierarchical Optimization Method Based on Technical Indices Decomposition 3899 Qingyun Yuan, <i>Shenyang Agricultural Univ.</i> Tan Liu, <i>Shenyang Agricultural Univ.</i> Yonggang Wang, <i>Shenyang Agricultural Univ.</i>
10:00-10:20	WedA01-6	Research on Intelligent Control Technology in Helicopter Wind Tunnel Test 3905 Xinfan Yin, <i>Low Speed Aerodynamics Institute of China Aerodynamics Research and Development Center</i> Guichuan Zhang, <i>Low Speed Aerodynamics Institute of China Aerodynamics Research and Development Center</i> Xianmin Peng, <i>Low Speed Aerodynamics Institute of China Aerodynamics Research and Development Center</i> Lei Li, <i>Low Speed Aerodynamics Institute of China Aerodynamics Research and Development Center</i> Bin Tian, <i>Low Speed Aerodynamics Institute of China Aerodynamics Research and Development Center</i>



Session	WedA02 : Fault Diagnosis and Self-healing Control (V)	
Venue	Room02	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Jinqing Zhang, <i>Beihang Univ.</i>	
Co-Chair	Jianying Yang, <i>Peking Univ.</i>	
8:00-8:20	WedA02-1	A Brief Review of Bayesian Belief Network 3910 Jinqing Zhang, <i>Beihang Univ.</i> Haosong Yue, <i>Beihang Univ.</i> Xingming Wu, <i>Beihang Univ.</i> Weihai Chen, <i>Beihang Univ.</i>
8:20-8:40	WedA02-2	Adaptive Fault-tolerant Control for Flight Systems with Severe Actuator Failures 3915 Man Wang, <i>China Center for Information Industry Development</i> Jianying Yang, <i>Peking Univ.</i>
8:40-9:00	WedA02-3	Development of Fault Diagnosis Test Bench for Doubly-fed Wind Generator based on Stator Current Analysis Method 3921 Xianjiang Shi, <i>Harbin Univ. of Science and Tech.</i> Wankai Ren, <i>Harbin Univ. of Science and Tech.</i> Qingkang Gao, <i>Harbin Univ. of Science and Tech.</i>
9:00-9:20	WedA02-4	Design of Fault Tolerant Control System for Four-rotor UAV Actuator Failure 3927 Wei Guan, <i>Shenyang Aerospace Univ.</i> Pei Shi, <i>Shenyang Aerospace Univ.</i>
9:20-9:40	WedA02-5	Adaptive Control Allocation for Flight Systems with Stuck Actuator Failures 3933 Man Wang, <i>China Center for Information Industry Development</i> Jianying Yang, <i>Peking Univ.</i>
9:40-10:00	WedA02-6	Stability Classification of Deformable Mirror in Adaptive Optics based on Logistic Regression 3938 Ziqiang Li, <i>Key Laboratory on Adaptive Optics</i> Qiwan Jia, <i>Key Laboratory on Adaptive Optics</i> Linhai Huang, <i>Key Laboratory on Adaptive Optics</i> Xinyang Li, <i>Key Laboratory on Adaptive Optics</i>



Session	WedA03 : Pattern Recognition and Deep Learning (IV)	
Venue	Room03	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Xin Chen, <i>Shanghai Jiao Tong Univ.</i>	
Co-Chair	FangZhou, <i>Zhejiang Univ.</i>	
8:00-8:20	WedA03-1	Amodal Detection of 3D Objects with Separate Network Output Branches 3943 Xin Chen, <i>Shanghai Jiao Tong Univ.</i> Meng Cai, <i>Luoyang Inst. of Electro-optical Equipment</i> JianXun Li, <i>Shanghai Jiao Tong Univ.</i>
8:20-8:40	WedA03-2	End-to-End Feature Learning for Text-Independent Speaker Verification 3949 FangZhou Chen, <i>Zhejiang Univ. Zhejiang Univ. Robotics Inst.</i> Tengyue Bian, <i>Zhejiang Univ. Zhejiang Univ. Robotics Inst.</i> Li Xu, <i>Zhejiang Univ. Zhejiang Univ. Robotics Inst.</i>
8:40-9:00	WedA03-3	Self-Attention Networks for Text-Independent Speaker Verification 3955 Tengyue Bian, <i>Zhejiang Univ. Zhejiang Univ. Robotics Inst.</i> Fangzhou Chen, <i>Zhejiang Univ. Zhejiang Univ. Robotics Inst.</i> Li Xu, <i>Zhejiang Univ. Zhejiang Univ. Robotics Inst.</i>
9:00-9:20	WedA03-4	Hard Ship Detection via Generative Adversarial Networks 3961 Jinlei Ma, <i>Beijing Inst. of Techn.</i> Zhiqiang Zhou, <i>Beijing Inst. of Techn.</i> Bo Wang, <i>Beijing Inst. of Techn.</i> Zhe An, <i>State Key Laboratory of Advanced Power Transmission Techn.</i>
9:20-9:40	WedA03-5	Comparison and Evaluation of Activation Functions in Term of Gradient Instability in Deep Neural Networks 3966 Xin Liu, <i>Hohai Univ. Nanjing Inst. of Techn.</i> Jun Zhou, <i>Hohai Univ.</i> Huimin Qian, <i>Hohai Univ.</i>
9:40-10:00	WedA03-6	Shared Bicycle Dynamic Distribution Model based on Boosting Algorithm 3972 Lu Han, <i>Beijing Technology and Business Univ.</i> Chongchong Yu, <i>Beijing Technology and Business Univ.</i> Yunbing Chen, <i>Beijing Technology and Business Univ.</i> Xiaojiang Tang, <i>Beijing Technology and Business Univ.</i>



Session	WedA04 : Pattern Recognition and Deep Learning (V)	
Venue	Room04	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Songhao Zhu , <i>Nanjing Univ. of Posts and Telecommunications</i>	
Co-Chair	Lingtao Huang , <i>Jilin Univ.</i>	
8:00-8:20	WedA04-1	Object Tracking Via Context Information And Correlation Filer Learning 3978 Peng Sun, <i>Nanjing Univ. of Posts and Telecommunications</i> Songhao Zhu, <i>Nanjing Univ. of Posts and Telecommunications</i> Weicheng Sun, <i>Nanjing Univ. of Posts and Telecommunications</i> Wenbo Guo, <i>Nanjing Univ. of Posts and Telecommunications</i>
8:20-8:40	WedA04-2	Epileptic State Classification for Seizure Prediction with Wavelet Packet Features and Random Forest 3983 Yuxing Wang, <i>Hangzhou Dianzi Univ.</i> Jiuwen Cao, <i>Hangzhou Dianzi Univ.</i> Xiaoping Lai, <i>Hangzhou Dianzi Univ.</i> Dinghan Hu, <i>Hangzhou Dianzi Univ.</i>
8:40-9:00	WedA04-3	Research on Living Face Detection Based on Dual Camera Contour Matching 3988 Tao Ni, <i>Jilin Univ.</i> Shaoyuan Zou, <i>Jilin Univ.</i> Zhifei Kong, <i>Jilin Univ.</i> Lingtao Huang, <i>Jilin Univ.</i> Hongyan Zhang, <i>Jilin Univ.</i> Le Sun, <i>Jilin Univ.</i>
9:00-9:20	WedA04-4	Crack Damage Detection of Bridge Based on Convolutional Neural Networks 3995 Xiaoyu Jia, <i>Guangxi Univ. of Science and Techn.</i> Wenguang Luo, <i>Guangxi Univ. of Science and Techn.</i>
9:20-9:40	WedA04-5	SVM-based Apple Classification of Soluble Solids Content by Near-infrared Spectroscopy 4001 Xiaoxu Li, <i>Univ. of Jinan</i> Shuhui Bi, <i>Univ. of Jinan</i> Yuhua Zhang, <i>National Engineering Research Center for Agricultural Products Logistics</i> Tao Shen, <i>Univ. of Jinan</i>
9:40-10:00	WedA04-6	Effective Data Classification via Combining Neural Networks and SVM 4006 Han Liu, <i>Univ. of Science and Techn.</i> Xiaowu Xiao, <i>Beijing Inst. of Techn.</i> Yanxiang Li, <i>Univ. of Science and Techn.</i> Qiang Mi, <i>Shenyang Ligong Univ.</i> Zhenwen Yang, <i>Shenyang Ligong Univ.</i>



Session	WedA05 : Signal Processing and Information Fusion (V)	
Venue	Room05	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Yuxia Sheng , <i>Wuhan Univ. of Science and Techn.</i>	
Co-Chair	Wenjuan Qi , <i>Heilongjiang Univ.</i>	
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8:20-8:40	WedA05-2	An Improved Cubature Information Filtering for Target Tracking in Distributed Wireless Sensor Networks with Measurement Outliers 4016 Jiahao Zhang, <i>Northwestern Polytechnical Univ.</i> Shesheng Gao, <i>Northwestern Polytechnical Univ.</i> Bingbing Gao, <i>Northwestern Polytechnical Univ.</i> Wenhui Wei, <i>Chang'an Univ.</i> Jiahui Yang, <i>Northwestern Polytechnical Univ.</i>
8:40-9:00	WedA05-3	Fitting H-Infinity Filter for Nonlinear Discrete-Time Systems 4022 Juan Xia, <i>Northwestern Polytechnical Univ.</i> Shesheng Gao, <i>Northwestern Polytechnical Univ.</i> Bingbing Gao, <i>Northwestern Polytechnical Univ.</i> Wenhui Wei, <i>Chang'an Univ.</i> Tian Tian, <i>Northwestern Polytechnical Univ.</i>
9:00-9:20	WedA05-4	Robust Centralized Fusion Kalman Filters with Uncertain Noise Variances 4028 Wenjuan Qi, <i>Heilongjiang Univ.</i> Zunbing Sheng, <i>Heilongjiang Univ.</i> Shigang Wang, <i>Heilongjiang Univ.</i>
9:20-9:40	WedA05-5	Research on Cantonese Phonetic Feature Extraction Algorithm Based on GMM - UBM 4034 Jing Zhang, <i>Guangdong Univ. of Foreign Studies</i>
9:40-10:00	WedA05-6	SSIM-based Weak Zero-forcing Precoder Design for Multiuser MIMO System 4039 Lunxiong Zhou, <i>Wuhan Univ. of Science and Techn.</i> Yuxia Sheng, <i>Wuhan Univ. of Science and Techn.</i> Li Chai, <i>Wuhan Univ. of Science and Techn.</i> Jingxin Zhang, <i>Swinburne Univ. of Techn.</i>



Session	WedA06 : Identification and Estimation (I)		
Venue	Room06		
Date/Time	Wednesday, 5 June, 2019 / 08:00-10:00		
Chair	Xunde Dong , <i>South China Univ. of Tech.</i>		
Co-Chair	Wenda Kang , <i>Beijing Inst. of Tech.</i>		
08:00-08:20	WedA06-1	Turbofan Engine Baseline Model Extraction Based on FDR Data 4044 Pan Wang, <i>Aero-Engine Academy of China, Beijing.</i> Kui Liu, <i>Aero-Engine Academy of China, Beijing.</i> Zijie Tang, <i>Aero-Engine Academy of China, Beijing.</i>	
08:20-08:40	WedA06-2	Recursive Identification of Hammerstein Systems with Dead-zone Input Nonlinearity 4050 Shijian Dong, <i>Zhejiang Univ. of Tech.</i> Li Yu, <i>Zhejiang Univ. of Tech.</i> Wenan Zhang, <i>Zhejiang Univ. of Tech.</i> Xusheng Yang, <i>Zhejiang Univ. of Tech.</i>	
08:40-09:00	WedA06-3	Recursive Least Squares based Hierarchical Estimation for Multi-input Nonlinear Systems 4056 Jiling Ding, <i>Shandong Univ. of Scie. and Tech.</i> Weihai Zhang, <i>Shandong Univ. of Scie. and Tech.</i>	
09:00-09:20	WedA06-4	A Frequency-Speed Subsystem of the Barkley Model for Spiral Tip Identification via Deterministic Learning 4062 Chen Song, <i>South China Univ. of Tech.</i> Xunde Dong, <i>South China Univ. of Tech.</i> Cong Wang, <i>South China Univ. of Tech.</i>	
09:20-09:40	WedA06-5	Parameter Estimation Method for Random Ocean Waves with Mixed Spectrum Model 4068 Wenda Kang, <i>Beijing Inst. of Tech.</i> Shuhe Lei, <i>Ocean Univ. of China.</i>	
09:40-10:00	WedA06-6	Practical Parameter Estimator for Dynamometer Card of Rod Pumping Systems by Measuring Terminal Data of Drive Motor 4074 Xiangyu Li, <i>Shenyang Ligong Univ.</i> Xianwen Gao, <i>Northeastern Univ.</i> Chunhua Yuan, <i>Shenyang Ligong Univ.</i> Yanbin Hou, <i>Northeastern Univ.</i> Xingyu Chen, <i>Northeastern Univ.</i>	



Session	WedA07 : Expert System, Fuzzy System and Fuzzy Control	
Venue	Room07	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Shiyun Xu, <i>China Electric Power Research Inst.</i>	
Co-Chair	Liping Xie, <i>State Nuclear Electric Power Planning Design & Research Inst. Co.</i>	
8:00-8:20	WedA07-1	Post Evaluation System of Nuclear Power Plant Construction Based on Comprehensive Fuzzy Theory 4078 Liping Xie, <i>State Nuclear Electric Power Planning Design & Research Inst. Co.</i> Yujie Sun, <i>State Nuclear Electric Power Planning Design & Research Inst. Co.</i>
8:20-8:40	WedA07-2	Integral Separation Fuzzy PID Control for Winding Tension System 4083 Shoubin Wang, <i>Univ. of Jinan.</i> Fang He, <i>Univ. of Jinan.</i> Qiang Wang, <i>Univ. of Jinan.</i>
8:40-9:00	WedA07-3	Study on Optimization Control of Fuzzy PID in Milling and Crushing System 4089 Liancheng Ma, <i>Qidashan Branch, Anshan Iron and Steel Group Corporation.</i> Yong Zhang, <i>Univ. of Science and Technology LiaoNing.</i> Hongyang Ren, <i>Univ. of Science and Technology LiaoNing.</i> Jinli Duan, <i>Qidashan Branch, Anshan Iron and Steel Group Corporation</i> Tianqi Lu, <i>State Grid LiaoNing Electric Power Company Limited Economic.</i>
9:00-9:20	WedA07-4	Coordinated Damping Control for Power System Dynamic Stability based on Wide-area Expert System 4094 Shiyun Xu, <i>China Electric Power Research Inst.</i> Lei Gao, <i>China Electric Power Research Inst.</i> Huadong Sun, <i>China Electric Power Research Inst.</i> Bing Zhao, <i>China Electric Power Research Inst.</i> Ping Wu, <i>China Electric Power Research Inst.</i> Chen Lv, <i>China Electric Power Research Inst.</i> Jingtian Bi, <i>China Electric Power Research Inst.</i>
9:20-9:40	WedA07-5	Improved Stabilization Method for Time-Delay T-S Fuzzy Systems 4100 Xin Zhao, <i>Qingdao Univ.</i> Chong Lin, <i>Qingdao Univ.</i> Bing Chen, <i>Qingdao Univ.</i> Huangxia Liu, <i>Qingdao Univ.</i> Zhiliang Liu, <i>Qingdao Univ.</i> Yuxia Yang, <i>Qingdao Univ.</i>
9:40-10:00	WedA07-6	L_∞ Filter Design for Continuous-Time T-S fuzzy Systems with Quantization 4106 Jinshuo Li, <i>Wuhan Univ. of Science and Tech.</i>



Session	WedA08 : Decision-making Theory and Method (I)	
Venue	Room08	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Longyue Li , <i>Air Force Engineering Univ.</i>	
Co-Chair	Xiangyan Zeng , <i>Guilin Univ. of Electronic Tech.</i>	
08:00-08:20	WedA08-1	Environment-Based Railway Transportation Safety Assessment Using Hybrid Belief Rule Base 4114 Jie Lei, <i>Hangzhou Dianzi Univ.</i> Xiaobin Xu, <i>Hangzhou Dianzi Univ.</i> Leilei Chang, <i>Hangzhou Dianzi Univ.</i>
08:20-08:40	WedA08-2	Multi-criterion Forecasting Methods for Collision Points of Missile Defense Engagements 4119 Longyue Li, <i>Air Force Engineering Univ.</i> Chengli Fan, <i>Air Force Engineering Univ.</i> Hailong Xu, <i>Air Force Engineering Univ.</i> Huizhen Zhao, <i>Air Force Engineering Univ.</i>
08:40-09:00	WedA08-3	A Multi-attribute Group Decision-making Approach Based on Uncertain Linguistic Information 4125 Jun Gong, <i>Navy Univ. of Engineering</i> Tao Hu, <i>Navy Univ. of Engineering</i> Ting Yu, <i>No.91709 Unit of PLA</i> Hongwei Zhu, <i>No.91709 Unit of PLA</i>
09:00-09:20	WedA08-4	A Second-order Grey Model for Forecasting Interval Number Series 4129 Xiangyan Zeng, <i>Guilin Univ. of Electronic Tech.</i> Fangli He, <i>Guilin Univ. of Electronic Tech.</i> Yanchao Shi, <i>Southwest Petroleum Univ.</i> Shuli Yan, <i>Henan Univ. of Science and Tech.</i>
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09:40-10:00	WedA08-6	Study on Crossing Behavior Decision-making Model of Unmanned Vehicles 4142 Wei Chen, <i>North China Univ. of Tech.</i> Mingming Du, <i>Beijing Inst. of Tech.</i> Gemeng Liu, <i>Beijing Inst. of Tech.</i> Xuemei Chen, <i>Beijing Inst. of Tech.</i>



Session	WedA09 : Economic Cybernetics and Social Economic Systems	
Venue	Room09	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Ping Li , <i>Harbin University of Commerce Suihua Univ.</i>	
Co-Chair	Jingyi Shao , <i>Nankai Univ.</i>	
8:00-8:20	WedA09-1	On Evaluation System of Agricultural Science and Technology Poverty 4148 Wei Wang, <i>Harbin Univ. of Commerce</i> Ping Li, <i>Harbin University of Commerce Suihua Univ.</i>
8:20-8:40	WedA09-2	Brief Algorithm Review on Vehicle Routing Problems with Different Backhaul Constraints 4152 Lin Li, <i>Central South Univ.</i> Jiao Meng, <i>Central South Univ.</i> Ying Chen, <i>Central South Univ.</i>
8:40-9:00	WedA09-3	An Empirical Research of the Impact of Monetary Policy on Stock Market Returns-- Based on the perspective of investor 4158 Lina Jia, <i>Xi'an Polytechnic Univ</i> Fangyun Wang, <i>Xi'an Polytechnic Univ</i> Hui Sun, <i>Xi'an Polytechnic Univ</i> Huiying Li, <i>Xi'an Polytechnic Univ</i>
9:00-9:20	WedA09-4	The Pricing Mechanism and Decision-making of Core Components Based on the Game Model under the Implicit Condition of Localization Substitution 4164 Jun Du, <i>National Univ. of Defense Tech., College of Systems Engineering</i> Mengjun Li, <i>National Univ. of Defense Tech., College of Systems Engineering</i>
9:20-9:40	WedA09-5	Research on Market Entry Order and Product Development Strategy of Aerospace Components Based on Game Analysis 4168 Jun Du, <i>National Univ. of Defense Tech., College of Systems Engineering</i> Mengjun Li, <i>National Univ. of Defense Tech., College of Systems Engineering</i>
9:40-10:00	WedA09-6	Empirical Analysis of Martingale Pricing for Convertible Bonds Based on Vasicek Model 4173 Jingyi Shao, <i>Nankai Univ.</i> Wanyi Chen, <i>Nankai Univ.</i>



Session	WedA10 : Robot Control (II)	
Venue	Room10	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Yahui Gan , <i>Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering</i>	
Co-Chair	Mingyue Cui , <i>Nanyang Normal Univ.</i>	
8:00-8:20	WedA10-1	Kinematic Optimization of Redundant Manipulators to Improve the Fault-Tolerant Control 4179 Yu Cao, <i>Southeast Univ.</i> Yahui Gan, <i>Southeast Univ.</i> Xianzhong Dai, <i>Southeast Univ.</i>
8:20-8:40	WedA10-2	Obstacle Avoidance of 7-DOF Redundant Manipulators 4184 Zhiyuan Xu, <i>Southeast Univ.</i> Yahui Gan, <i>Southeast Univ.</i> Xianzhong Dai, <i>Southeast Univ.</i>
8:40-9:00	WedA10-3	Design of Unified Controller for Obstacle Avoidance and Tracking of Wheeled Mobile Robots 4190 Mingyue Cui, <i>Nanyang Normal Univ.</i> Jinji Zhao, <i>Nanyang Normal Univ.</i> Hongzhao Liu, <i>Nanyang Normal Univ.</i>
9:00-9:20	WedA10-4	3D Humanoid Robot Multi-gait Switching and Optimization 4196 Yulei Lu, <i>Nanjing Univ. of Posts and Telecommunications</i> Zhiwei Liang, <i>Nanjing Univ. of Posts and Telecommunications</i> Hao He, <i>Nanjing Univ. of Posts and Telecommunications Key</i> Chengxi Xu, <i>Nanjing Univ. of Posts and Telecommunications</i> Ben Yang, <i>Nanjing Univ. of Posts and Telecommunications</i> Fang Fang, <i>Nanjing Univ. of Posts and Telecommunications</i>
9:20-9:40	WedA10-5	Research on PD-type Iterative Learning Control Algorithm of Manipulator Based on Gain Switching 4202 Zihan Ma, <i>Univ. of Chinese Academy of Sciences</i> Yanbing Liang, <i>Univ. of Chinese Academy of Sciences</i>
9:40-10:00	WedA10-6	Model-free based Adaptive RBF Neural Network Control for a Rehabilitation Exoskeleton 4208 Yi Chen, <i>Nanjing Univ. of Science and Tech.</i> Jingyi Liu, <i>Nanjing Univ. of Science and Tech.</i> Haoping Wang, <i>Nanjing Univ. of Science and Tech.</i> Zhengyuan Pan, <i>Nanjing Univ. of Science and Tech.</i> Shuaishuai Han, <i>Nanjing Univ. of Science and Tech.</i>



Session	WedA11 : Smart Grids (I)	
Venue	Room17	
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00	
Chair	Luhao Wang, <i>Univ. of Jinan</i>	
Co-Chair	Jian Guo, <i>Harbin Engineering Univ.</i>	
8:00-8:20	WedA11-1	Generalized Modeling and Coordinated Management of Energy Hub Incorporating Wind Power and Demand Response 4214 Yuchun Li, <i>Northeastern Univ.</i> Jinkuan Wang, <i>Northeastern Univ.</i> Yinghua Han, <i>Northeastern Univ.</i> Qiang Zhao, <i>Northeastern Univ.</i>
8:20-8:40	WedA11-2	Distributed Optimal Scheduling of Virtual Power Plants with Multi-micorgrid 4220 Luhao Wang, <i>Univ. of Jinan</i> Guangqian Ding, <i>Univ. of Jinan</i> Yongfeng Zhang, <i>Univ. of Jinan</i> Zipeng Wang, <i>Univ. of Jinan</i> Kezhen Han, <i>Univ. of Jinan</i> Guanguan Li, <i>Shandong Univ.</i>
8:40-9:00	WedA11-3	An Innovative Method for Optimization of Power System Restoration Path 4225 Kunlong Song, <i>Guodian Scie. and Tech. Research Inst. Co. Ltd</i> Jianming Jiang, <i>Guodian Scie. and Tech. Research Inst. Co. Ltd</i> Zongbao Gao, <i>Guodian Scie. and Tech. Research Inst. Co. Ltd</i> Gongyi Song, <i>Guodian Scie. and Tech. Research Inst. Co. Ltd</i> Yue Lu, <i>Officers College of PAP</i>
9:00-9:20	WedA11-4	Modeling and Simulation of a Positive and Negative Sequence Component Separation for Grid Voltage Based on the Improved Method of Instantaneous Symmetrical Components 4231 Jian Guo, <i>Harbin Engineering Univ.</i> Xiaobo Yang, <i>Harbin Engineering Univ.</i> Jiawen Si, <i>Harbin Engineering Univ.</i> Ke Ren, <i>Harbin Engineering Univ.</i> Pengfei Yue, <i>Harbin Engineering Univ.</i> Roaidar Khan, <i>Harbin Engineering Univ.</i>
9:20-9:40	WedA11-5	Response-based Transient Stability Control for Wind Power Connected to VSC-HVDC Grid 4238 Chao Liu, <i>China Electric Power Research Inst.</i> Chunxia Wei, <i>China Electric Power Research Inst.</i> Xiaojie Fan, <i>North China Electric Power Univ.</i> Yan Li, <i>China Electric Power Research Inst.</i> Zhibing Wang, <i>China Electric Power Research Inst.</i>
9:40-10:00	WedA11-6	The Stability Analysis of DC-DC Conversion Systems Based on Monodromy Matrix 4244 Ling Guo, <i>Northwest Minzu Univ.</i> Kun Zhang, <i>Northwest Minzu Univ.</i> Huan Pan, <i>Ningxia Univ.</i>



Session	WedAIS : Interactive Session
Venue	Room12
Date/Time	Wednesday, 5 June, 2019 / 8:00-10:00
WedAIS-01	<p>A Parameter Estimation of Fractional Order Multivariate Grey Model with Time-delay Based on Adaptive Dynamic Cat Swarm Optimization 4249</p> <p>AnSheng Li, <i>Wuhan Univ. of Tech.</i> Fei Gao, <i>Wuhan Univ. of Tech.</i> Meng Wang, <i>Wuhan Univ. of Tech.</i> Binyan Lin, <i>Wuhan Univ. of Tech.</i></p>
WedAIS-02	<p>Effect of Patient Online Information Searching on the Trust in the Doctor --A Cognitive Dissonance Theory Perspective 4254</p> <p>Yongmei Liu, <i>Central South Univ.</i> Xiangxi Lei, <i>Central South Univ.</i></p>
WedAIS-03	<p>The Influence of Technical Features of Diabetic Medical APP on Users' Continuance Intention: The Mediating Effect of Health Empowerment 4260</p> <p>Yongmei Liu, <i>Central South Univ.</i> Peiyang Lin, <i>Central South Univ.</i> Fei Jiang, <i>Central South Univ.</i></p>
WedAIS-04	<p>Accounting Control, Motivation and supervision: A Study of Financial Operation of Large Enterprises in China 4266</p> <p>Degui Zhu, <i>Harbin Univ. of Commerce</i> Liqiongyu Zhu, <i>Management Heilongjiang Univ.</i></p>
WedAIS-05	<p>Information Technology and Internal Controls: A Study of Chinese Commercial High-tech Enterprises 4271</p> <p>Degui Zhu, <i>Harbin Univ. of Commerce</i> Guixiang Li, <i>Harbin Univ. of Commerce</i></p>
WedAIS-06	<p>Exploring Motivations for Using Online Patients Community and Its Effects on Patients' Health Outcomes 4275</p> <p>Cui Xu, <i>Central South Univ.</i> Yongmei Liu, <i>Central South Univ.</i></p>
WedAIS-07	<p>A Multiattribute Decision Approach for 4PL Supply Base Design 4281</p> <p>Xiaohu Qian, <i>Shenzhen Univ.</i> Min Huang, <i>Northeastern Univ.</i> Mingqiang Yin, <i>Northeastern Univ.</i> Qingyu Zhang, <i>Shenzhen Univ.</i> Yangyang Yu, <i>Northeastern Univ.</i></p>
WedAIS-08	<p>The Optimal Type of Online Channel Considering Showrooming 4286</p> <p>Yongmei Liu, <i>Central South Univ.</i> Meng Gao, <i>Central South Univ.</i> Chen Fan, <i>Changsha Univ. of Science and Tech.</i></p>



- WedAIS-09** **Multi-product Distribution Scheduling for Electric Energy Metering Device** 4292
Tianxing Shi, *Beijing Jiaotong Univ.*
Wenliang Bian, *Beijing Jiaotong Univ.*
Kai Liu, *State Grid Tianjin Electric Power Company*
Xue Liu, *State Grid Tianjin Electric Power Company*
Rui Guo, *Beijing Jiaotong Univ.*
- WedAIS-10** **A Multilateral Fair Negotiation Embedded Matching Method under the Fourth Party Logistics** 4298
Peng Jiang, *Northeastern Univ.*
Min Huang, *Northeastern Univ.*
- WedAIS-11** **An Improved PSO Approach to Solve the Flight Gate Assignment Problem** 4303
Ping Yan, *Shenyang Aerospace Univ.*
Minghai Jiao, *Northeastern Univ.*
Yuan Yuan, *Shenyang Aerospace Univ.*
- WedAIS-12** **Pricing and Environmental Innovation in a Supply Chain with a Risk-averse Retailer** 4308
Tiantian Xu, *Nanjing Audit Univ.*
Jizhou Zhan, *Nanjing Audit Univ.*
- WedAIS-13** **The Carbon-constrained EOQ Model Under the Cap-and-Traderegulation Considering the Consumers' Low-carbon Awareness** 4314
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- WedAIS-14** **Double-trailer Drop-and-pull Container Drayage Problem** 4320
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Di Chen, *Xi'an Univ. of Tech.*
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Dan Zhang, *Xi'an Univ. of Tech.*
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Danhong Chen, *Shenyang Aerospace Univ.*
Peng Yi, *Shenyang education research inst.*
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Kai Yang, *Zhengzhou Normal Univ.*
Hao Zhang, *Zhengzhou Normal Univ.*
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- WedAIS-19** **Customer Value Analysis Based on Python Crawler** 4345
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Xifen Xu, *Nanjing Univ. of Science and Tech.*
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Xinhong Hei, *Xi'an Univ. of Tech.*
Tong Zhang, *Xi'an Univ. of Tech.*
- WedAIS-22** **Research on Personalized Tourist Attraction Recommendation based on Tag and Collaborative Filtering** 4362
Yanqing Cui, *Dalian Neusoft Univ. of Information*
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 Ruomei Liu, *Northeastern Univ.*
 Hao Sun, *Northeastern Univ.*
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 Xiang Yu, *Naval Univ. of Engineering*
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 Yanling Zhao, *Instrumentation Tech. & Economy Inst.*
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- WedAIS-34 Air Quality PM_{2.5} Prediction based on Multi-model Fusion 4426**
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 Yanling Zhao, *Instrumentation Tech. & Economy Inst.*
 Yang Li, , *Communication Univ. of China*
 Xinjian Wang, *Beijing Univ. of Tech.*



- WedAIS-35 A Knowledge Graph based Disaster Storyline Generation Framework 4432**
 Jinxin Ni, *Shenzhen Research Inst. of Xiamen Univ.*
 Xiang Liu, *Shenzhen Research Inst. of Xiamen Univ.*
 Qifeng Zhou, *Shenzhen Research Inst. of Xiamen Univ.*
 Langcai Cao, *Shenzhen Research Inst. of Xiamen Univ.*
- WedAIS-36 The Ship Collision Accidents Based on Logistic Regression and Big Data 4438**
 Yihan Wang, *Bohai Univ. of Shipping*
 Yang Ou, *Bohai Univ. of Shipping*
 Xudong Deng, *Bohai Univ. of Science and Tech.*
 Luran Zhao, *Bohai Univ. of Science and Tech.*
 Chaoyu Zhang, *Bohai Univ. of Shipping*
- WedAIS-37 Research of Elevator Security Data Mining Based on Hadoop 4441**
 Guicheng Wang, *Shanghai Inst. of Tech.*
 Changxi Han, *Shanghai Inst. of Tech.*
 Chunming Zhang, *Engineering Univ. of CAPF*
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 Min Zhang, *Shanghai Inst. of Tech.*
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 Fanjun Yao, *Qingdao Univ. of Science and Tech.*
 Yumei Wang, *Qingdao Univ. of Science and Tech. Yantai Nanshan Univ.*
- WedAIS-39 Research on Markov Prediction Model of Urban Energy Consumption Structure Based on Library Big Data 4450**
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 Fanjun Yao, *Qingdao Univ. of Science and Tech.*
 Yumei Wang, *Qingdao Univ. of Science and Tech. Yantai Nanshan Univ.*
 Jiameng Zhou, *Qingdao Univ. of Science and Tech.*
- WedAIS-40 Analysis of Knowledge Innovation Capability of High-tech Service Enterprises Based on the Perspective of Book Knowledge Spillover 4456**
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 Fanjun Yao, *Qingdao Univ. of Science and Tech.*
 Xiangru Song, *Yantai Nanshan Univ.*
 Yumei Wang, *Qingdao Univ. of Science and Tech. Yantai Nanshan Univ.*
- WedAIS-41 Gaomi Cultural and Creative Industry Cluster Development Evaluation Research 4462**
 Jing Qiu, *Library Of Univ. of Science and Tech.*
 Yumei Wang, *Library Of Univ. of Science and Tech.*
 Yanqi Zang, *Library Of Univ. of Science and Tech.*
- WedAIS-42 Single-well Economic Benefit Evaluation of Overseas Projects Under Different Output Indicator Scenarios 4468**
 Liang Tao, *PetroChina Research Inst. of Petroleum Exploration & Development*
 Wang Rui, *Heavy Oil Development Company PetroChina Xinjiang Oilfield Company*
 Dan Zhou, *International Financial Leasing Company*
 Jiexin Yi, *PetroChina Research Inst. of Petroleum Exploration & Development*
 Xiaofei Guo, *PetroChina Research Inst. of Petroleum Exploration & Development*



- WedAIS-43** **A Comparative Study on the Independence and Collaboration among the Public Purchasing Auction Participants** 4476
Huirong Jing, *Yunnan Minzu Univ.*
- WedAIS-44** **A Fusion Model of Social Influence and Group Decision** 4484
Jidong Jin, *Capital Univ. of Economics and Business*
- WedAIS-45** **Social Network Structure: Groups and Their Influence** 4489
Jidong Jin, *Capital Univ. of Economics and Business*
- WedAIS-46** **Social Network Public Opinion Evolution Model Based on Node Intimacy** 4496
Yiran Gu, *Nanjing Univ. of Posts and Telecommunications*
Bingyan Zhang, *Nanjing Univ. of Posts and Telecommunications*
- WedAIS-47** **Brand Satisfaction Analysis of New Retail Catering Industry Based on Brand Experience** 4501
Yuxin Zhao, *School of Maritime Economics and Management of Dalian Maritime Univ. Dalian Neusoft Inst. of Information*
Xiaoyu Wang, *Dalian Neusoft Inst. of Information*
Yan Chen, *School of Maritime Economics and Management of Dalian Maritime Univ.*
Qian Wang, *Dalian Neusoft Inst. of Information*
- WedAIS-48** **Solving Nash Equilibrium for Non-cooperative Game Based on the Particle Swarm Optimization Integrating Multiply Strategies** 4506
Yuliang Zhao, *Naval Univ. of Engineering*
Yexin Song, *Naval Univ. of Engineering*
Liwen Kang, *Marine Map Information Center*
- WedAIS-49** **Analysis on Electromagnetic Field of Electromagnetic Blank Holder** 4512
Yayun Zheng, *Univ. of Jinan*
Fang He, *Univ. of Jinan*
Qiang Wang, *Univ. of Jinan*
Hao Li, *Univ. of Jinan*
- WedAIS-50** **Fault Diagnosis of Sucker Rod Pumping System Using Modified Extreme Learning Machine Assisted by Gravitational Search Algorithm** 4518
Xiaogang Deng, *China Univ. of Petroleum*
Yuping Cao, *China Univ. of Petroleum*
Minghui Yang, *China Univ. of Petroleum*
Zhenhua Sun, *China Univ. of Petroleum*
Wenzhi Cui, *China Univ. of Petroleum*
- WedAIS-51** **Research on Data Synchronization of Cement Intelligent Control Cloud Platform** 4523
Shaofeng Zong, *Univ. of Jinan*
Shaohong Jing, *Univ. of Jinan*
Laiyu Li, *Univ. of Jinan*
- WedAIS-52** **Network Control Technology applied in Remote Mine Ventilation Control System** 4528
Cui Qingquan, *Yunnan Land and Resources Vocational College*
Ning Jing, *Yunnan Agricultural Univ. Kunming*
Yin Xunhe, *Beijing Jiaotong Univ.*



- WedAIS-53** **Analysis and Research on Magnetic Suspension Force of New Double Stators Maglev Switched Reluctance** 4533
 Zhen Wang, *Jiangsu Univ.*
 Fengxiang Li, *Jiangsu Univ.*
 Peng Zhu, *Jiangsu Univ.*
- WedAIS-54** **Study on Optimal Parameters of Wireless Power Transfer via Magnetic Resonance Coupling** 4538
 Tao Zhang, *Northeastern Univ.*
 Songsheng Wu, *Northeastern Univ.*
 Chenxuanyi Zou, *Northeastern Univ.*
- WedAIS-55** **Research of Photovoltaic Generation and Braking Energy Recovery System for Electric Vehicles** 4544
 Jiabao Zou, *Wuhan Univ. of Tech.*
 Zhijun Li, *Wuhan Univ. of Tech.*
 Junan Guo, *Wuhan Univ. of Tech.*
 Zhiqiang Cao, *Wuhan Univ. of Tech.*

Session	WedB01 : Intelligent Control, Computation and Optimization (VI)	
Venue	Room01	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Hongwu Guo , <i>National Univ. of Defense Tech.</i>	
Co-Chair	Yeqi Lan , <i>Sun Yat-sen Univ.</i>	
10:20-10:40	WedB01-1	Hierarchical Petri Net Model of Distributed RFID Reader Network 4549 Zhonghua Li, <i>Sun Yat-sen Univ.</i> Yeqi Lan, <i>Sun Yat-sen Univ.</i> Qilin Yu, <i>Sun Yat-sen Univ.</i> Shanjin Wang, <i>Dongguan Univ. of Technology</i>
10:40-11:00	WedB01-2	Design of an RBF Surrogate Model for Low Reynolds Number Airfoil Based on Transfer Learning 4555 Zhe Zhu, <i>National Univ. of Defense Tech.</i> Hongwu Guo, <i>National Univ. of Defense Tech.</i>
11:00-11:20	WedB01-3	The Route Planning for AMR Based on Combined Ant Colony and Genetic Algorithm 4560 Yong Zhou, <i>Northwestern Polytechnical Univ.</i> Jiakuan Gao, <i>Northwestern Polytechnical Univ.</i> Yubo Zhang, <i>Northwestern Polytechnical Univ.</i> Hao Wu, <i>Northwestern Polytechnical Univ.</i>
11:20-11:40	WedB01-4	Research on the Attitude Control of Civil Quad-Rotor UAV Based on Fuzzy PID Control 4566 Guangrun Sheng, <i>Beijing Information Science & Technology Univ.</i> Guowei Gao, <i>Beijing Information Science & Technology Univ.</i>
11:40-12:00	WedB01-5	Research on Generalized Traveling Salesman Problem based on Modified Ant Colony Optimization 4570 Meng Li, <i>Univ. of Jinan</i> Lin Yu, <i>Univ. of Jinan</i> Qing Song, <i>Univ. of Jinan</i> Wenjing Fang, <i>Univ. of Jinan</i>



Session	WedB02 : Fault Diagnosis and Self-healing Control (VI)	
Venue	Room02	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Miao Yu, <i>College of Optoelectronic Engineering</i>	
Co-Chair	Zeping Zhao, <i>Air Force Engineering Univ.</i>	
10:20-10:40	WedB02-1	Fault Diagnosis for Rolling Element Bearing under Variable Loading Based on Cumulant-based AR and FDA 4575 Liying Jiang, <i>School of Automation, Shenyang Aerospace Univ.</i> Chenglin An, <i>School of Automation, Shenyang Aerospace Univ.</i> Jianguo Cui, <i>School of Automation, Shenyang Aerospace Univ.</i> Mingyue Yu, <i>School of Automation, Shenyang Aerospace Univ.</i> Zeli Lin, <i>Aviation Key Laboratory of Science and Tech. on Fault Diagnosis and Health Management</i>
10:40-11:00	WedB02-2	An Adaptive Algorithm on Light Intensity Applied to Threshold Selection for Pipeline Detection Based on Image Processing 4581 Kecheng Zhou, <i>Northeastern Univ</i> Zi Liu, <i>Northeastern Univ</i> Xu Liu, <i>Northeastern Univ</i>
11:00-11:20	WedB02-3	Transformer Fault Diagnosis based on Massive Vibration Data 4586 Hanbo Deng, <i>College of Optoelectronic Engineering</i> Jie Hu, <i>College of Optoelectronic Engineering</i> Xusheng Wang, <i>College of Optoelectronic Engineering</i> Miao Yu, <i>College of Optoelectronic Engineering</i>
11:20-11:40	WedB02-4	Active Fault Tolerant Control Design for Satellite Attitude Systems with Mixed Actuator Faults 4592 Jun Li, <i>Nanjing Univ. of Posts and Telecommunications</i> Zhifeng Gao, <i>Nanjing Univ. of Posts and Telecommunications</i> Moshu Qian, <i>Nanjing Tech. Univ.</i>
11:40-12:00	WedB02-5	Quantized Fault Detection for Linear Uncertain Delayed Markovian Jump Systems subject to Missing Measurements 4598 Shiyu Song, <i>Harbin Univ. of Science and Tech.</i> Jun Hu, <i>Harbin Univ. of Science and Tech.</i> Weilu Chen, <i>Harbin Univ. of Science and Tech.</i> Dongyan Chen, <i>Harbin Univ. of Science and Tech.</i>



Session	WedB03 : Pattern Recognition and Deep Learning (VI)	
Venue	Room03	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Jie Li, <i>National Univ. of Defense Techn.</i>	
Co-Chair	Haohao Huang, <i>Shanghai Jiao Tong Univ.</i>	
10:20-10:40	WedB03-1	Deep Neural Network for 3D Point Cloud Completion with Multistage Loss Function 4604 Haohao Huang, <i>Shanghai Jiao Tong Univ.</i> Hongliang Chen, <i>Inst. of Electro-optical Equipment</i> Jianxun Li, <i>Shanghai Jiao Tong Univ.</i>
10:40-11:00	WedB03-2	Small Object Detection Networks Based on Classification-Oriented Super-Resolution GAN for UAV Aerial Imagery 4610 Yiting Chen, <i>National Univ. of Defense Techn.</i> Jie Li, <i>National Univ. of Defense Techn.</i> Yifeng Niu, <i>National Univ. of Defense Techn.</i> Jingbo He, <i>Unit 75840</i>
11:00-11:20	WedB03-3	Breast Cancer Diagnosis from Histopathological Image based on Deep Learning 4616 Xiang Zhan, <i>Beijing Inst. of Techn.</i> Ting Zhang, <i>Beijing Inst. of Techn.</i> Weiyang Feng, <i>Beijing Inst. of Techn.</i> Cong Lin, <i>Beijing Inst. of Techn.</i>
11:20-11:40	WedB03-4	Effectiveness Evaluation of UUV Cooperative Combat Based on GAPSO-BP Neural Network 4620 Yuanming Ding, <i>Key Laboratory of Communication and Networks Dalian Univ.</i> Chengyang Liu, <i>Key Laboratory of Communication and Networks Dalian Univ.</i> Qian Lu, <i>Key Laboratory of Communication and Networks Dalian Univ.</i> Min Zhu, <i>Key Laboratory of Communication and Networks Dalian Univ.</i>
11:40-12:00	WedB03-5	Face Recognition based on Improved Residual Neural Network 4626 Zhenzhou Chen, <i>Guangdong Univ. of Techn.</i> Pengcheng Ding, <i>Guangdong Univ. of Techn.</i>
12:00-12:20	WedB03-6	Image Classification via Hierarchical Dictionary Learning 4630 Peng Sun, <i>Nanjing Univ. of Posts and Telecommunications</i> Songhao Zhu, <i>Nanjing Univ. of Posts and Telecommunications</i> Xuewen Ju, <i>Nanjing Univ. of Posts and Telecommunications</i> Wenbo Guo, <i>Nanjing Univ. of Posts and Telecommunications</i>



Session	WedB04 : Pattern Recognition and Deep Learning (VII)	
Venue	Room04	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Yixiang Lu, <i>Anhui Univ.</i>	
Co-Chair	Lei Zhang, <i>Beijing Univ. of Chemical Techn.</i>	
10:20-10:40	WedB04-1	Tunnel Pedestrian Detection Based on Super Resolution and Convolutional Neural Network 4635 Min Zhao, <i>Chongqing Univ.</i> Ying Mei, <i>Chongqing Univ.</i> Dihua Sun, <i>Chongqing Univ.</i>
10:40-11:00	WedB04-2	Deep Neural Networks for Fatty Liver Ultrasound Images Classification 4641 Lei Zhang, <i>Beijing Univ. of Chemical Techn.</i> Haijiang Zhu, <i>Beijing Univ. of Chemical Techn.</i> Tengfei Yang, <i>Beijing Univ. of Chemical Techn.</i>
11:00-11:20	WedB04-3	Towards Support Vector Data Description based on Heuristic Sample Condensed Rule 4647 Hua Qu, <i>Xi'an Jiaotong Univ.</i> Jianlong Zhao, <i>Xi'an Jiaotong Univ.</i> Jihong Zhao, <i>Xi'an Jiaotong Univ. Xi'an Univ. of Posts and Telecommunications</i> Dingchao Jiang, <i>Xi'an Jiaotong Univ.</i>
11:20-11:40	WedB04-4	Image Feature Description Based on Local Intensity Comparison 4654 Yixiang Lu, <i>Anhui Univ.</i> Dan Ma, <i>Anhui Univ.</i> Jikai Tang, <i>Anhui Univ.</i> Xueming Peng, <i>Anhui Univ.</i>
11:40-12:00	WedB04-5	An Improved Hybrid CNN-SVM based Method for Bearing Fault Diagnosis Under Noisy Environment 4660 Jian Xu, <i>Zhejiang Univ.</i> Liu hao Ma, <i>Zhejiang Univ.</i> Wei Zhang, <i>Zhejiang Univ.</i> Qiang Yang, <i>Zhejiang Univ. Zhejiang Lab</i> Xun Li, <i>China Southern Power Grid</i> Shungui Liu, <i>China Southern Power Grid</i>
12:00-12:20	WedB04-6	A Time Weight Convolutional Neural Network for Positioning Internal Detector 4666 Senxiang Lu, <i>Northeastern Univ.</i> Jian Feng, <i>Northeastern Univ.</i> Jing Wu, <i>Liaoning Provincial Inst. of Measurement</i>



Session	WedB05 : Signal Processing and Information Fusion (VI)	
Venue	Room05	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Bo Xu, Harbin Engineering Univ.	
Co-Chair	Jianbao Liu, Naval Univ. of Engineering	
10:20-10:40	WedB05-1	Maximum Correntropy Extend Kalman Filter for Multiple AUVs Cooperative Localization 4670 Bo Xu, Harbin Engineering Univ. Xiaoyu Wang, Harbin Engineering Univ.
10:40-11:00	WedB05-2	Design and Analysis of H_∞ Filter for Network-Based Systems with Redundant Channels 4676 Shuai Yin, Heilongjiang Univ. Xiuying Li, Heilongjiang Univ. Shanghai Inst. of Techn.
11:00-11:20	WedB05-3	Research on the Method of Hyperspectral and Image Deep Features for Bacon Classification 4682 Hongbing Xiao, Beijing Techn. and Business Univ. Peiyuan Guo, Beijing Techn. and Business Univ. Xiaodong Dong, Beijing Techn. and Business Univ. Suxia Xing, Beijing Techn. and Business Univ. Mei Sun, Beijing Techn. and Business Univ.
11:20-11:40	WedB05-4	Effect of Compressive Measurement in Spatial Domain on Attitude Determination 4687 Hang Yin, Space Engineering Univ. Lei Wang, Space Engineering Univ.
11:40-12:00	WedB05-5	Inter-harmonics Parameter Detection Based on Interpolation FFT and Multiple Signal Classification Algorithm 4691 Jianbao Liu, Naval Univ. of Engineering Ying Shao, Naval Univ. of Engineering Xinxin Qin, Naval Univ. of Engineering Xin Lu, Naval Univ. of Engineering
12:00-12:20	WedB05-6	Design of Data Analysis System for Full Scale Carrier-based Aircraft Drop Test Based On LabVIEW Programming Environment 4697 Jianbo Yang, AVIC Aircraft Strength Research Inst. Xiao Li, AVIC Aircraft Strength Research Inst.



Session	WedB06 : Identification and Estimation (II)	
Venue	Room06	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Yingting Luo, <i>Sichuan Univ.</i>	
Co-Chair	Yi Hu, <i>Wuhan Univ. of Scie. and Tech.</i>	
10:20-10:40	WedB06-1	Artificial Bee Colony Algorithm with Tree-seed Searching for Modeling Multivariable Systems Using GRNN 4702 Sida Zhao, <i>Zhejiang Univ.</i> Ning Wang, <i>Zhejiang Univ.</i> Xiu Liu, <i>Zhejiang Univ.</i>
10:40-11:00	WedB06-2	LADRC based TEC Temperature Control System 4708 Keyi Shao, <i>Wuhan Univ. of Scie. and Tech.</i> Wanping Hu, <i>Wuhan Univ. of Scie. and Tech.</i> Yi Hu, <i>Wuhan Univ. of Scie. and Tech.</i> Yuyan Yu, <i>Wuhan Univ. of Scie. and Tech.</i>
11:00-11:20	WedB06-3	Monitoring of Operation Efficiency Module of Coal Fired Power Plant 4713 Shiyi Guo, <i>Shanghai Electric Power Generation Environment Protection Engineering Co.,Ltd.</i> Xin Chen, <i>Shanghai Jiao Tong Univ.</i> Chao Cao, <i>Shanghai Jiao Tong Univ.</i> Jingcheng Wang, <i>Shanghai Jiao Tong Univ. Xi'an Technological Univ.</i> Bohui Wang, <i>Xidian Univ.</i>
11:20-11:40	WedB06-4	A Decoupled Method for Lidar-based Close-range Relative Navigation of Tumbling Non-cooperative Target 4719 Qiyang Hu, <i>Beijing Inst. of Control Engineering.</i> Dayi Wang, <i>Beijing Inst. of Spacecraft System Engineering.</i>
11:40-12:00	WedB06-5	The Indirect Estimation Algorithm of MEMS IMU Stochastic Error Properties Based on Wavelet Variance 4725 Fei Liu, <i>Civil Aviation Management Inst. of China.</i> Renli Lv, <i>Civil Aviation Management Inst. of China.</i>



Session	WedB07 : Sensor Networks and Internet of Things	
Venue	Room07	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Chengpeng Jiang, <i>Univ. of Science and Tech. Beijing</i>	
Co-Chair	Fuqiang Wang, <i>Qilu Univ. of Tech.</i>	
10:20-10:40	WedB07-1	Finite-Horizon Adaptive Dynamic Programming for Collaborative Target Tracking in Energy Harvesting Wireless Sensor Networks 4731 Chengpeng Jiang, <i>Univ. of Science and Tech. Beijing</i> Fen Liu, <i>Univ. of Science and Tech. Beijing</i> Shuai Chen, <i>Univ. of Science and Tech. Beijing</i> Wendong Xiao, <i>Univ. of Science and Tech. Beijing</i>
10:40-11:00	WedB07-2	Pulse Integrated and Needle-free Targeting Intelligent Ultrasonic Conductivity Meter System 4737 Xiaoxiao Wang, <i>Beijing Inst. of Tech.</i> Lei Dong, <i>Beijing Inst. of Tech.</i> Ying Hao, <i>Beijing Inst. of Tech.</i> Chunxiao Weng, <i>Beijing NAVA Med. Tec. Co., Ltd</i>
11:00-11:20	WedB07-3	Mobile Robots Healing Strategy for Event Coverage Holes in Wireless Sensor and Robot Networks 4743 Yaoming Zhuang, <i>Northeastern Univ.</i> Chengdong Wu, <i>Northeastern Univ.</i> Yunzhou Zhang, <i>Northeastern Univ.</i> Pengju Si, <i>Northeastern Univ.</i> Yuan Gao, <i>Northeastern Univ.</i> Yang Wu, <i>Northeastern Univ.</i>
11:20-11:40	WedB07-4	Time Synchronization Method based on a Virtual Node for Wireless Sensor Networks 4749 Fuqiang Wang, <i>Qilu Univ. of Tech.</i> Xiaoming Wu, <i>Qilu Univ. of Tech.</i>
11:40-12:00	WedB07-5	Intelligent Agriculture System Based on LoRa and Qt Technology 4755 Jing Liu, <i>Zhejiang Univ.</i> Wei Yao, <i>Zhejiang Univ.</i>
12:00-12:20	WedB07-6	A Novel Intrusion Detection Method for Internet of Things 4761 Peisong Li, <i>Shanghai Maritime Univ.</i> Ying Zhang, <i>Shanghai Maritime Univ.</i>



Session	WedB08 : Decision-making Theory and Method (II)	
Venue	Room08	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Xiaosong Li , <i>PLA Military Science</i>	
Co-Chair	Xiaoping Ren , <i>National Center for Science & Tech. Evaluation</i>	
10:20-10:40	WedB08-1	Research on Dynamic Simulation of Civil-Military Integration Development System 4766 Xiaosong Li, <i>PLA Military Science</i> Zenghua Li, <i>PLA Military Science</i> Zhenhua Xiao, <i>Research Inst. of Air Force</i>
10:40-11:00	WedB08-2	Belief-rule-base Model with Attribute Reliability for Multiple Attribute Decision Making 4770 Yaqian You, <i>National Univ. of Defense Tech.</i> Jianbin Sun, <i>National Univ. of Defense Tech.</i> Jiang Jiang, <i>National Univ. of Defense Tech.</i> Yuejin Tan, <i>National Univ. of Defense Tech.</i>
11:00-11:20	WedB08-3	A Genetic Algorithm Regression Model for the Mid-long Term of China's Electricity Consumption 4776 Qing Lu, <i>Shanghai Univ. of Electric Power</i> Zhixin Zhang, <i>Shanghai Univ. of Electric Power</i>
11:20-11:40	WedB08-4	An Indicator Determination Technique based on Delphi Approach and Monte Carlo Simulation 4783 Xiaoping Ren, <i>National Center for Science & Tech. Evaluation National Inst. of Metrology</i> Yun Yang, <i>National Center for Science & Tech. Evaluation</i> Fang Nan, <i>National Center for Science & Tech. Evaluation</i> Ziyu Li, <i>National Center for Science & Tech. Evaluation</i> Jingru Chi, <i>National Center for Science & Tech. Evaluation</i> Fan Yang, <i>Central South Univ. of Forestry and Tech.</i>
11:40-12:00	WedB08-5	The Evolution Law and Crisis Early Warning of Military-related Network Public Opinion 4788 Xuanru Chen, <i>Information Engineering Univ.</i> Jichao Xing, <i>Information Engineering Univ.</i> Shaoqiang Wu, <i>Information Engineering Univ.</i> Yaorong Dai, <i>Information Engineering Univ.</i>
12:00-12:20	WedB08-6	Modeling and Decision of Success Probability of Ship Sail Mission in Multi-Force Cooperative Operation on the Sea 4794 Shunhe Guo, <i>Naval Univ. of Engineering</i> Jianwei Lv, <i>Naval Univ. of Engineering</i> Yifan Xu, <i>Naval Univ. of Engineering</i> Haojie Yang, <i>Naval Univ. of Engineering</i>



Session	WedB09 : Electric Vehicles and Intelligent Transportation (I)	
Venue	Room09	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Xiaojie Sun, <i>Dalian Maritime Univ.</i>	
Co-Chair	Yunke Wang, <i>Chongqing Univ.</i>	
10:20-10:40	WedB09-1	Bus Priority Strategy Considering Signal Compensation for Non-bus Priority Phase 4798 Jing Jin, <i>State Nuclear Electric Power Planning Design & Research Inst. Company, Limited</i> Yujie Sun, <i>State Nuclear Electric Power Planning Design & Research Inst. Company, Limited</i> Jinquan Zhen, <i>State Nuclear Electric Power Planning Design & Research Inst. Company, Limited</i>
10:40-11:00	WedB09-2	Modeling and Online Parameter Identification of Lithium Battery Considering Hysteresis Characteristics 4804 Jiayu Fan, <i>Southeast Univ.</i> Nan Chen, <i>Southeast Univ.</i> Weichao Zhuang, <i>Southeast Univ.</i> Jing Xia, <i>Univ. of Shanghai for Science and Tech.</i>
11:40-11:20	WedB09-3	Gear Ratio Optimization of Two-speed Transmission in Electric Off-road Vehicle 4810 Xinxin Zhao, <i>Univ. of Science and Tech. Beijing</i> Jingkai Wang, <i>Univ. of Science and Tech. Beijing</i> Yaran Zhang, <i>Univ. of Science and Tech. Beijing</i> Jing Tang, <i>Univ. of Science and Tech. Beijing</i> Xiaoyan Zhao, <i>Univ. of Science and Tech. Beijing</i>
11:20-11:40	WedB09-4	An In-Vehicle Infotainment Test Data Management Method based on XML Schema 4816 Yunke Wang, <i>Chongqing Univ.</i> Xiaoming Liu, <i>Chongqing Univ.</i>
11:40-12:00	WedB09-5	Fast Collision Avoidance Method Based on Velocity Resolution for Unmanned Surface Vehicle 4822 Xiaojie Sun, <i>Dalian Maritime Univ.</i> Guofeng Wang, <i>Dalian Maritime Univ.</i> Yunsheng Fan, <i>Dalian Maritime Univ.</i> Dongdong Mu, <i>Dalian Maritime Univ.</i> Bingbing Qiu, <i>Dalian Maritime Univ.</i>
12:00-12:20	WedB09-6	Design of Drive Control Strategy for Mini Pure Electric Vehicles on the Condition of Slope Climbing 4828 Anyu Cheng, <i>Chongqing Univ. of Posts and Telecommunications</i> Qiuhan Xiong, <i>Chongqing Univ. of Posts and Telecommunications</i> Ling Wang, <i>Chongqing Univ. of Posts and Telecommunications</i> Yulei Zhang, <i>Chongqing Univ. of Posts and Telecommunications</i>



Session	WedB10 : Robot Control (III)	
Venue	Room10	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Lei Zhang , <i>Henan Univ. of Science and Tech. Henan Province Engineering Laboratory of Power Electronic Device and System</i>	
Co-Chair	Weining Jin , <i>Changchun Univ. of Tech.</i>	
10:20-10:40	WedB10-1	NURBS Piecewise Interpolation Algorithm Based on Discrete S-Type Velocity Planning 4833 Buhai Shi, <i>South China Univ. of Tech.</i> Tong Jiang, <i>South China Univ. of Tech.</i>
10:40-11:00	WedB10-2	An Adaptive Neural Network Control Method for Robotic Manipulators Trajectory Tracking 4839 Lei Zhang, <i>Henan Univ. of Science and Tech. Henan Province Engineering Laboratory of Power Electronic Device and System</i> Linyun Cheng, <i>Henan Univ. of Science and Tech. Henan Province Engineering Laboratory of Power Electronic Device and System</i> ,
11:00-11:20	WedB10-3	Decentralized Guaranteed Cost Control for Reconfigurable Manipulators with Environmental Constraints Based on Adaptive Dynamic Programming 4845 Weining Jin, <i>Changchun Univ. of Tech.</i> Yi An, <i>Jilin Univ.</i> Fan Zhou, <i>Changchun Univ. of Tech.</i> Bo Dong, <i>Changchun Univ. of Tech.</i> Yuanchun Li, <i>Changchun Univ. of Tech.</i>
11:20-11:40	WedB10-4	Kinematic Control with Gravity Optimization for Redundant Manipulators under Model Uncertainties 4851 Xiaojing Lv, <i>School of Aircraft Maintenance Engineering</i> Zhihao Xu, <i>Guangdong Institute of Intelligent Manufacturing</i> Yiqun Gao, <i>School of Aircraft Maintenance Engineering</i> Xuefeng Zhou, <i>Guangdong Institute of Intelligent Manufacturing</i> Xiaoyan Lao, <i>South China Robotics Innovation Research Institute</i> Ying Chen, <i>South China Robotics Innovation Research Institute</i>
11:40-12:00	WedB10-5	Simulation Research on Motion Trajectory of PUMA 560 Manipulator Based on MATLAB 4857 Tianxiang Mei, <i>Nantong Univ.</i> Yi Yang, <i>Nantong Univ.</i> Jianbo Chen, <i>Nantong Univ.</i> Zhang Guihong, <i>Nantong Univ.</i> Ziyun Jiao, <i>Nantong Univ.</i> Long Gao, <i>Nantong Univ.</i> Xiaolin Ren, <i>Nantong Univ.</i> Qing Li, <i>Nantong Univ.</i>
12:00-12:20	WedB10-6	Experimental Study of Decentralized Robot Network Coordination 4863 Martyn Lemon, <i>Clemson Univ.</i> Timothy Anglea, <i>Clemson Univ.</i> Yongqiang Wang, <i>Clemson Univ.</i>



Session	WedB11 : Smart Grids (II)	
Venue	Room11	
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20	
Chair	Gang Chen, Chongqing Univ.	
Co-Chair	Huwei Chen, Tsinghua Univ.	
10:20-10:40	WedB11-1	The Research on the Strategy of Power Grid Fault Treatment with Multi Information Integration via Expand Linear Temporal Logic 4868 Miao Li, <i>State Grid Corporation of China</i> Jing Wang, <i>State Grid Corporation of China</i>
10:40-11:00	WedB11-2	A Novel Composite Control Strategy of Three-Phase Intermediate Frequency Multiple Inverter Power Supply 4872 Fujun Li, <i>Beijing Institute of Technology</i> Lei Dong, <i>Beijing Institute of Technology</i> Anran Wei, <i>Beijing Institute of Technology</i> Xiaozhong Liao, <i>Beijing Institute of Technology</i> Liwei Shao, <i>Research Institute of BIT in Zhongshan</i>
11:00-11:20	WedB11-3	A Distributed Algorithm for Economic Dispatch with Packet Drops and Time Delays on Digraph 4879 Ting Wang, <i>Chongqing Univ.</i> Gang Chen, <i>Chongqing Univ.</i>
11:20-11:40	WedB11-4	Risk Identification of Power Transmission System with Renewable Energy 4885 Chao Zhai, <i>Nanyang Technological Univ.</i> Gaoxi Xiao, <i>Nanyang Technological Univ.</i> Hehong Zhang, <i>Nanyang Technological Univ.</i>
11:40-12:00	WedB11-5	Optimal Incentive Decision-making Scheme for Charging Electric Vehicles in Internet of Things: A Stackelberg Game Approach 4891 Huwei Chen, <i>Tsinghua Univ.</i> Yong Zhao, <i>Tsinghua Univ.</i> Wei Qian, <i>Tsinghua Univ.</i> Shijun Chen, <i>Tsinghua Univ.</i>
12:00-12:20	WedB11-6	Modeling and Simulation of Asymmetric Three-phase Grid Voltage Phase-locking Method Based on Improved Extended Kalman Filter 4897 Jian Guo, <i>Harbin Engineering Univ.</i> Xiaobo Yang, <i>Harbin Engineering Univ.</i> Ke Ren, <i>Harbin Engineering Univ.</i> Jiawen Si, <i>Harbin Engineering Univ.</i> Pengfei Yue, <i>Harbin Engineering Univ.</i> Roaidar Khan, <i>Harbin Engineering Univ.</i>



Session	WedBIS : Interactive Session
Venue	Room12
Date/Time	Wednesday, 5 June, 2019 / 10:20-12:20
WedBIS-01	A Hypergraph-Based Key Management Scheme for Smart Charging Networking 4904 Zhi Li, <i>State Grid Information & Telecommunication Group Company, Limited.</i> Yanzhu Liu, <i>Great Wall Computer Software and Systems Inc.</i> Di Liu, <i>State Grid Information & Telecommunication Group Company, Limited.</i> Nan Zhang, <i>State Grid Information & Telecommunication Group Company, Limited.</i> Xueying Ding, <i>State Grid Information & Telecommunication Group Company, Limited.</i> Yuanyuan Liu, <i>State Grid Information & Telecommunication Group Company, Limited.</i>
WedBIS-02	Design and Realization of High Power Density EV Charging Module 4909 Shuguang Liu, <i>Huangshan Univ.</i> Jia Jiang, <i>Anhui Dorje Electric Company, Limited.</i> Zhenxing Ye, <i>Huangshan Univ.</i> Gang Cheng, <i>Huangshan Univ.</i>
WedBIS-03	Research on Vector Control Strategy of Three Phase VIENNA Rectifier Employed in EV Charger 4914 Shuguang Liu, <i>Huangshan Univ.</i> Jia Jiang, <i>Anhui Dorje Electric Company, Limited.</i> GangCheng, <i>Huangshan Univ.</i>
WedBIS-04	An Improved Traffic Flow Prediction Algorithm Based on TLBO and BP 4918 Qiong Wu, <i>Shenyang Univ. Chang'an Univ.</i> Xiangmo Zhao, <i>Chang'an Univ.</i>
WedBIS-05	Design of Communication Module of Vehicle Controller Based on ISO26262 Standard 4922 Anyu Cheng, <i>Chongqing Univ. of Posts and Telecommunications</i> Lin Qin, <i>Chongqing Univ. of Posts and Telecommunications</i> Qiuhan Xiong, <i>Chongqing Univ. of Posts and Telecommunications</i> Youguo Li, <i>Chongqing Univ. of Posts and Telecommunications</i>
WedBIS-06	Study on Flux Weakening Speed Regulation of Permanent Magnet Synchronous Motor for Vehicle 4928 Yuanyuan Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Shuang Zhao, <i>Chongqing Univ. of Posts and Telecommunications</i> Yanjing Zhao, <i>Chongqing Univ. of Posts and Telecommunications</i>
WedBIS-07	Optimal Energy Consumption Oriented Car-Following Model for Electric Vehicles Traffic Flow 4933 Zhenyu Zhong, <i>Chongqing Univ. of Posts and Telecommunications</i> Yongfu Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Kaibi Zhang, <i>Chongqing Univ. of Posts and Telecommunications</i>
WedBIS-08	Lateral Stability Improvement of In-Wheel-Motor-Driven Electric Vehicles Using Gain-scheduled Robust Control 4938 Xianjian Jin, <i>Shanghai Univ. Jilin Univ</i> Guodong Yin, <i>Southeast Univ.</i> Nan Chen, <i>Southeast Univ.</i>
WedBIS-09	Improved-ORB-based SLAM Using RGB-D Data 4944 Yan Zhou, <i>Xiangtan Univ.</i> Biye Li, <i>Xiangtan Univ.</i> Yafang Li, <i>Xiangtan Univ.</i> Dongli Wang, <i>Xiangtan Univ.</i>



- WedBIS-10** **Lidar-IMU and Wheel Odometer Based Autonomous Vehicle Localization System** 4950
 Shaojiang Zhang, *Harbin Inst. of Tech.*
 Yanning Guo, *Harbin Inst. of Tech.*
 Qiang Zhu, *Tianjin CATARC Data Limited*
 Zhiyuan Liu, *Harbin Inst. of Tech.*
- WedBIS-11** **Event-based Improved FAST Corner Feature Detection Algorithm** 4956
 Shiguang Wen, *Faculty of Robot Science and Engineering*
 Wen An, *College of Information Science and Engineering*
 Haojia Li, *Faculty of Robot Science and Engineering*
 Hongyan Wei, *College of Information Science and Engineering*
- WedBIS-12** **Designing and Implementing a Model for a Semi-autonomous Blind-guiding System** 4962
 Dehong Cong, *Northeastern Univ.*
 Xuanhong Liao, *Northeastern Univ.*
 Yangyang Huang, *Northeastern Univ.*
 Aijun Fan, *Northeastern Univ.*
 Xinqi Gao, *Northeastern Univ.*
- WedBIS-13** **High-precision Planar Positioning System Test Platform** 4968
 Fengrong Xu, *Northeastern Univ.*
 Hongshuo Li, *Northeastern Univ.*
 Hansong Liu, *Northeastern Univ.*
 Yang Xiu, *Northeastern Univ.*
 Jiang Fucheng, *Northeastern Univ.*
- WedBIS-14** **Research on Assistance Evaluation and Online Optimization Method of Lower Limb Exoskeleton Based on Musculoskeletal Model** 4974
 Lei Sun, *National Univ. of Defense Tech.*
 Honglei An, *National Univ. of Defense Tech.*
 Hongxu Ma, *National Univ. of Defense Tech.*
 Qing Wei, *National Univ. of Defense Tech.*
- WedBIS-15** **Research on Arm Movement Aided Electronic System for Parkinson's Patients** 4980
 Huimin Zhang, *Univ. of Science and Tech. Beijing*
 Han Zhang, *Univ. of Science and Tech. Beijing*
 Xiaoyan Zhao, *Univ. of Science and Tech. Beijing*
 Zhaohui Zhang, *Univ. of Science and Tech. Beijing*
- WedBIS-16** **Direct Adaptive Fuzzy Compensation Control of a Skeleton Post-Stroke Rehabilitation Robot's Wrist Joint With Unmodeled Dynamics** 4986
 Xiongjun Wu, *National Defense Key Laboratory of Science and Tech. on Electromagnetic Scattering*
 Yang Qian, *Shanghai Shentian Industrial Co., Ltd.*
 Ying Chen, *Shanghai Jiaotong Univ.*
 Yangtai Guan, *Shanghai Jiaotong Univ.*
 Ding Li, *Shanghai Jiao Tong Univ. Affiliated Sixth Peoples Hospital*



- WedBIS-17** **Correlation Between Diabetes and Body Composition of based on Decision Tree and Neural Network** 4992
 Xufei Bai, *Dalian Univ.*
 Bo Chen, *Lingnan Normal Univ.*
 Xiue Gao, *Lingnan Normal Univ.*
 Jiahao Li, *Dalian Univ.*
- WedBIS-18** **System Design and Clinical Simulation of A Robotic System for Endoscopic Sinus Surgery** 4998
 Jinyao Yang, *Nankai Univ.*
 Li Gao, *Nankai Univ.*
 Ningbo Yu, *Nankai Univ.*
- WedBIS-19** **Trajectory Tracking Control of an Aerial Robot based on Linear Active Disturbance Rejection Control Approach** 5004
 Ding Li, *Nankai Univ.*
 Gao Zhenqi, *Nankai Univ.*
- WedBIS-20** **A Survey of Three-Dimensional Flight Path Planning for Unmanned Aerial Vehicle** 5010
 Baoye Song, *Shandong Univ. of Science and Tech.*
 Gaoru Qi, *Shandong Univ. of Science and Tech.*
 Lin Xu, *Shandong Univ. of Science and Tech.*
- WedBIS-21** **Complete Coverage Path Planning of UUV for Marine Mine Countermeasure Using Grid Division and Spanning Tree** 5016
 Hongchuan Luo, *Army Engineering Univ. of PLA*
 Haifeng Lin, *Army Engineering Univ. of PLA*
 Tao Zhu, *Army Engineering Univ. of PLA*
 Zhao Kang, *Army Engineering Univ. of PLA*
- WedBIS-22** **Path Following Control for Static Docking Recovery of an Underactuated AUV in the Presence of Ocean Current Disturbances** 5022
 Xiaoliang Zhang, *Systems Engineering Research Inst of China State Shipbuilding Corporation*
 Zaopeng Dong, *Wuhan Univ. of Tech.*
 Min Yu, *Wuhan Univ. of Tech.*
 Shixin Chu, *Wuhan Univ. of Technology*
- WedBIS-23** **Vision-based Navigation of UAV with Continuous Action Space Using Deep Reinforcement Learning** 5030
 Benchun Zhou, *Beihang Univ.*
 Weihong Wang, *Beihang Univ.*
 Zhenghua Liu, *Beihang Univ.*
 Jia Wang, *Beihang Univ.*
- WedBIS-24** **Pheromone Inspired with Directional Variable on Underwater Robot Swarm** 5036
 Chao Geng, *Systems Engineering Research Inst of China State Shipbuilding Corporation*
 Guannan Li, *Wuhan Univ. of Tech.*
 Hongli Xu, *Wuhan Univ. of Tech.*



- WedBIS-25 The Coordinate Control of Multi-UUVs Formation with Double Independent Communication Topologies in the Situation of Velocity Information Missing 5041**
 Yibo Liu, *Systems Engineering Research Inst. of CSSC*
 Aigen Huang, *Systems Engineering Research Inst. of CSSC*
 Xing Liu, *Systems Engineering Research Inst. of CSSC*
- WedBIS-26 A Novel Control Design of Bilateral Teleoperation System with Fuzzy Logic based General Environments 5047**
 Fanghao Huang, *Zhejiang Univ.*
 Zheng Chen, *Zhejiang Univ. Zhejiang Lab*
 Jason Gu, *Dalhousie Univ. Zhejiang Lab*
 Shiqiang Zhu, *Zhejiang Univ. Zhejiang Lab*
- WedBIS-27 Research on Improved PD Control of Flexible Manipulator 5053**
 Hongmei Zhang, *Shenyang Aerospace Univ.*
 Xinyi Gao, *Shenyang Aerospace Univ.*
 Guangyan Xu, *Shenyang Aerospace Univ.*
- WedBIS-28 Improvement of Gmapping Algorithm Based on Non-continuous System 5058**
 Tianshu Zheng, *Northeastern Univ.*
 Chongxi Meng, *Northeastern Univ.*
 Peng Zou, *Northeastern Univ.*
 Jiao Wang, *Northeastern Univ.*
- WedBIS-29 Design of Bidirectional DC-DC Converter Control Based on Arrange the Transition Process 5064**
 Bao Yang, *Tianjin Univ. of Tech.*
 Yunliang Wang, *Tianjin Univ. of Tech.*
 Xuesong Zhou, *Tianjin Univ. of Tech.*
 Youjie Ma, *Tianjin Univ. of Tech.*
- WedBIS-30 A Novel Improved Variable Step Size INC MPPT Method for PV Systems 5070**
 Yang Liu, *Changchun Inst. of Tech.*
 Yunbo Zhang, *Changchun Inst. of Tech.*
- WedBIS-31 SOC Estimation Method for Lithium-ion Batteries: Extended Kalman Filter with Weighted Innovation 5074**
 Yiyang Han, *Nanjing Univ. of Posts and Telecommunications*
 Jie Ding, *Nanjing Univ. of Posts and Telecommunications*
 Jiazhong Chen, *Nanjing Univ. of Posts and Telecommunications*
 Peng Sun, *Nanjing Univ. of Posts and Telecommunications*
- WedBIS-32 Numerical Simulation of Energy Separation in a Vortex Tube with Different Vane Number Rectifiers 5079**
 Rui Li, *Univ. of Shanghai for Science and Tech.*
 Zhuohuan Hu, *Univ. of Shanghai for Science and Tech.*
 Yang Gao, *Univ. of Shanghai for Science and Tech.*



- WedBIS-33** **Research on Optimization of Wind/PV/Storage Capacity Configuration Based on Homer Software** 5084
 Lin jing Hu, *Inner Mongolia Univ. of Tech.*
 Tong Liu, *Inner Mongolia Univ. of Tech.*
 Kai Liu, *Inner Mongolia Univ. of Tech.*
- WedBIS-34** **The Current Status and Experience of Renewable Energy Development in Portugal** 5090
 Wei Yang, *China Electric Power Research Inst. Centro de Investigação em Energia REN-State Grid*
 Rui Pestana, *Centro de Investigação em Energia REN-State Grid*
 Xing Zhang, *China Electric Power Research Inst.*
 Joao Esteves, *Centro de Investigação em Energia REN-State Grid*
 Yan Li, *China Electric Power Research Inst.*
 Francisco Reis, *Centro de Investigação em Energia REN-State Grid*
- WedBIS-35** **Design of Photovoltaic Charging Pile for Electric Bicycle Based on New Inverter** 5095
 Xiaowei Qi, *Northeastern Univ. at Qinhuangdao*
 Hongjun Shao, *Northeastern Univ. at Qinhuangdao*
 Junjie Su, *Northeastern Univ. at Qinhuangdao*
 Rong Yang, *Northeastern Univ. at Qinhuangdao*
- WedBIS-36** **Research on Reactive Power Compensation System of Offshore Wind Farm** 5100
 Xueyuan Xu, *Shan dong Electric power engineering consulting institute corp. LTD.*
 Huadong Wei, *Shan dong Electric power engineering consulting institute corp. LTD.*
 Yimu Fu, *State Grid Shandong Electric Power Company*
 Xiao Fan, *Shan dong Electric power engineering consulting institute corp. LTD.*
 Yongkui Lu, *Shan dong Electric power engineering consulting institute corp. LTD.*
 Yiqun Wang, *State Grid Shandong Electric Power Company*
 Pan Lv, *State Grid XinJiang Electric Power CO. LTD*
- WedBIS-37** **Self-admittance Simulation Analysis for Power Network Stability Research** 5106
 Xuesong Zhou, *Tianjin Univ. of Tech.*
 Yangyang Cui, *Tianjin Univ. of Tech.*
 Youjie Ma, *Tianjin Univ. of Tech.*
- WedBIS-38** **Correlations Between Generation Output of Two Different Photovoltaic Power Stations based on the Field Data of Xinjiang** 5111
 Yu Weihao, *North China Electric Power Univ.*
- WedBIS-39** **Solve the Inverted Pendulum Problem base on DQN Algorithm** 5115
 Xiaoqian Li, *Tsinghua Univ.*
 Houde Liu, *Tsinghua Univ.*
 Xueqian Wang, *Tsinghua Univ.*
- WedBIS-40** **Optimized Control for Exoskeleton for Lower Limb Rehabilitation with Uncertainty** 5121
 Jun Chen, *Anhui Univ.*
 Yuan Fan, *Anhui Univ.*
 Mingwei Sheng, *Anhui Univ.*
 Mingjian Zhu, *Anhui Univ.*



- WedBIS-41 Adaptive Vision-based Force/position Tracking of Robotic Manipulators Interacting with Uncertain Environment 5126**
 Lijiao Wang, *Beijing Inst. of Control Engineering*
 Bin Meng, *Beijing Inst. of Control Engineering*
- WedBIS-42 Adaptive Sliding Mode Decentralized Control for Modular and Reconfigurable Robots with Torque Sensor 5132**
 Yan Li, *Changchun Univ. of Tech.*
 Zengpeng Lu, *Changchun Univ. of Tech.*
 Fan Zhou, *Changchun Univ. of Tech.*
 Bo Dong, *Changchun Univ. of Tech.*
 Keping Liu, *Changchun Univ. of Tech.*
 Yuanchun Li, *Changchun Univ. of Tech.*
- WedBIS-43 An Automatic Robot Skills Learning System from Robot s Real-World Demonstrations 5138**
 Boyao Li, *Chinese Academy of Sciences*
 Tao Lu, *Chinese Academy of Sciences*
 Xiaocan Li, *Chinese Academy of Sciences*
 Yinghao Cai, *Chinese Academy of Sciences*
 Shuo Wang, *Chinese Academy of Sciences*
- WedBIS-44 A Modified Wave Variable Method in Bilateral Teleoperation System with Time Delay 5143**
 Chenyao Xu, *Tsinghua Univ.*
 Xueqian Wang, *Tsinghua Univ.*
 Xiaojun Zhu, *Beijing Univ. of Posts and Telecommunications*
 Bin Liang, *Tsinghua Univ. Research Inst. of Tsinghua Univ. in Shenzhen*
- WedBIS-45 Motion Control of Omnidirectional Mobile Robot Based on Fuzzy PID 5149**
 Qian Jia, *Nanjing Inst. of Tech.*
 Chao Chang, *Nanjing Inst. of Tech.*
 Shuqing Liu, *Nanjing Inst. of Tech.*
 Luhao Zhang, *Nanjing Inst. of Tech.*
 Sidi Zhang, *Nanjing Inst. of Tech.*
- WedBIS-46 Combined Control based on Passive Dynamic Walking for Variable Slope Walking 5155**
 Limei Liu, *Jilin Univ. of Finance and Economics*
- WedBIS-47 Adaptive Trajectory Tracking Control of Wheeled Mobile Robot 5161**
 Xiao Shen, *Tianjin Polytechnic Univ.*
 Wuxi Shi, *Tianjin Polytechnic Univ.*
- WedBIS-48 Random Trajectory Tracking of Flexible Manipulator with Buffer 5166**
 Hongwei Li, *Yantai Univ.*
 Zhaojing Wu, *Yantai Univ.*
 Dianfeng Zhang, *Yantai Univ.*



- WedBIS-49** **Trajectory Tracking Control of a Spherical Robot Based on Adaptive PID Algorithm** 5171
Song Zihao, *Beijing Jiaotong Univ.*
Wu Bin, *Beijing Jiaotong Univ.*
Zhou Ting, *Beijing Jiaotong Univ.*
- WedBIS-50** **Dynamic Kick Optimization of Humanoid Robot Based on Options Framework** 5176
Hao He, *Nanjing Univ. of Posts and Telecommunications Key Laboratory of Measurement and Control of CSE*
Zhiwei Liang, *Nanjing Univ. of Posts and Telecommunications Key Laboratory of Measurement and Control of CSE*
Yulei Lu, *Nanjing Univ. of Posts and Telecommunications Key Laboratory of Measurement and Control of CSE*
Chengxi Xu, *Nanjing Univ. of Posts and Telecommunications Key Laboratory of Measurement and Control of CSE*
Ben Yang, *Nanjing Univ. of Posts and Telecommunications Key Laboratory of Measurement and Control of CSE*
Fang Fang, *Nanjing Univ. of Posts and Telecommunications Key Laboratory of Measurement and Control of CSE*
- WedBIS-51** **Formation Deployment of Cooperative Source Seeking by Multiple Robots: Algorithms and Experiments** 5182
Dezheng Zhu, *The 28th Research Institute of China Electronics Technology Group Corporation*
Meng Cao, *The 28th Research Institute of China Electronics Technology Group Corporation*
- WedBIS-52** **3-DOF Flexible Joint Manipulator Motion Control based on the Double-layer Structure** 5188
Xianghui Huang, *Xi'an Univ. of Science and Tech.*
Qi Ni, *Xi'an Univ. of Science and Tech.*
Hongguang Pan, *Xi'an Univ. of Science and Tech.*
Wenyu Mi, *Xi'an Univ. of Science and Tech.*
- WedBIS-53** **Design and Implementation of the Freedom Gymnastic Robot with the Ten DOF** 5194
Cui Qingquan, *Yunnan Land and Resources Vocational College*
Ning Jing, *Yunnan Agricultural Univ.*



Session	WedC01 : Intelligent Control, Computation and Optimization (VII)	
Venue	Room01	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Huanqing Wang, Bohai Univ.	
Co-Chair	Xun Wang, Air Force Engineering Univ.	
13:30-13:50	WedC01-1	Finite-time Adaptive Fault-tolerant Control for Strict-feedback Nonlinear Systems 5200 Huanqing Wang, <i>Bohai Univ.</i> Wen Bai, <i>Bohai Univ.</i>
13:50-14:10	WedC01-2	Research on Data Driven Modeling Method of Grinding Process based on RBF Neural Network 5205 Bingyu Liu, <i>Northeastern Univ.</i> Bojian Liu, <i>Northeastern Univ.</i> Dezhi Hao, <i>Northeastern Univ.</i> Xianwen Gao, <i>Northeastern Univ.</i>
14:10-14:30	WedC01-3	Complex Network Nodes Attack Method based on Improved Genetic Algorithm 5210 Xun Wang, <i>Air Force Engineering Univ.</i> Peiyang Yao, <i>Air Force Engineering Univ.</i> Jieyong Zhang, <i>Air Force Engineering Univ.</i> Lujun Wan, <i>Air Force Engineering Univ.</i> Wensheng Chi, <i>Air Force Engineering Univ.</i>
14:30-14:50	WedC01-4	The Study of Modified ADRC Algorithm for Six Degrees of Freedom Shipboard Stabilized Platform 5217 Lei Guo, <i>Nanjing Univ. of Science and Tech.</i> Xufeng Wang, <i>Shanghai Electro-Mechanical Engineering Inst.</i> Lu Liu, <i>Nanjing Univ. of Science and Tech.</i> Liang Shan, <i>Nanjing Univ. of Science and Tech.</i> Rong Lin, <i>Nanjing Univ. of Science and Tech.</i> Jun Li, <i>Nanjing Univ. of Science and Tech.</i>
14:50-15:10	WedC01-5	Modeling Method for Performance Prediction of Centrifugal Compressor Based on Broad Learning System 5223 Fei Chu, <i>China Univ. of Mining and Tech.</i> Jiaming Su, <i>China Univ. of Mining and Tech.</i> Tao Liang, <i>China Univ. of Mining and Tech.</i> Xiaoping Ma, <i>China Univ. of Mining and Tech.</i> Fuli Wang, <i>Northeastern Univ.</i>
15:10-15:30	WedC01-6	An Adaptive Differential Evolution Crisscross Optimization Based Dynamic Economic/ Emission Dispatch Considering Wind Power 5228 Panpan Mei, <i>Hunan Univ. Of Science And Tech.</i> Lianghong Wu, <i>Hunan Univ. Of Science And Tech.</i> Hongqiang Zhang, <i>Hunan Univ. Of Science And Tech.</i> Zhenzu Liu, <i>Hunan Univ. Of Science And Tech.</i>



Session	WedC02 : Fault Diagnosis and Self-healing Control (VII)	
Venue	Room02	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Donghui Pan , <i>Anhui Univ.</i>	
Co-Chair	Zijun Ren , <i>Northwestern Polytechnical Univ.</i>	
13:30-13:50	WedC02-1	Output Data Identification Model for buried Pipeline Damage Detection Using Blind Source Separation Technique Complexity Pursuit 5234 Zia Ullah, <i>Beijing Univ.</i> Xinhua Wang, <i>Beijing Univ.</i> Yingchun Chen, <i>Beijing Univ.</i> Hasan Shahzad, <i>Beijing Univ.</i> Tao Zhang, <i>Beijing Univ.</i> Haiyang Ju, <i>Beijing Univ.</i> Yizhen Zhao, <i>Beijing Univ.</i>
13:50-14:10	WedC02-2	A New Life Estimation Result based on a Nonlinear Degradation Model 5240 Xiaohui Yu, <i>Anhui Univ.</i> Donghui Pan, <i>Anhui Univ.</i> Yongbin Liu, <i>Anhui Univ.</i>
13:50-14:10	WedC02-3	Fault Detection of Flight Vehicle Electric Servo System by Extended Kalman Filter 5244 Zhicheng Zhao, <i>Univ. of Jinan Quancheng College</i> Dongbo Wang, <i>Weifang Univ. of Science and Tech.</i> Bing Zhao, <i>Weifang Univ. of Science and Tech.</i> Xiaoxiang Hu, <i>Weifang Univ. of Science and Tech.</i>
14:30-14:50	WedC02-4	Fault Diagnosis of Turntable Angle Measuring System based on Symmetric Sliding Window Wavelet Transform 5250 Zijun Ren, <i>Northwestern Polytechnical Univ.</i> Xing Jin, <i>Northwestern Polytechnical Univ.</i> Liangliang, <i>Xing Beijing Institute of Electronic System Engineering</i> Kang Chen, <i>Northwestern Polytechnical Univ.</i> Wenxing Fu, <i>Northwestern Polytechnical Univ.</i> Jie Yan, <i>Northwestern Polytechnical Univ.</i>
14:50-15:10	WedC02-5	Faults Prediction and Diagnoses of Shield Machine Based on LSTM 5254 Zhonghai Sun, <i>South China Univ. of Tech.</i> Hengyu Zheng, <i>South China Univ. of Tech.</i> Buhai Shi, <i>South China Univ. of Tech.</i>
15:10-15:30	WedC02-6	A Fault Classification Method of Photovoltaic Array Based on Probabilistic Neural Network 5260 Xiaoxiao Wang, <i>Beijing Institute of Tech.</i> Lei Dong, <i>Beijing Institute of Tech.</i> Shengyang Liu, <i>Beijing Institute of Tech.</i> Ying Hao, <i>Beijing Institute of Tech.</i> Bo Wang, <i>China Electric Power Research Institute</i>



Session	WedC03 : Pattern Recognition and Deep Learning (VIII)	
Venue	Room03	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Jun Wu , <i>Harbin Inst. of Techn.</i>	
Co-Chair	Dongpo Li , <i>Nanjing Univ.</i>	
13:30-13:50	WedC03-1	Skeleton Based Fall Detection with Convolutional Neural Network 5266 Jun Wu, <i>Harbin Inst. of Techn.</i> Ke Wang, <i>Harbin Inst. of Techn.</i> Baoping Cheng, <i>China Mobile (Hangzhou) Information Techn. Co.</i> Ruifeng Li, <i>Harbin Inst. of Techn.</i> Changfan Chen, <i>Harbin Inst. of Techn. Johns Hopkins Univ.</i> Tianxiang Zhou, <i>Harbin Inst. of Techn.</i>
13:50-14:10	WedC03-2	An Efficient Optical Flow Based Motion Detection Method for Non-stationary Scenes 5272 Junjie Huang, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i> Wei Zou, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences TainJin Intelligent Tech. Inst.</i> Zheng Zhu, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i> Jiangang Zhu, <i>Chinese Academy of Sciences Univ. of Chinese Academy of Sciences</i>
14:10-14:30	WedC03-3	Defect Detection of Pantograph Slider Based on Improved Faster R-CNN 5278 Siyang Jiang, <i>Beijing Jiaotong Univ.</i> Xiukun Wei, <i>Beijing Jiaotong Univ.</i> Ziming Yang, <i>Beijing Jiaotong Univ.</i>
14:30-14:50	WedC03-4	Spatio-Temporal Discriminative Correlation Filter Based Object Tracking 5284 Zheng Xu, <i>Nanjing Univ. of Posts and Telecommunications</i> Songhao Zhu, <i>Nanjing Univ. of Posts and Telecommunications</i> Peng Sun, <i>Nanjing Univ. of Posts and Telecommunications</i> Wenbo Guo, <i>Nanjing Univ. of Posts and Telecommunications</i>
14:50-15:10	WedC03-5	Pilots' Brain Cognitive State Inference Based on Remaining Life HSMM 5289 Yingxue Luo, <i>Shanghai Jiaotong Univ.</i> Wu Qi, <i>Shanghai Jiaotong Univ.</i>
15:10-15:30	WedC03-6	Dwell Time Adaptive Three-Way Text Entry by Gaze 5295 Dongpo Li, <i>Nanjing Univ.</i> Libo Zhang, <i>Nanjing Univ.</i> Wenting Hu, <i>Jiangsu Open Univ.</i> Huaxiong Li, <i>Nanjing Univ.</i> Xiangzhong Zhou, <i>Nanjing Univ.</i>



Session	WedC04 : Pattern Recognition and Deep Learning (IX)	
Venue	Room04	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Shuming Tang , <i>Chinese Academy of Sciences</i>	
Co-Chair	Siyu Xia , <i>Southeast Univ.</i>	
13:30-13:50	WedC04-1	A Review on Object Detection Based on Deep Convolutional Neural Networks for Autonomous Driving 5301 <i>Jialin Lu, Chinese Academy of Sciences</i> <i>Shuming Tang, Chinese Academy of Sciences</i> <i>Jinqiao Wang, Chinese Academy of Sciences</i> <i>Haibing Zhu, Chinese Academy of Sciences</i> <i>Yunkuan Wang, Chinese Academy of Sciences</i>
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Session	WedC05 : Optimal Control and Optimization (III)	
Venue	Room05	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Hong Huang , <i>Beijing Inst. of Tech.</i>	
Co-Chair	Jianguo Guo , <i>Northwestern Polytechnical Univ.</i>	
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Venue	Room06	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Yunong Zhang, <i>Sun Yat-sen Univ.</i>	
Co-Chair	Zhaojing Wu, <i>Yantai Univ.</i>	
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Session	WedC07 : Robust Control	
Venue	Room07	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Shigang Wang , <i>Heilongjiang Univ.</i>	
Co-Chair	Shuping He , <i>Anhui Univ.</i>	
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Session	WedC08 : Decision-making Theory and Method (III)	
Venue	Room08	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Zhibin Wu , <i>Sichuan Univ.</i>	
Co-Chair	Zhi Zheng , <i>Fujian Normal Univ.</i>	
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15:10-15:30	WedC08-6	Multi-variable Grey Prediction Model based on Positive Real Order Random Weakening Buffer Sequence 5456 Jiwei Liu, <i>Communication Univ. of China</i> Suqin Min, <i>Communication Univ. of China</i> Mengdi Jin, <i>Communication Univ. of China</i>



Session	WedC09 : Electric Vehicles and Intelligent Transportation (II)	
Venue	Room09	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Xianjian Jin, <i>Shanghai Univ Jilin Univ.</i>	
Co-Chair	Guodong Yin, <i>Southeast Univ.</i>	
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Session	WedC10 : Mobile Robotics (I)	
Venue	Room10	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Dazi Li, <i>Beijing Univ. of Chemical Tech.</i>	
Co-Chair	Peng-fei WU, <i>Naval Univ. of Engineering Unit 92925 of PLA</i>	
13:30-13:50	WedC10-1	Experimental Research on Feature Extraction of Laser SLAM Based on Artificial Landmarks 5495 Mingchao Hu, <i>Harbin Inst. of Tech.</i> Hongrui Ao, <i>Harbin Inst. of Tech.</i> Hongyuan Jiang, <i>Harbin Inst. of Tech.</i>
13:50-14:10	WedC10-2	Distance-based Formation Control of a Three-Robot System 5501 Zhuo Chen, <i>Stevens Inst. of Tech.</i> Chao Jiang, <i>Stevens Inst. of Tech.</i> Yi Guo, <i>Stevens Inst. of Tech.</i>
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Session	WedC11 : Smart Grids (III)	
Venue	Room11	
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30	
Chair	Jianliang Zhang , <i>Zhejiang Univ.</i>	
Co-Chair	Shijie Yan , <i>Northeastern Univ.</i>	
13:30-13:50	WedC11-1	A Game Model based Distributed Power Dispatch for Wind Generators in Wind Farm with Variable Communication 5533 Jianliang Zhang, <i>Zhejiang University</i> Donglian Qi, <i>Zhejiang University</i>
13:50-14:10	WedC11-2	Impact of Offshore Wind Power on Transient Stability of Power System and Control Strategy Optimization 5538 Ming Dai, <i>Shandong Huayu Univ.of Tech.</i> Zhengguang Fu, <i>Shandong Huayu Univ.of Tech.</i> Haitao Zhang, <i>State Grid Shandong Power Company Dezhou Power Supply Company</i> Shiliang Zhang, <i>Shandong Reachuan Electric Power Technology Co. Ltd</i> Chao Liu, <i>China Electric Power Research Institute</i>
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Session	WedCIS : Interactive Session
Venue	Room12
Date/Time	Wednesday, 5 June, 2019 / 13:30-15:30
WedCIS-01	A Method for Position Estimation of Mobile Robot Based on Data Fusion 5568 Wenjian Yan, <i>Harbin Inst. of Tech.</i> Ke Wang, <i>Harbin Inst. of Tech.</i> Ruifeng Li, <i>Harbin Inst. of Tech.</i>
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WedCIS-03	Path Tracking Control of Omnidirectional Mobile Robot Based on Bidirectional Visual Navigation 5579 Qian Jia, <i>Nanjing Inst. of Tech.</i> Chao Chang, <i>Nanjing Inst. of Tech.</i> Luhao Zhang, <i>Nanjing Inst. of Tech.</i> Ke Zhang, <i>Nanjing Inst. of Tech.</i> Sidi Zhang, <i>Nanjing Inst. of Tech.</i>
WedCIS-04	An Improved ORB-SLAM Algorithm for Mobile Robots 5585 Xinhua Liu, <i>Wuhan Univ. of Tech.</i> Linjun Chen, <i>Wuhan Univ. of Tech.</i> Xiaodan Wang, <i>Wuhan Univ. of Tech.</i> Hailan Kuang, <i>Wuhan Univ. of Tech.</i> Xiaolin Ma, <i>Wuhan Univ. of Tech.</i>
WedCIS-05	An Adaptive Sliding Mode Controller for Four-wheeled Omnidirectional Mobile Robot with Input Constraints 5591 Wang Jianbin, <i>Zhaoqing Univ.</i> Chen Jianping, <i>Zhaoqing Univ.</i>
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 Fu Cheng, *Beijing City Univ.*
 Jing Bai, *Beijing City Univ.*
 Huiyu Wang, *Beijing City Univ.*
 Xiaoguang Xie, *Henan Information Engineering School*
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 Xincheng Tian, *Shandong Univ.*
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 Zongnan Zhang, *Tianjin Univ. of Tech.*
 Zhangbo Wei, *Tianjin Univ. of Tech.*
 Jinqiang Xi, *Tianjin Univ. of Tech.*
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 Keping Liu, *Changchun Univ. of Tech.*
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 Hongtao Yang, *Changchun Univ. of Tech.*
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 Can Tian, *Shenyang Aerospace Univ.*
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 Qian Xiao, *Shenyang Univ.*
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- WedCIS-28** **Improved BACF Tracker Based on Multi-Peak Detection in Visual Tracking** 5711
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 Gang Yang, *Northeastern Univ.*
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 Oloro Michael, *Shenyang Jianzhu Univ.*
 Ma Ruwei, *Shenyang Jianzhu Univ.*
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 Mao Yaobin, *Nanjing Univ. of Sci. & Tech.*
- WedCIS-31** **Research on Face Recognition Algorithm for Robot Vision** 5728
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- WedCIS-32** **Fast Salient Object Detection based on Multi-scale Feature Aggression** 5734
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 Yanfeng Ge, *Shenyang Univ. Of Tech.*
 Tie Li, *Shenyang Univ. Of Tech.*
 Dai Cui, *Shenyang Univ. Of Tech.*



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 Shan Gao, *State Grid Shandong Electric Power Company*
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- WedCIS-45 Study on the Demand and Requirements of Renewable Energy Primary Frequency Control 5804**
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 Francisco Reis, *Centro de Investigação em Energia REN*
 Yizheng Xu, *China Electric Power Research Institute*
 Xing Zhang, *China Electric Power Research Institute*
 Yan Li, *China Electric Power Research Institute*
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- WedCIS-46 Application of Artificial Intelligence in Digital Design of Substation 5809**
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 Zhongkun Ma, *State Nuclear Electric Power Planning Design & Research Institute CO.,LTD*
 Yunwei Li, *State Nuclear Electric Power Planning Design & Research Institute CO.,LTD*
 Lin Wang, *State Nuclear Electric Power Planning Design & Research Institute CO.,LTD*
 Yu Gao, *State Nuclear Electric Power Planning Design & Research Institute CO.,LTD*
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- WedCIS-48 Power System Transient Stability Assessment Method Based on Convolutional Neural Network 5819**
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- WedCIS-49 Research of Energy Consumption Information Collection based on Object-oriented Technology 5825**
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 Xiaoguang Yin, *State Grid Dalian Electric Power Supply Company*
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 An Hu, *Northeastern Univ.*
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 Songwei Lv, *Northeastern Univ.*
- WedCIS-53 Ship Target Detection Method based on SRM Segmentation and Hierarchical Line Segment Features 5847**
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 Lian Kai Chen, *Jiangsu Univ. of Science and Tech.*
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- WedCIS-54 Soil Moisture Measurement Based on Monte Carlo Method 5852**
 lingli Zhao, *Beifang Univ. of Nationalities*



Session	WedD01 : Intelligent Control, Computation and Optimization (VIII)	
Venue	Room01	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Weilong Gao, <i>Northeastern Univ.</i>	
Co-Chair	Jinglei Huang, <i>State Key Laboratory of Air Traffic Management System and Tech.</i>	
15:50-16:10	WedD01-1	The Framework of Data Distribution Management with Region Match Method of Middleware in Joint Test Platform 5856 Zhiyuan Du, <i>Space Engineering Univ.</i> Shuai Liu, <i>Space Engineering Univ.</i> Xuejun Liao, <i>Space Engineering Univ.</i>
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16:30-16:50	WedD01-3	Research on Improved Train Automatic Control Strategy Based on Particle Swarm Optimization 5867 Weidong Li, <i>Dalian Jiaotong Univ.</i> Xiaoyan Li, <i>Dalian Jiaotong Univ.</i> Yang Liu, <i>Dalian Jiaotong Univ.</i> Chuntong Hua, <i>Dalian Jiaotong Univ.</i>
16:50-17:10	WedD01-4	Improved Cuckoo Algorithm for Adaptive Adjustment of Discovery Probability 5873 Kun Wang, <i>Beijing Tech. and Business Univ.</i> Han Jia, <i>Beijing Tech. and Business Univ.</i> Khan Malak Abid Ali, <i>Beijing Tech. and Business Univ.</i> Xiaofeng Lian, <i>Beijing Tech. and Business Univ.</i>
17:10-17:30	WedD01-5	An Interval Discrete Wavelet Neural Network Model and Its Numerical Analysis 5879 Shouping Guan, <i>Northeastern Univ.</i> Zihe Zhang, <i>Northeastern Univ.</i>
17:30-17:50	WedD01-6	A Dynamical Programming-Based Method to Generate Control Strategy for Air Traffic Flow 5885 Jinglei Huang, <i>State Key Laboratory of Air Traffic Management System and Tech.</i> Qiucheng Xu, <i>State Key Laboratory of Air Traffic Management System and Tech.</i> Jing Tian, <i>State Key Laboratory of Air Traffic Management System and Tech.</i> Yongjie Yan, <i>State Key Laboratory of Air Traffic Management System and Tech.</i>



Session	WedD02 : Fault Diagnosis and Self-healing Control (VIII)	
Venue	Room02	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Zhenhua Wang, <i>Harbin Institute of Tech</i>	
Co-Chair	Chunlei Pang, <i>Air Force Engineering Univ.</i>	
15:50-16:10	WedD02-1	A Novel Detection Method for Open-Circuit Fault in Modular Multilevel Converters 5891 Cui Li, <i>Wuhan Univ. of Science and Technology</i> Zhenxing Liu, <i>Wuhan Univ. of Science and Technology</i> Yong Zhang, <i>Wuhan Univ. of Science and Technology</i> Longzhang Ke, <i>Wuhan Univ. of Science and Technology</i>
16:10-16:30	WedD02-2	Modular Simulation for Thickness and Tension of Five-Stand Cold Rolling 5897 Hanqi Li, <i>Northeastern Univ.</i> Mingxing Jia, <i>Northeastern Univ.</i> Zhizhong Mao, <i>Northeastern Univ.</i>
16:30-16:50	WedD02-3	Fault Diagnosis for Attitude Sensors based on Analytical Redundancy and EMD 5903 Rui Niu, <i>Shanghai Institute of Spaceflight Control Tech.</i> Weixin Liu, <i>Shanghai Institute of Precision Measurement and Test</i> Bo Wang, <i>Shanghai Institute of Precision Measurement and Test</i> Liliang Li, <i>Shanghai Institute of Spaceflight Control Tech.</i> Zhenhua Wang, <i>Harbin Institute of Tech</i>
16:50-17:10	WedD02-4	Fault Tolerant Control of Actuator Additive Fault for Quadrotor Based on Sliding Mode Observer 5908 Jiajing Zheng, <i>Huaqiao Univ.</i> Ping Li, <i>Huaqiao Univ.</i>
17:10-17:30	WedD02-5	A Multivariate Monitoring Method based on PCA and Dual Control Chart 5914 Liang Liu, <i>Northeastern Univ.</i> Jianchang Liu, <i>Northeastern Univ.</i> Xia Yu, <i>Northeastern Univ.</i> Honghai Wang, <i>Northeastern Univ.</i> Zhaoqiang Chen, <i>Northwestern Polytechnical Univ.</i>
17:30-17:50	WedD02-6	Improved Fault Detection and Tolerance Method based on Local Test and Adaptively Robust Filtering for INS/GNSS Integration 5919 Chuang Zhang, <i>Air Force Engineering Univ.</i> Xiubin Zhao, <i>Air Force Engineering Univ.</i> Chunlei Pang, <i>Air Force Engineering Univ.</i> Chao Gao, <i>Air Force Engineering Univ.</i> Bo Feng, <i>Air Force Engineering Univ.</i>



Session	WedD03 : Pattern Recognition and Deep Learning (X)	
Venue	Room03	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Lianqiao Li , <i>China Jiliang Univ.</i>	
Co-Chair	Changming Han , <i>The College of Communication Engineering of Jilin Univ.</i>	
15:50-16:10	WedD03-1	Deep Convolutional Neural Networks with Curriculum Learning for Facial Expression Recognition 5925 Xiaoqian Liu, <i>Shangdong Univ.</i> Fengyu Zhou, <i>Shangdong Univ.</i> Dongdong Shen, <i>Shangdong Univ.</i> Shuqian Wang, <i>Shangdong Univ.</i>
16:10-16:30	WedD03-2	An Improved Image Inpainting Method Based on Patch Matching and Texture Synthesis 5933 Shaofang Lu, <i>The College of Communication Engineering of Jilin Univ.</i> Changming Han, <i>The College of Communication Engineering of Jilin Univ.</i>
16:30-16:50	WedD03-3	Recognition and Application of Infrared Thermal Image Among Power Facilities Based on YOLO 5939 Lianqiao Li, <i>China Jiliang Univ.</i> Xiai Chen, <i>China Jiliang Univ. Zhejiang Yalong Educational Equipment Joint-Stock Co.</i> Huili Zhou, <i>China Jiliang Univ.</i> Ling Wang, <i>China Jiliang Univ.</i>
16:50-17:10	WedD03-4	A Method for Coloring Low-resolution Black and White Old Movies through Object Understanding 5944 Ming Fang, <i>Northeast Normal Univ.</i> Yu Song, <i>Northeast Normal Univ.</i> Xiaoying Bai, <i>Northeast Normal Univ.</i> Yushu Ren, <i>Northeast Normal Univ.</i> Shuhua Liu, <i>Northeast Normal Univ.</i>
17:10-17:30	WedD03-5	Real-time Hand Gesture Recognition Based on Deep Learning in Complex Environments 5950 Weixin Wu, <i>National Univ. of Defense Techn.</i> Meiping Shi, <i>National Univ. of Defense Techn.</i> Tao Wu, <i>National Univ. of Defense Techn.</i> Dawei Zhao, <i>National Univ. of Defense Techn.</i> Shuai Zhang, <i>National Univ. of Defense Techn.</i> Junxiang Li, <i>National Univ. of Defense Techn.</i>
17:30-17:50	WedD03-6	Identification and Detection of Automotive Door Panel Solder Joints based on YOLO 5956 Zhimin Mo, <i>South China Univ. of Techn.</i> Liding Chen, <i>South China Univ. of Techn.</i> Wenjing You, <i>South China Univ. of Techn.</i>



Session	WedD04 : Pattern Recognition and Deep Learning (XI)	
Venue	Room04	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Fei Wang , <i>Northeastern Univ.</i>	
Co-Chair	Tao Shen , <i>Univ. of Jinan</i>	
15:50-16:10	WedD04-1	Machine Vision-based Apple External Quality Grading 5961 Maoyong Nie, <i>Univ. of Jinan</i> Qinjun Zhao, <i>Univ. of Jinan</i> Yuan Xu, <i>Univ. of Jinan</i> Tao Shen, <i>Univ. of Jinan</i>
16:10-16:30	WedD04-2	Shucked Corn Detection based on GMM and LBP Features 5967 Zechuan Liu, <i>Univ. of Science and Techn. of China</i> Song Wang, <i>Univ. of Science and Techn. of China</i> Keli Han, <i>Chinese Academy of Agricultural Mechanization Sciences</i> Zengde Han, <i>Chinese Academy of Agricultural Mechanization Sciences</i> Dayong Zhang, <i>Univ. of Science and Techn. of China</i> Qiang Ling, <i>Univ. of Science and Techn. of China</i>
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16:50-17:10	WedD04-4	Research on a Continuous Deep Belief Network for Feature Learning of Time Series Prediction 5977 Qili Chen, <i>Beijing Univ. of Techn.</i> Guangyuan Pan, <i>Univ. of Waterloo</i> Junfei Qiao, <i>Beijing Univ. of Techn.</i> Ming Yu, <i>The Chinese Univ. of Hong Kong</i>
17:10-17:30	WedD04-5	Gesture Recognition and Localization Using Convolutional Neural Network 5984 Fei Wang, <i>Northeastern Univ.</i> Li Kong, <i>Northeastern Univ.</i> Xing Zhang, <i>Northeastern Univ.</i> Hu Chen, <i>Northeastern Univ.</i>
17:30-17:50	WedD04-6	Accurate Ship Detection via Paired Semantic Segmentation 5990 Xiaowu Xiao, <i>Beijing Inst. of Techn.</i> Zhiqiang Zhou, <i>Beijing Inst. of Techn.</i> Bo Wang, <i>Beijing Inst. of Techn.</i> Zhe An, <i>State Key Laboratory of Advanced Power Transmission Techn.</i>



Session	WedD05 : Optimal Control and Optimization (IV)	
Venue	Room05	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Qilong Sun , <i>Beijing Inst. of Space Long March Vehicle, Beijing.</i>	
Co-Chair	Yanliang Zhang , <i>Wuhan Univ. of Scie. and Tech.</i>	
15:50-16:10	WedD05-1	Guidance Law for Attacking Active Defense Aircraft 5995 Qilong Sun, <i>Beijing Inst. of Space Long March Vehicle, Beijing.</i> Xiaolong Gu, <i>Beijing Inst. of Space Long March Vehicle, Beijing.</i> Tianxiao Cai, <i>Beijing Inst. of Space Long March Vehicle, Beijing.</i> Shengmin Deng, <i>Beijing Inst. of Space Long March Vehicle, Beijing.</i> Naiming Qi, <i>Harbin Inst. of Tech.</i>
16:10-16:30	WedD05-2	Defeating 2-D Runge Problem by Coefficients and Order Determination (CAOD) Method 6000 Siyuan Feng, <i>Sun Yat-sen Univ.</i> Ning Tan, <i>Sun Yat-sen Univ.</i> Huanchang Huang, <i>Sun Yat-sen Univ.</i> Min Yang, <i>Sun Yat-sen Univ.</i> Yunong Zhang, <i>Sun Yat-sen Univ.</i>
16:30-16:50	WedD05-3	Ground Moving Targets Recognition Based on Chaos Genetic Algorithm 6006 Xiangzhong Meng, <i>Army Artillery and Air Defense Forces Academy.</i> Wei Pan, <i>Army Artillery and Air Defense Forces Academy.</i> Feng Huang, <i>Army Artillery and Air Defense Forces Academy.</i> Huixiang Xie, <i>Army Artillery and Air Defense Forces Academy.</i> Lichao Ding, <i>Army Artillery and Air Defense Forces Academy.</i>
16:50-17:10	WedD05-4	Landing Path Planning for General Aircraft Based on Legendre Pseudo Spectral Method 6012 Guangyan Xu, <i>Shenyang Aerospace Univ.</i> Pengfei Liu, <i>Shenyang Aerospace Univ.</i> Hongmei zhang, <i>Shenyang Aerospace Univ.</i>
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17:30-17:50	WedD05-6	Research on Group Review and Conversion Algorithm Based on National Counselor Competition 6024 Qinhao Yan, <i>Wuhan Univ. of Tech.</i> Yanliang Zhang, <i>Wuhan Univ. of Scie. and Tech.</i>



Session	WedD06 : Theory and Application of Nonlinear Systems (IV)	
Venue	Room06	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Zhiliang Liu, Qingdao Univ.	
Co-Chair	Tian Li, Southeast Univ.	
15:50-16:10	WedD06-1	Short-term Load Forecast using Maximum Overlap Discrete Wavelet Transform and BP Neural Network based on Chaos Theory 6029 Rui Lu, <i>Beijing Forestry Univ.</i> Ting Lei, <i>Beijing Forestry Univ.</i>
16:10-16:30	WedD06-2	Fixed-Time Output Feedback Control for a Class of High-Order Nonlinear Systems 6034 Anmin Zou, <i>Shantou Univ.</i>
16:30-16:50	WedD06-3	Stability Investigation of Car-trailer Combinations Considering Steering System Stiffness 6040 Tian Li, <i>Southeast Univ.</i> Ning Zhang, <i>Southeast Univ.</i> Jian Ma, <i>Southeast Univ.</i> Guodong Yin, <i>Southeast Univ.</i>
16:50-17:10	WedD06-4	Fractional Order Fixed-Time Nonsingular Sliding Mode Control of a Fractional Hydro-Turbine Governing System 6046 Ziwei Zhu, <i>Xi'an Jiaotong Univ.</i> Chongxin Liu, <i>Xi'an Jiaotong Univ.</i> Yan Wang, <i>Xi'an Jiaotong Univ.</i> Jian Liu, <i>State Grid Shaanxi Electric Power Research Inst., Xi'an.</i>
17:10-17:30	WedD06-5	Output Tracking Control of Time-Varying Nonlinear Scalar Systems Using ZD and ZG Methods 6052 Ning Tan, <i>Sun Yat-sen Univ.</i> Nini Shi, <i>Sun Yat-sen Univ.</i> Huanchang Huang, <i>Sun Yat-sen Univ.</i> Jinjin Guo, <i>Sun Yat-sen Univ.</i> Yunong Zhang, <i>Sun Yat-sen Univ.</i>
17:30-17:50	WedD06-6	Observer-based Adaptive Control for Switched Nonlinear Systems with Input Quantization 6059 Zhiliang Liu, <i>Qingdao Univ.</i> Yun Shang, <i>Qingdao Univ.</i> Bing Chen, <i>Qingdao Univ.</i> Chong Lin, <i>Qingdao Univ.</i> Xin Zhao, <i>Qingdao Univ.</i>



Session	WedD07 : Process Control and Predictive Control (II)	
Venue	Room07	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Dakuo He, <i>Northeastern Univ.</i>	
Co-Chair	Yu Meng, <i>Univ. of Science and Tech. Beijing.</i>	
15:50-16:10	WedD07-1	Soft Sensor Modeling and Adaptive Model Correction Strategy for Gold Cyanide Leaching Process 6065 Qing Liu, <i>Northeastern Univ.</i> Zhengsong Wang, <i>Northeastern Univ.</i> Yu Liang, <i>Northeastern Univ.</i> Zhiqiang Wang, <i>Northeastern Univ.</i> Fangting Peng, <i>Northeastern Univ.</i> Dakuo He, <i>Northeastern Univ.</i>
16:10-16:30	WedD07-2	MPC-Based Path Tracking of Mobile Robots in the Non-Global Coordinate System 6071 Guoxing Bai, <i>Univ. of Science and Tech. Beijing</i> Yu Meng, <i>Univ. of Science and Tech. Beijing</i> Qing Gu, <i>Univ. of Science and Tech. Beijing</i> Xin Gan, <i>Univ. of Science and Tech. Beijing</i> Li Liu, <i>Univ. of Science and Tech. Beijing</i>
16:30-16:50	WedD07-3	Multi-Model Control of Cement Combined Grinding Ball Mill System Based on Adaptive Dynamic Programming 6076 Hangke Cui, <i>Univ. of Jinan</i> Zhugang Yuan, <i>Univ. of Jinan</i> Peng Luo, <i>Univ. of Jinan</i> Xi Zhang, <i>Univ. of Jinan</i>
16:50-17:10	WedD07-4	Soft Sensor for Ball Mill Load Based on Multi-view Domain Adaptation Learning 6082 Xuqi Guo, <i>Taiyuan Univ. of Tech.</i> Fei Yan, <i>Taiyuan Univ. of Tech.</i> Yusong Pang, <i>Delft Univ. of Tech.</i> Gaowei Yan, <i>Taiyuan Univ. of Tech.</i>
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17:30-17:50	WedD07-6	Performance Trend Prediction Analysis of Key Component of Aircraft Hydraulic System 6093 Jianguo Cui, <i>Shenyang Aerospace Univ.</i> Pengcheng Li, <i>Shenyang Aerospace Univ.</i> Mingyue Yu, <i>Shenyang Aerospace Univ.</i> Liying Jiang, <i>Shenyang Aerospace Univ.</i> Jinglin Wang, <i>Aviation Key Laboratory of Science and Tech. on Fault Diagnosis and Health Management.</i>



Session	WedD08 : Decision-making Theory and Method (IV)	
Venue	Room08	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Chunguang Chang , <i>Shenyang Jianzhu Univ.</i>	
Co-Chair	Lei Li , <i>Zhejiang Normal Univ.</i>	
15:50-16:10	WedD08-1	Comparative Study on the Service Pricing Strategy of Car Wash Industry 6098 Jiuru Zhao, <i>Guangdong Univ. of Foreign Studies</i>
16:10-16:30	WedD08-2	An Improved Topsis Method Based on Cloud Model for Risk Assessment of Failure Modes of Metro Vehicle 6104 Lei Li, <i>Zhejiang Normal Univ. Rutgers Univ.</i> Fang Zhou, <i>Hangzhou Metro Group Ltd Operation Branch</i> Ge Guo, <i>China Academy of Railway Sciences Corporation Limited</i>
16:30-16:50	WedD08-3	Hesitant-intuitionistic Fuzzy Preference Relation and Its Application in Group Decision Making 6111 Jintao Yu, <i>Army Academy of Artillery and Air Defense</i> Jinshan Wang, <i>Army Academy of Artillery and Air Defense</i>
16:50-17:10	WedD08-4	Approaches to Modeling and Optimization of Warship Testability Indicators Based on Mission Process Analysis 6116 Zongren Xie, <i>Center of Assessment and Demonstration Research</i> Kui Geng, <i>Center of Assessment and Demonstration Research</i> Jiancheng Luo, <i>Center of Assessment and Demonstration Research</i>
17:10-17:30	WedD08-5	Disjunctive Belief Rule Base Optimization by Ant Colony Optimization for Railway Transportation Safety Assessment 6120 Wei Zhu, <i>Hangzhou Dianzi Univ.</i> Pingzhi Hou, <i>Hangzhou Dianzi Univ.</i> Leilei Chang, <i>Hangzhou Dianzi Univ.</i> Xiaobin Xu, <i>Hangzhou Dianzi Univ.</i>
17:30-17:50	WedD08-6	Two Level Optimization Model for Multi Period Compounding Loan of Engineering Project Groups 6125 Chunguang Chang, <i>Shenyang Jianzhu Univ.</i> Xi Wu, <i>Shenyang Jianzhu Univ.</i> Hongxue Li, <i>Shenyang Jianzhu Univ.</i> Xuelong Wang, <i>Shenyang Jianzhu Univ.</i>



Session	WedD09 : Electric Vehicles and Intelligent Transportation (III)	
Venue	Room09	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
Chair	Cunwu Han , <i>North China Univ. of Tech.</i>	
Co-Chair	Dawei Pi , <i>North China Univ. of Tech.</i>	
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Venue	Room10	
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50	
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Co-Chair	Lei Sun , <i>Tianjin Univ. of Tech.</i>	
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Session	WedD11 : Smart Grids (IV)	
Venue	Room11	
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Co-Chair	Enhui An, Northeastern Univ.	
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13:50-14:10	WedD11-2	Research on Integrated Energy Regional Trading Strategy Based on Cooperative Game 6210 Enhui An, <i>Northeastern Univ.</i> Qiuye Sun, <i>Northeastern Univ.</i> Dazhong Ma, <i>Northeastern Univ.</i>
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Venue	Room12
Date/Time	Wednesday, 5 June, 2019 / 15:50-17:50
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WedDIS-03	Phase Measurement Circuit Study of Eddy Current Signal in MIT 6248 Dan Yang, <i>Northeastern Univ.</i> Puguang Hao, <i>Northeastern Univ.</i> Fei Hu, <i>Northeastern Univ.</i> Nengxin Pan, <i>Northeastern Univ.</i>
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 Yajie Wang, *Shenyang Aerospace Univ.*
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