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Technical Papers

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Co-Chair	<i>Hailin Zhao, Zhejiang Univ.</i>

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Session	SatB01: Presentations by Finalists of Zhang Si-Ying Outstanding Youth Paper Award
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Co-Chair	Yi Zhao, Shenzhen Univ.

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17:30-17:50	SatB03-6	Consensus of Continuous-time Linear Multi-agent Systems with Intermittent Information Transmission 900 Fen Zhang, <i>Xidian Univ.</i> Zhi Li, <i>Xidian Univ.</i> Yanbang Zhang, <i>Xianyang Normal University</i>

Session	SatB04: Nonlinear Systems (I)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 04
Chair	Guoping Jiang, Nanjing Univ. of Posts and Telecommunications
Co-Chair	Xiaoling Wang, Qingdao Univ.

15:50-16:10	SatB04-1	Stability Analysis for Switched Systems with ISS and Unstable Time-Delayed Subsystems 905 Zhongping Jiang New York Univ. Yuandan Lin Florida Atlantic Univ. Yuan Wang Florida Atlantic Univ.
16:10-16:30	SatB04-2	Nonlinear Vertical Plan Motion Feedback Stabilization of a Fast Ferry with Flaps and T-Foil 910 Ticherfatine Mounia Harbin Engineering Univ. Qidan Zhu Harbin Engineering Univ.
16:30-16:50	SatB04-3	Observer Design for Incommensurate Fractional Systems 916 Baojin Wang Harbin Inst. of Tech. Zhiyuan Liu Harbin Inst. of Tech.
16:50-17:10	SatB04-4	Fuzzy Approximation-Based Adaptive Command Filtered Control for Induction Motors 922 Xiaoling Wang Qingdao Univ. Yumei Ma Qingdao Univ. Jinpeng Yu Qingdao Univ. Lichao Liu Qingdao Univ. Wei Li Qingdao Univ.
17:10-17:30	SatB04-5	Chaos Synchronization of Two Uncertain Chaotic Nonlinear Gyros Using Adaptive Backstepping Design 928 Loembe-Souamy Nanjing Univ. of Posts and Telecommunications Rostand. M. Davy Guoping Jiang Nanjing Univ. of Posts and Telecommunications Chunxia Fan Nanjing Univ. of Posts and Telecommunications Xinwei Wang Nanjing Univ. of Posts and Telecommunications Xu Wu Nanjing Univ. of Posts and Telecommunications

17:30-17:50 **SatB04-6** ***The Second-Order ZD, GD and Hybrid Systems Solving Nonlinear Equations Compared with Other Dynamics*** 933
 Yunong Zhang Sun Yat-sen Univ.
 SYSU-CMU Shunde International Joint Research Institute Key
 Laboratory of Autonomous Systems and Networked Control
 Jinjin Wang Sun Yat-sen Univ.
 SYSU-CMU Shunde International Joint Research Institute Key
 Laboratory of Autonomous Systems and Networked Control
 Tianjian Qiao Sun Yat-sen Univ.
 SYSU-CMU Shunde International Joint Research Institute Key
 Laboratory of Autonomous Systems and Networked Control
 Zhengli Xiao Sun Yat-sen Univ.
 SYSU-CMU Shunde International Joint Research Institute Key
 Laboratory of Autonomous Systems and Networked Control
 Mingzhi Mao Sun Yat-sen Univ.

Session	SatB05: Networked Control Systems (I)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 05
Chair	Weizhou Su, <i>South China Univ. of Tech.</i>
Co-Chair	Jianan Wang, <i>Beijing Inst. of Tech.</i>

15:50-16:10 **SatB05-1** ***Extended Kalman Filter Based Localization for a Mobile Robot Team*** 939
 Jieying Lu South China Univ. of Tech.
 Chuxi Li South China Univ. of Tech.
 Weizhou Su South China Univ. of Tech.

16:10-16:30 **SatB05-2** ***Network-Based Synchronization via Fuzzy Variable Structure Control with Stochastic Actuator Activation and Its Application to Secure Communication*** 945
 Xiaomei Zhang Nantong Univ.
 Jing Lv Nantong Univ.
 Zhenjun Zhang Nantong Univ.

16:30-16:50 **SatB05-3** ***Robust Cooperative Tracking of Multiple-Order Power Integrators*** 951
 Junmin Peng CSR Zhuzhou Electric Locomotive CO, LTD
 Jianan Wang Beijing Inst. of Tech.
 Jiayuan Shan Beijing Inst. of Tech.

16:50-17:10 **SatB05-4** ***Event-triggered robust H8 control for networked control system with sensor faults*** 957
 Xiaoyu He Univ. of Science and Tech. Beijing
 Liying Zhao Univ. of Science and Tech. Beijing
 Fei Ma Univ. of Science and Tech. Beijing
 Xue Cheng Univ. of Science and Tech. Beijing
 Jintao Meng Univ. of Science and Tech. Beijing

17:10-17:30 **SatB05-5** ***Asynchronous Control for Discrete Switched Systems over Network by using Sojourn Probability Method*** 962
 Xia Zhao Nanjing College of Information Tech.
 Engang Tian Nanjing Normal Univ.
 Lei Wang Nanjing Normal Univ.
 Hongyan Li Nanjing College of Information Tech.

17:30-17:50 **SatB05-6** **Event-Triggered H8 Filtering for Networked Takagi-Sugeno Fuzzy Systems Using Deviation Bounds of Normalized Membership Functions** 968
 Xiaobo Chi Shanxi Univ.
 Xinchun Jia Shanxi Univ.

Session	SatB06: Hybrid Systems (I)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 06
Chair	Xiaojie Su, Chongqing Univ.
Co-Chair	Haichao Gao, Henan Vocational Coll. of Chemical Tech.

15:50-16:10 **SatB06-1** **Sliding Mode Controller Design for Switched Nonlinear Systems** 974
 Xinxin Liu Chongqing Univ.
 Xiaojie Su Chongqing Univ.
 Jianwei Zhang Chongqing Univ.
 Rongni Yang Shandong Univ.

16:10-16:30 **SatB06-2** **Finite Time Estimation of a Linear System based on Sampled Measurement through Impulsive Observer** 978
 Atif Qayyum National Univ. of Sciences and Tech.
 Universit degli Studi di Napoli Federico II
 Mohammad Bilal Malik National Univ. of Sciences and Tech.
 Gianmaria De Tommasi Universit degli Studi di Napoli Federico II
 Alfredo Pironti Universit degli Studi di Napoli Federico II

16:30-16:50 **SatB06-3** **Positivity and stability analysis of positive discrete-time descriptor systems** 982
 Haichao Gao Henan Vocational Coll. of Chemical Tech.
 Wei Dong Henan Vocational Coll. of Chemical Tech.
 Linli Ma Hangzhou Dianzi Univ.

16:50-17:10 **SatB06-4** **Bumpless Switching Control for Switched Systems with Sensor Failures Using Terminal Sliding Mode Method** 988
 Yiwen Qi Shenyang Aerospace Univ.
 Jiaming Hu Shenyang Aerospace Univ.

17:10-17:30 **SatB06-5** **Integral Input-to-state-KL* -Stability for Hybrid Dynamical Systems** 993
 Bin Liu Hunan Univ. of Tech
 Dongnan Liu Hunan Univ. of Tech
 Zhong Wang Hunan Univ. of Tech

17:30-17:50 **SatB06-6** **Modeling and Simulation of Cascade Reservoirs Flood Control System Based on Hybrid Stochastic Timed Petri Nets** 997
 Ruimin Cao Northeastern Univ.
 Fengli Wang Northeastern Univ.
 Lina Hao Northeastern Univ.
 Qiang Gao Northeastern Univ.

Session	SatB07: Social Economy Systems (II)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 07
Chair	<i>Heyong Wang, South China Univ. of Tech.</i>
Co-Chair	<i>Xin Tong, Northeastern Univ. Central Univ. of Finance and Economics</i>

15:50-16:10	SatB07-1	Research on the relationship between customer characteristics and categories in personal automotive business 1003 <i>Heyong Wang, South China Univ. of Tech. Jingyuan Zhang, South China Univ. of Tech.</i>
16:10-16:30	SatB07-2	Empirical study on Spatial Spillover of provincial carbon emissions and influencing factors in China 1009 <i>Xin Tong, Northeastern Univ. Central Univ. of Finance and Economics Lin Tong, Dalian Inst. of Science and Tech. Xuesen Li, Shenyang Polytechnic Coll.</i>
16:30-16:50	SatB07-3	Analysis on the Interaction of Employment, Wages and Income Gap of Urban Residents in China 1014 <i>Wei Wang, Harbin Univ. of Commerce Wenjia Cao, Harbin Univ. of Commerce Yiming Zhang, China Academy of Labor and Social Security Kai Yu, China Academy of Labor and Social Security</i>
16:50-17:10	SatB07-4	Study on Explore China's New Employment Spaces Creation with the Social Society System Revolution through Science and Technology Innovation 1019 <i>Minglei Ding, Chinese Academy of Science and Tech. for Development Baoming Chen, Chinese Academy of Science and Tech. for Development Yang Lv, State Grid Beijing Economic Research Inst.</i>
17:10-17:30	SatB07-5	Environmental Protection Effectiveness of China's Taxation Policy 1025 <i>Yu Zhang, Qingdao Univ. of Science and Tech.</i>
17:30-17:50	SatB07-6	An Empirical Analysis on Carbon Emission and Economic Growth in Liaoning 1029 <i>Xin Tong, Central Univ. of Finance and Economics Northeastern Univ. Xuesen Li, Shenyang Polytechnic Coll. Lin Tong, Dalian Inst. of Science and Tech.</i>

Session	SatB08: Delay Systems (I)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 08
Chair	<i>Ximing Sun, Dalian Univ. of Tech.</i>
Co-Chair	<i>Bin Zhou, Harbin Inst. of Tech.</i>

15:50-16:10	SatB08-1	Integral input-to-state stability of switched delay systems composed of unstable subsystems 1035 <i>Ximing Sun, Dalian Univ. of Tech. Xinmei Li, Dalian Univ. of Tech. Xudong Zhao, Dalian Univ. of Tech.</i>
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- 16:10-16:30 SatB08-2 Time-Varying Razumikhin and Krasovskii Stability Theorems for Time-Varying Delay Systems** 1041
Bin Zhou, *Harbin Inst. of Tech.*
Alexey V. Egorov, *Saint-Petersburg State Univ.*
- 16:30-16:50 SatB08-3 Further Results on Global Stabilization of the Double Integrator System by Delayed and Bounded Controls** 1047
Xuefei Yang, *Harbin Inst. of Tech.*
Bin Zhou, *Harbin Inst. of Tech.*
- 16:50-17:10 SatB08-4 Complete Stability for Constant-Coefficient Distributed Delay Systems: A Unified Frequency-Sweeping Approach** 1053
Lu Zhang, *Northeastern Univ.*
Zhizhong Mao, *Northeastern Univ.*
Xuguang Li, *Northeastern Univ.*
Silviu-Julian Niculescu CNRS-CentraleSupélec-Univ. Paris-Sud
Arben Çela, *Noisy-Le-Grand 93162*
- 17:10-17:30 SatB08-5 Novel Delay Dependent Conditions for Non-Lyapunov Stability of Singular Time Delay Systems** 1059
Ivan M. Buzurovic, *Harvard Univ.*
Sreten B. Stojanovic, *Univ. of Nis*
Dragutin Lj. Debeljkovic, *Univ. of Belgrade*
Darko M. Radojevic, *Univ. of Belgrade*
- 17:30-17:50 SatB08-6 Bifurcation and control of a delayed reaction-diffusion rumor spreading model with medium mechanism** 1065
Linhe Zhu, *Nanjing Univ. of Aeronautics and Astronautics*
Hongyong Zhao, *Nanjing Univ. of Aeronautics and Astronautics*

Session	SatB09: Singular Systems (II) (Invited Session)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 09
Chair	Qingling Zhang, <i>Northeastern Univ.</i>
Co-Chair	Huazhou Hou, <i>Northeastern Univ.</i>

- 15:50-16:10 SatB09-1 Stabilization of a Polynomial Chaotic System Based on T-S Fuzzy Model** 1071
Changchun Sun, *Shenyang Jianzhu Univ.*
Baoyan Zhu, *Shenyang Jianzhu Univ.*
Qicheng Xu, *Shenyang Jianzhu Univ.*
Ying Ai, *Shenyang Jianzhu Univ.*
- 16:10-16:30 SatB09-2 The Modelling and Control of a Singular Biological Economic System with a Species Migration and Environment Damage** 1076
Yi Zhang, *Shenyang Univ. of Tech.*
Nanjing Univ. of Science and Tech.
Northeastern Univ.
Zhenghong Jin, *Shenyang Univ. of Tech.*
- 16:30-16:50 SatB09-3 Permanent Analysis Of Predator-Prey System With The Holling IV Kind Functional Reaction And Stage Structure** 1082
Yi Zhang, *Shenyang Univ. of Tech.*
Nanjing Univ. of Science and Tech.
Northeastern Univ.
Huiying Zhao, *Shenyang Univ. of Tech.*

- 16:50-17:10** **SatB09-4** **Impulse Analysis for Nonlinear Singular System Via Differential Mean Value Theorem** 1088
 Qingling Zhang, *Northeastern Univ.*
 Huazhou Hou, *Northeastern Univ.*
- 17:10-17:30** **SatB09-5** **Static Output Feedback Sliding Mode Control for Stochastic Descriptor Systems** 1093
 Qingling Zhang, *Northeastern Univ.*
 Jinghao Li, *Northeastern Univ.*
- 17:30-17:50** **SatB09-6** **Local stability and Hopf bifurcation of a single-species singular system with delays** 1098
 Xin-You Meng, *Northeastern Univ.*
Lanzhou Univ. of Tech.
 Qing-Ling Zhang, *Northeastern Univ.*

Session	SatB10: Economic and Management Decision Model (Invited Session)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 10
Chair	Jianjun Gao, <i>Shanghai Univ. of Finance and Economics</i>
Co-Chair	Yiqing Gao, <i>Shanghai Univ.</i>

- 15:50-16:10** **SatB10-1** **Dynamic Revised Mean-Variance Policy in a Market without Riskless Asset** 1103
 Yiqing Gao, *Shanghai Univ.*
 Xiangyu Cui, *Shanghai Univ. of Finance and Economics*
 Yun Shi, *Shanghai Univ.*
 Liumeng Peng, *Shanghai Univ.*
- 16:10-16:30** **SatB10-2** **Dynamic mean-LPM portfolio optimization under the mean-reverting market** 1108
 Yiwei Niu, *Shanghai Jiao Tong Univ.*
 Jianjun Gao, *Shanghai Univ. of Finance and Economics*
- 16:30-16:50** **SatB10-3** **Extensions of Black-Litterman portfolio optimization model with downside risk measure** 1114
 Xinxin Jia, *Shanghai Jiao Tong Univ.*
 Jianjun Gao, *Shanghai Univ. of Finance and Economics*
- 16:50-17:10** **SatB10-4** **Convergence Analysis on Variable Sample Distributed Methods for Stochastic Nash Equilibrium** 1120
 Dali Zhang, *Shanghai Jiao Tong Univ.*

Session	SatB11: Intelligence System-Theory and Application (II) (Invited Session)		
Date/Time	Saturday, 28 May 2016 / 15:50-17:50		
Venue	Room 11		
Chair	<i>Ying Wei, Northeastern Univ.</i>		
Co-Chair	<i>Mingxiu Lin, Northeastern Univ.</i>		
15:50-16:10	SatB11-1	Research and Application of Machine Vision in Intelligent Manufacturing	1126
		Li Fu, <i>Shenyang Aerospace Univ.</i> Yuanhang Zhang, <i>Shenyang Aerospace Univ.</i> Quanjun Huang, <i>Shenyang Aircraft Design&Research Inst.</i> Xinyu Chen, <i>Shenyang Aerospace Univ.</i>	
16:10-16:30	SatB11-2	Design of LED Marker for Camera Calibration of Rapid Deployment	1132
		Mingxiu Lin, <i>Northeastern Univ.</i> Qingyang Zhao, <i>Northeastern Univ.</i> Bo Liu, <i>Northeastern Univ.</i> Jiayu Li, <i>Northeastern Univ.</i>	
16:30-16:50	SatB11-3	Measurement of Acoustic Wave Travel-Time in Grain Bulk	1137
		Hua Yan, <i>Shenyang Univ. of Tech.</i> Peng Yu, <i>Shenyang Univ. of Tech.</i> Ying Gang, <i>Zhou Shenyang Univ. of Tech.</i>	
16:50-17:10	SatB11-4	Gait Authentication Based on Partial Cyclic Rotation Metric	1143
		Hui Xu, <i>Shenyang Univ. of Tech.</i> Lihua Gu, <i>Shenyang Univ. of Tech.</i> <i>Shenyang Univ. of Chemical Tech.</i> Binbin Tu, <i>Shenyang Univ. of Tech.</i> <i>Shenyang Univ.</i>	
17:10-17:30	SatB11-5	The Propagation Characteristics of Oblique Incident Ultrasonic Waves in Damage Coating Steel	1149
		Li-jian Yang, <i>Shenyang Univ. of Tech.</i> Ping Li, <i>Shenyang Univ. of Tech.</i> Song-wei Gao, <i>Shenyang Univ. of Tech.</i> Yan-hao Xing, <i>Shenyang Univ. of Tech.</i> Bin Liu, <i>Shenyang Univ. of Tech.</i>	
17:30-17:50	SatB11-6	Nonlinear Inversion Algorithm of Geological Forecast in Induced Polarization Method	1154
		Li Yao Shenyang, <i>Univ. of Tech.</i> Feng-chao Chen, <i>Shenyang Univ. of Tech.</i>	

Session	SatB12: Process Automation	
Date/Time	Saturday, 28 May 2016 / 15:50-17:50	
Venue	Room 12	
Chair	Yiguo Li, Southeast Univ.	
Co-Chair	Qingbin Wang, Inst. of Automation, Chinese Acad. of Scie.	
15:50-16:10	SatB12-1	Analysis on the Influence Factors of Fiber Tension in Fiber Placement 1159 Qingbin Wang, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Wei Zou, <i>Inst. of Automation, Chinese Acad. of Scie.</i> De Xu, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Fangfang Liu, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Haipeng Li, <i>Inst. of Automation, Chinese Acad. of Scie.</i>
16:10-16:30	SatB12-2	Observer based model predictive control of a MGT-CCHP system 1165 Peizhi Liao, <i>Southeast Univ.</i> Shuanzhu Sun, <i>Jiangsu Fangtian Electric Tech. Co. LTD</i> Yiguo Li, <i>Southeast Univ.</i> Jiong Shen, <i>Southeast Univ.</i> Junli Zhang, <i>Southeast Univ.</i>
16:30-16:50	SatB12-3	A Mathematical Expression of an Index Function in FRIT 1171 Akira Inoue, <i>Okayama Univ.</i> Mingcong Deng, <i>Tokyo Univ. of Agriculture and Tech.</i> Tomohiro Henmi, <i>National Inst. of Tech. Kagawa Coll.</i>
16:50-17:10	SatB12-4	Theoretical study of rolling force during width control in edge rolling 1176 Yuanming Liu, <i>Northeastern Univ.</i> Dianhua Zhang, <i>Northeastern Univ.</i> Jie Sun, <i>Northeastern Univ.</i> Dewen Zhao, <i>Northeastern Univ.</i>
17:10-17:30	SatB12-5	The Improvement of Silicon-Controlled Trigger Circuit 1180 Fuyun Li, <i>Univ. of Scie. and Tech. Liaoning</i> Qingsi Zhang, <i>Univ. of Scie. and Tech. Liaoning</i>
17:30-17:50	SatB12-6	Host computer software design of MAA hydrolysis reaction based on WinCC configuration software 1185 Wei Zhang, <i>Qingdao Univ. of Scie. and Tech.</i> Zhenglian He, <i>Qingdao Univ. of Scie. and Tech.</i>

Session	SatB13: Optimal control and optimization (II)	
Date/Time	Saturday, 28 May 2016 / 15:50-17:50	
Venue	Room 13	
Chair	Dongmei Wu, Nanjing Univ. Of posts and telecommunications.	
Co-Chair	Yuming Guo, Northeastern Univ.	

15:50-16:10	SatB13-1	A Hybrid Algorithm Based on BFA and PSO for Optimal Reactive Power Problem 1190 Shimei Que, <i>Nanjing Univ. Of posts and telecommunications.</i> Dongmei Wu, <i>Nanjing Univ. Of posts and telecommunications.</i>
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- 16:10-16:30 SatB13-2 Hybrid Modeling Method for Predicting the Cooling Water Outlet Temperature in Plate Heat Exchanger** 1194
Yuming Guo, *Northeastern Univ.*
Fuli Wang, *Northeastern Univ.*
State Key Laboratory of Synthetical Automation for Process Industries
Mingxing Jia, *Northeastern Univ.*
Dapeng Niu, *Northeastern Univ.*
- 16:30-16:50 SatB13-3 A Novel Hybrid Optimization Algorithm Combined with BBO and PSO** 1198
Gang Cheng, *Lanzhou Univ.*
Chao Lv, *Lanzhou Univ.*
Shi Yan, *Lanzhou Univ.*
Li Xu, *Akita Prefectural Univ.*
- 16:50-17:10 SatB13-4 Fast Design and Optimization of the Low Energy Lunar Escaping Trajectory** 1203
Yue Liu, *DFH Satellite Co. Ltd.*
Yingjing Qian, *Beijing Institute of Tech.*
Wuxing Jing, *Harbin Institute of Tech.*
- 17:10-17:30 SatB13-5 Many-to-Many Network Design of Fourth-Party Logistics with Delivery Time Considered** 1209
Rui Li, *Liaoning Univ. of Tech.*
Fuming Sun, *Liaoning Univ. of Tech.*
Yujun Tong, *Liaoning Univ. of Tech.*
- 17:30-17:50 SatB13-6 Multiple Set-points Tracking Control Based on Online ADP** 1214
Kang Wang, *University of Scie. and Tech.*
Xiaoli Li, *Beijing Univ. of Tech.*

Session	SatB14: Smart grids (II)
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 14
Chair	<i>Pengfei Guo, Inner Mongolia Univ. Hohhot</i>
Co-Chair	<i>Canzhi Gui, Zhejiang Univ.</i>
15:50-16:10 SatB14-1	Short-Term Wind Power Prediction Based on Genetic Algorithm to Optimize RBF Neural Network 1220 <i>Pengfei Guo, Inner Mongolia Univ. Hohhot</i> <i>Zhiyuan Qi, Inner Mongolia Univ. Hohhot</i> <i>Wei Huang, Inner Mongolia Univ. Hohhot</i>
16:10-16:30 SatB14-2	Dynamic Reconfiguration of Distribution Network with PV Generation Prediction Based On Credibility Theory 1224 <i>Canzhi Gui, Zhejiang Univ.</i> <i>Zhejing Bao, Zhejiang Univ.</i> <i>Wenjun Yan, Zhejiang Univ.</i>

16:30-16:50	SatB14-3	Robust Mixed H2 /H 8 based Optimal Controller Design for ? Single-phase Grid-connected Converter 1230 Zhongwen Li <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Univ. of Chinese Acad. of Sciences Chuanzhi Zang, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Peng Zeng, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Haibin Yu, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Hepeng Li, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Lin Gao, <i>Yingkou Electric Power Supply Company</i> Xiuwen Bai, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i>
16:50-17:10	SatB14-4	Topology and Control Study for a Novel STATCOM 1235 Xinwen Zhang, <i>Beifang Univ. of Nationalities</i> <i>Xi'an Univ. of Tech.</i> Xiangqian Tong, <i>Xi'an Univ. of Tech.</i>
17:10-17:30	SatB14-5	The Development of Micro-source Controller Based on the Model Design Method 1241 Jing Bian, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Chuanzhi Zang, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Peng Zeng, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Xianhong Li, <i>Shenyang Inst. of Automation, Chinese Acad. of Sciences</i> Fenglian Ni, <i>Huaihai Inst. of Tech.</i>
17:30-17:50	SatB14-6	Design of a three-phase grid tied inverter 1246 Li Liu, <i>Wuhan Univ. of Tech.</i> Rui Liu, <i>Wuhan Univ. of Tech.</i> Qihua Cao, <i>Wuhan Univ. of Tech.</i> Qihong Chen, <i>Wuhan Univ. of Tech.</i>

Session	SatBIS: Interactive Session
Date/Time	Saturday, 28 May 2016 / 15:50-17:50
Venue	Room 15

- SatBIS-01** **Phase Reduce False Distance Law and Ionosphere Residual Error
Method Detect and Correct the Cycle Slip** 1251
Zigeng Chen, *Kunming Univ. of Science and Tech.*
Guoyong Huang, *Kunming Univ. of Science and Tech.*
Engineering Research Center for Mineral Pipeline Transportation. YN
- SatBIS-02** **Information Sharing Method for RCRSS in Communication-limited
Environment** 1256
Xiang Gao, *Nanjing Univ. of Posts and Telecommunications*
Dexiao Wu, *Nanjing Univ. of Posts and Telecommunications*
Zhiwei Liang, *Nanjing Univ. of Posts and Telecommunications*

- SatBIS-03 Optimal Active Queue Management for Internet with Reduced-Order State-Observer** 1260
 Cunwu Han, *North China Univ. of Tech.*
 Qi Diao, *North China Univ. of Tech.*
 Shurui Chang, *North China Univ. of Tech.*
 Song Bi, *North China Univ. of Tech.*
 Lei Liu, *North China Univ. of Tech.*
 Zhonghua Pang, *North China Univ. of Tech.*
- SatBIS-04 Stability and Hopf bifurcation of an n-neuron annular neural network with time-delay** 1264
 Yan Wang, *Qingdao Univ. of Science and Tech.*
 Zunshui Cheng, *Qingdao Univ. of Science and Tech.*
Southeast Univ. Tianshun Wang, Qingdao Univ. of Science and Tech.
- SatBIS-05 The study on Dynamics of Functional Brain network: Based on Symbolic Dynamics** 1269
 Miao Wang, *Huazhong Univ. of Science and Tech.*
Image Processing and Intelligent Control Key Laboratory of Education Ministry of China
 Yapeng Li, *Huazhong Univ. of Science and Tech.*
Image Processing and Intelligent Control Key Laboratory of Education Ministry of China
 Xi Chen, *Huazhong Univ. of Science and Tech.*
Image Processing and Intelligent Control Key Laboratory of Education Ministry of China
 Wei Li, *Huazhong Univ. of Science and Tech.*
Image Processing and Intelligent Control Key Laboratory of Education Ministry of China
- SatBIS-06 Projective Synchronization and Identification of Two Different Markovian Jumping Complex Delayed Networks with Stochastic Perturbations** 1274
 Qian Xie, *Xi'an Jiaotong Univ.*
 Gangquan Si, *Xi'an Jiaotong Univ.*
 Yanbin Zhang, *Xi'an Jiaotong Univ.*
 Ningning Yang, *Xi'an Univ. of Tech.*
 Chaojun Wu, *Xi'an Polytechnic Univ.*
- SatBIS-07 Complex Network's Topological Similarity Analysis Based on Spectral Density** 1280
 Haoqing Lan, *Beijing Inst. of Tech.*
 Qi Gao, *Beijing Inst. of Tech.*
 Zhe Deng, *Beijing Inst. of Tech.*
 Feng Pan, *Beijing Inst. of Tech.*
- SatBIS-08 Research on Modeling and Simulation of Guiding Re-weighting Mechanism Based on Guiding Amount** 1286
 Shihua Wang, *Guangdong Univ. of Petrochemical Tech.*
 Jianmei Yang, *South China Univ. of Tech.*
- SatBIS-09 Research on the active defense security system based on cloud computing of wisdom campus network** 1292
 Yuanyuan Chen, *Information Center of Chongqing Univ. of Tech.*
 Wang Yao, *State power grid maintenance branch of Chongqing electric power company*
 Jianghua Luo, *Information Center of Chongqing Univ. of Posts and Telecommunications*

- SatBIS-10 Node-importance identification in complex networks via neighbors average degree** 1298
 Jun Ai, *Univ. of Shanghai for Science and Tech.*
 Linzhi Li, *Univ. of Shanghai for Science and Tech.*
 Zhan Su, *Univ. of Shanghai for Science and Tech.*
 Linhua Jiang, *Univ. of Shanghai for Science and Tech.*
 Naixue Xiong, *Univ. of Shanghai for Science and Tech.*
- SatBIS-11 Second-order Consensus of Multi-agent Systems with Nonlinear Dynamics and Time-varying Delays via Impulsive Control** 1304
 Kuo Feng, *Wuhan Univ.*
 Yan Wang, *Wuhan Univ.*
 Hong Zhou, *Wuhan Univ.*
 Zhenhua Wang, *Wuhan Univ.*
 Zhiwei Liu, *Wuhan Univ.*
- SatBIS-12 Safe Operation Improvement of an Electrical Power System by Superconducting Fault Current Limiters** 1310
 Yi Chai, *Chongqing Univ.*
 Congmei Jiang, *Chongqing Univ.*
 Ke Zhang, *Chongqing Univ.*
 Shuiqing Xu, *Chongqing Univ.*
- SatBIS-13 Finite Time Rendezvous Control of Multi-agent Networks Preserving Topology Connectivity with Constrained Energy** 1315
 Di Yu, *Northeast Petroleum Univ.*
 Wei Dong, *CNOOC Safety&Technology Services CO. LTD.*
 Wenjun Yang, *Daqing oil field chemical group methanol factory*
 Yansheng Zhang, *Northeast Petroleum Univ.*
- SatBIS-14 Globally Controlled Consensus Criteria for Networked Multi-Agent Systems with Different Agent Dynamics and Time Delays** 1320
 Weisong Zhong, *Suqian Coll.*
 Wenxiu Cao, *Suqian Coll.*
- SatBIS-15 Adaptive Average Bipartite Consensus Control of High-order Multi-agent Systems on Coopetition Networks** 1326
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 Jiangping Hu, *Univ. of Electronic Science and Tech. of China*
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- SatBIS-55** **Research Based on Decision Classes of Military Chess Game** 1546
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- SatBIS-63** **Dispatch Intelligent Analysis System in Henan Power Communication Network** 1578
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- SatBIS-72 Application of Non-minimum Phase System Control Strategy to Hydro Turbine Set** 1628
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Session	SunA01: Adaptive Control (II)	
Date/Time	Sunday, 29 May 2016 / 10:10-12:10	
Venue	Room 01	
Chair	Huijin Fan, Huazhong University of Scie. and Tech.	
Co-Chair	Tantan Yang, Qingdao Univ.	
10:10-10:30	SunA01-1	Low-cost Robust Adaptive Control of Nonlinear Uncertain Systems with Application to Helicopters 1640 Zhixi Shen, <i>Chongqing Univ.</i> Shuyan Zhou, <i>Chongqing Univ.</i> Yongduan Song, <i>Chongqing Univ.</i>
10:30-10:50	SunA01-2	A Design of Dredger Cutter Motor Synchronous Speed Control System Based on ADRC 1646 Yongqiang Ye, <i>Guangzhou Maritime Inst.</i> Ming Bai, <i>Guangzhou Maritime Inst.</i> Zhenxian Zhang, <i>Guangzhou Maritime Inst.</i> Weicheng Qiu, <i>Guangzhou Maritime Inst.</i> Rui Li, <i>Guangzhou Maritime Inst.</i>
10:50-11:10	SunA01-3	Adaptive Failure Compensation Control for LEO Drag-free satellite with Actuator Failures and Disturbances 1651 Huijin Fan, <i>Huazhong University of Scie. and Tech.</i> Xuan Zhao, <i>Huazhong University of Scie. and Tech.</i> Yongji Wang, <i>Huazhong University of Scie. and Tech.</i> Li Xu, <i>Akita Prefectural Univ.</i>
11:10-11:30	SunA01-4	Direct Adaptive Control for a Class of Switched Nonlinear Systems Based on LS-SVM 1657 Chunli Xie, <i>Dalian Nationalities Univ.</i> Dandan Zhao, <i>Dalian Nationalities Univ.</i> Yuzhe Wang, <i>Dalian Nationalities Univ.</i>
11:30-11:50	SunA01-5	Modeling and Robust Adaptive Attitude Control of Near Space Interceptor 1663 Jianglong Yu, <i>Beihang Univ.</i> Zihao Xiong, <i>Beihang Univ.</i> Ke Yi, <i>Beihang Univ.</i> Zhang Ren, <i>Beihang Univ.</i> Qingdong Li, <i>Beihang Univ.</i> Weiwen Zhou, <i>China Airborne Missile Academy</i>
11:50-12:10	SunA01-6	Observer- based Adaptive Fuzzy Control for Nonlinear Systems with Unknown Dead-zone Input 1669 Tantan Yang, <i>Qingdao Univ.</i> Bing Chen, <i>Qingdao Univ.</i> Chong Lin, <i>Qingdao Univ.</i>

Session	SunA02: Robust Control (I)		
Date/Time	Sunday, 29 May 2016 / 10:10-12:10		
Venue	Room 02		
Chair	<i>Xiushan Jiang, China University of Petroleum</i>		
Co-Chair	<i>Na Wang Tianjin, Polytechnic Univ. Key Laboratory of Advanced Electrical Engineering and Energy Tech.</i>		
10:10-10:30	SunA02-1	An Approach to the Polytopic Representation of Time-Varying Uncertain Systems with Reduced Complexity and Conservatism 1675 Wei Wu, <i>Jiangnan Univ.</i> Steven Liu, <i>University of Kaiserslautern</i> Baotong Cui, <i>Jiangnan Univ.</i>	
10:30-10:50	SunA02-2	Polytopic LPV-based Robust Model Predictive Control with Varying Horizons for Air-Breathing Hypersonic Vehicles 1681 Na Wang, <i>Tianjin Polytechnic Univ.</i> <i>Key Laboratory of Advanced Electrical Engineering and Energy Tech</i> Chaofang Hu, <i>Tianjin Univ.</i> Qianqian Xie, <i>Tianjin Univ.</i>	
10:50-11:10	SunA02-3	Robust stability analysis of delayed genetic regulatory networks with linear fractional parametric uncertainties 1687 Zhen Li, <i>Harbin University of Scie. and Tech.</i> Dongyan Chen, <i>Harbin University of Scie. and Tech.</i> Yanfeng Zhao, <i>Harbin Engineering Univ.</i> <i>Harbin University of Scie. and Tech.</i>	
11:10-11:30	SunA02-4	Multiple-model Weighted Control for Helicopter Based on H2/H8 1693 Junqing Pan, <i>University of Jinan</i> Tao Shen, <i>University of Jinan</i>	
11:30-11:50	SunA02-5	Robust Quadratic Stability and Stabilizability of Uncertain Linear Discrete-Time Stochastic Systems with State Delay 1699 Xiushan Jiang, <i>China University of Petroleum</i> Xuemin Tian, <i>China University of Petroleum</i> Tianliang Zhang, <i>China University of Petroleum</i> Weihai Zhang, <i>Shandong University of Scie. and Tech.</i>	
11:50-12:10	SunA02-6	Parameter Calibration and Simulation of Fractional PID Controller for Hydraulic Servo System 1704 Duanyuan Bai, <i>Changchun University of Scie. and Tech.</i>	

Session	SunA03: Co-operative Control (I)	
Date/Time	Sunday, 29 May 2016 / 10:10-12:10	
Venue	Room 03	
Chair	<i>Xiwang Dong, Beihang Univ.</i>	
Co-Chair	<i>Zhong Liu, Northwestern Polytechnical Univ.</i>	
10:10-10:30	SunA03-1	Impact Time Control Guidance Law using Virtual Leader and Dynamic Inversion 1709 Ke Chen, <i>Xi'an Research Inst. of High Tech.</i> Shicheng Wang, <i>Xi'an Research Inst. of High Tech.</i> Yang Guo, <i>Xi'an Research Inst. of High Tech.</i> Xinsan Li, <i>Xi'an Research Inst. of High Tech.</i> Zhiguo Liu, <i>Xi'an Research Inst. of High Tech.</i> Xunliang Yan, <i>Xi'an Research Inst. of High Tech.</i>
10:30-10:50	SunA03-2	Distributed Receding Horizon Control of Nonlinear Vehicle Formations with Constraints 1715 Huiping Li, <i>Northwestern Polytechnical Univ.</i> Weisheng Yan, <i>Northwestern Polytechnical Univ.</i> Yang Shi, <i>Univ. of Victoria</i>
10:50-11:10	SunA03-3	Average formation tracking for second-order multi-agent systems with multiple leaders 1721 Xiwang Dong, <i>Beihang Univ.</i> Liang Han, <i>Beihang Univ.</i> Qingdong Li, <i>Beihang Univ.</i> Zhang Ren, <i>Beihang Univ.</i>
11:10-11:30	SunA03-4	Coalition Formation for Multiple Heterogeneous UAVs Cooperative Search and Prosecute with Communication Constraints 1727 Zhong Liu, <i>Northwestern Polytechnical Univ.</i> Xiaoguang Gao, <i>Northwestern Polytechnical Univ.</i> Xiaowei Fu, <i>Northwestern Polytechnical Univ.</i>
11:30-11:50	SunA03-5	Second-order Consensus of Nonlinear Multi-agent Systems with Heterogeneous Topologies 1735 Li Gao, <i>HangZhou DianZi Univ.</i> Yinqiu Wang, <i>HangZhou DianZi Univ.</i> Jian Wang, <i>HangZhou DianZi Univ.</i> Fengmin Yu, <i>HangZhou DianZi Univ.</i>
11:50-12:10	SunA03-6	Adaptive impulsive consensus of multi-agent systems with unknown parameters 1741 Peng Xiao, <i>Beihua Univ.</i> Tiedong Ma, <i>Chongqing Univ.</i> Fangzheng Xue, <i>Chongqing Univ.</i> Zhenyu Gu, <i>Chongqing Univ.</i> Jie Fu, <i>Key Lab for Optoelectronic Tech. and Systems Chongqing Univ.</i>

Session	SunA04: Nonlinear Systems (II)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 04
Chair	Jiaming Tian, <i>Shandong Univ.</i>
Co-Chair	Xianfu Zhang, <i>Shandong Univ.</i>
10:10-10:30	SunA04-1 State Tracking of Nonlinear System with Multiplicative Noises Based on AR-SIS Particle Filter 1747 Yanhua Yuan, <i>Harbin Inst. of Tech.</i> Shuo Wang, <i>Harbin Inst. of Tech.</i> Zhibin Yan, <i>Harbin Inst. of Tech.</i>
10:30-10:50	SunA04-2 Complexity Explosion Problem Analysis and Development in Back-stepping Method 1753 Hongxia Yu, <i>Northeastern Univ.</i> <i>Shenyang Engineering Inst.</i> Yuanwei Jing, <i>Northeastern Univ.</i> Siying Zhang, <i>Northeastern Univ.</i>
10:50-11:10	SunA04-3 Feedback Stabilization for Cross Triangular Nonlinear Systems 1759 Xiandong Chen, <i>Shandong Univ.</i> Xianfu Zhang, <i>Shandong Univ.</i> Le Chang, <i>Shandong Univ.</i> Chenghui Zhang, <i>Shandong Univ.</i>
11:10-11:30	SunA04-4 Observer Design for One-Sided Lipschitz Nonlinear Continuous-Time Singular Systems with Unknown Input 1764 Jiaming Tian, <i>Shandong Univ.</i> Jimin Wang, <i>Shandong Univ.</i> Shuping Ma, <i>Shandong Univ.</i>
11:30-11:50	SunA04-5 Modeling and analysis of impedance for uncontrolled rectifier based nonlinear load 1770 Hongtao Shi, <i>Beifang Univ. of Nationalities</i> Jiandong Mao, <i>Beifang Univ. of Nationalities</i> Xuesheng Li, <i>Beifang Univ. of Nationalities</i> Juntao Pan, <i>Beifang Univ. of Nationalities</i>
11:50-12:10	SunA04-6 A Constructive Self-balancing Controlled Lagrangian for Wheeled Inverted Pendulum 1776 Morteza Tayefi, <i>Peking Univ.</i> Zhiyong Geng, <i>Peking Univ.</i>

Session	SunA05: Sensor Network Systems (I)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 05
Chair	Qiuming Li, <i>Northeastern Univ.</i>
Co-Chair	Ying Zhang, <i>Shanghai Maritime Univ.</i>
10:10-10:30	SunA05-1 Non Steady Gas Source Localization Algorithm for Indoor Environment using WSN 1782 Qiuming Li, <i>Northeastern Univ.</i> Zhigang Liu, <i>Northeastern Univ.</i> Jinkuan Wang, <i>Northeastern Univ.</i>
10:30-10:50	SunA05-2 Study on Indoor Positioning and Navigation Algorithms Based on the MEMS Inertial Devices and Smartphone 1787 Huiqing Zhang, <i>Beijing Univ. of Tech.</i> Ruyong Dai, <i>Beijing Univ. of Tech.</i> Xiaomin Xu, <i>Beijing Univ. of Tech.</i>
10:50-11:10	SunA05-3 The Urban Road Dust Monitoring System Based on ZigBee 1793 Hong He, <i>Tianjin Univ. of Tech.</i> Yannan Gao, <i>Tianjin Univ. of Tech.</i> Zhihong Zhang, <i>Tianjin Univ. of Tech.</i> <i>Tianjin Radio and TV Station</i>
11:10-11:30	SunA05-4 Topology Analysis Based on Linear Wireless Sensor Networks in Monitoring of High-speed Railways 1797 Xiaojun Lv, <i>China Academy of Railway Sciences</i> Jian Li, <i>China Academy of Railway Sciences</i> Tianyun Shi, <i>China Academy of Railway Sciences</i> Xinchun Jia, <i>Shanxi Univ.</i>
11:30-11:50	SunA05-5 Fault Diagnosis in Clustering WSN Based on Neighbor Cooperation 1803 Ying Zhang, <i>Shanghai Maritime Univ.</i> Xianfeng Yuan, <i>Shanghai Maritime Univ.</i>
11:50-12:10	SunA05-6 Brief investigation of sensor technology and data analysis in building energy management 1808 Shaoxing Zhang, <i>Xian Univ. of Architecture and Tech.</i> Dengfeng Chen, <i>Xian Univ. of Architecture and Tech.</i> Qiqi Xue, <i>Xian Univ. of Architecture and Tech.</i>

Session	SunA06: Stochastic Systems (I)		
Date/Time	Sunday, 29 May 2016 / 10:10-12:10		
Venue	Room 06		
Chair	Tao Li, <i>Shanghai Univ.</i>		
Co-Chair	Weihai Zhang, <i>Shandong Unive. of Science and Tech.</i>		
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		Na Duan, <i>Jiangsu Normal Univ.</i> Huifang Min, <i>Nanjing Univ. of Science and Tech.</i> Hongxu Chu, <i>Jiangsu Normal Univ.</i>	
10:30-10:50	SunA06-2	Stability and Stabilization of Discrete-time Markov Jump Singular Systems with General uncertain t ransition rates	1819
		Mingmei Sun, <i>Shandong Unive. of Science and Tech.</i> Yuhong Wang, <i>China Univ. of Petroleum</i> Gang Li, <i>Shandong Unive. of Science and Tech.</i> Weihai Zhang, <i>Shandong Unive. of Science and Tech.</i>	
10:50-11:10	SunA06-3	Stochastic Finite-time Boundedness Analysis and Control for Discrete-time Positive Markov Jump Linear Systems	1824
		Bo Wang, <i>Shandong Univ.</i> Shuqian Zhu, <i>Shandong Univ.</i> You Xu, <i>Shandong Univ.</i> Lang Ma, <i>Shandong Univ.</i>	
11:10-11:30	SunA06-4	Robust H8 Filtering with Stability Degree Constraint of a Class of Nonlinear Discrete Time Stochastic Systems	1830
		Tianliang Zhang, <i>China Univ. of Petroleum</i> Yuhong Wang, <i>China Univ. of Petroleum</i> Xiushan Jiang, <i>China Univ. of Petroleum</i> Weihai Zhang, <i>Shandong Univ. of Science and Tech.</i>	
11:30-11:50	SunA06-5	Tracking Controller Design for Random Nonlinear TORA System	1836
		Shitong Wang, <i>Yantai Univ.</i> Zhaojing Wu, <i>Yantai Univ.</i> Mingyue Cui, <i>Yantai Univ.</i>	
11:50-12:10	SunA06-6	A New Combined Sampling Method Based on Variance Minimization Strategy	1841
		Xiaotian Xie, <i>Harbin Inst. of Tech.</i> Wei Li, <i>Harbin Inst. of Tech.</i> Lingyun Lu, <i>Harbin Inst. of Tech.</i> Ming Yang, <i>Harbin Inst. of Tech.</i>	

Session	SunA07: Neural Networks (I)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 07
Chair	Zhanshan Wang, <i>Northeastern Univ.</i>
Co-Chair	Fei Lu, <i>Zhejiang Univ. of Tech.</i>
10:10-10:30	SunA07-1 A New Criterion for Echo State Property of ESN with Feedback 1845 Xianshuang Yao, <i>Northeastern Univ.</i> Zhanshan Wang, <i>Northeastern Univ.</i> Shijie Yan, <i>Northeastern Univ.</i> Huaguang Zhang, <i>Northeastern Univ.</i>
10:30-10:50	SunA07-2 Facial Expression Recognition Based on Direction Basis Function Network 1849 Fei Lu, <i>Zhejiang Univ. of Tech.</i> Dewen Zhuang, <i>Zhejiang Univ. of Tech.</i> Luping Fang, <i>Zhejiang Univ. of Tech.</i> Shoujue Wang, <i>Zhejiang Univ. of Tech.</i> <i>Inst. of Semiconductors, Chinese Academy of Science</i>
10:50-11:10	SunA07-3 Application of Alternating Deep Belief Network in Image Classification 1853 Tao Shi, <i>North China Univ. of Science and Tech.</i> Chunlei Zhang, <i>North China Univ. of Science and Tech.</i> Fujun Li, <i>North China Univ. of Science and Tech.</i> Weimin Liu, <i>North China Univ. of Science and Tech.</i> Meijie Huo, <i>North China Univ. of Science and Tech.</i>
11:10-11:30	SunA07-4 A New CMAC Neural Network Algorithm Based on Association Membership 1857 Shaochuan Xu, <i>Northeastern Univ.</i> <i>Univ. of Science and Tech. Liaoning</i> Yuanwei Jing, <i>Northeastern Univ.</i>
11:30-11:50	SunA07-5 Stability Analysis for Delayed Recurrent Neural Networks Based on Delay-decomposition Approach 1861 Guangxia Xing, <i>Nantong Univ.</i> Yanbo Gao, <i>Nantong Univ.</i>
11:50-12:10	SunA07-6 Improvement of an Elman Neural Network Model for Once-through Boiler Unit and its Verification 1867 Yanna Xi, <i>North China Electric Power Univ.</i> Yinsong Wang, <i>North China Electric Power Univ.</i> Ke Li, <i>North China Electric Power Univ.</i>

Session	SunA08: Fault Diagnosis and Fault-Tolerant Control (I)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 08
Chair	Naiyu Xue, <i>Beihang Univ.</i>
Co-Chair	Ruiyun Qi, <i>Nanjing Univ. of Aeronautics and Astronautics</i>
10:10-10:30	SunA08-1 An Improved Hybrid Kalman Filter Design for Aircraft Engine Based on a Velocity-Based LPV Framework 1873 Xiaofeng Liu, <i>Beihang Univ.</i> Naiyu Xue, <i>Beihang Univ.</i>

- 10:30-10:50 SunA08-2 Adaptive Sliding Mode Fault-tolerant Control for Hypersonic Aircraft Using RBF Neural Networks** 1879
Rongyu Zhai, *Nanjing Univ. of Aeronautics and Astronautics*
Ruiyun Qi, *Nanjing Univ. of Aeronautics and Astronautics*
Bin Jiang, *Nanjing Univ. of Aeronautics and Astronautics*
- 10:50-11:10 SunA08-3 Annealing Parameter Optimization Algorithm in Weibull Distribution of Reliability Life Prediction Analysis for Scraper Conveyor** 1885
Xianmin Ma, *Xi'an Univ. of Science and Tech.*
Jie Yang, *Xi'an Univ. of Science and Tech.*
Yongqiang Zhang, *Xi'an Univ. of Science and Tech.*
Shenhua Ningxia Coal Group
- 11:10-11:30 SunA08-4 A Data Driven Method for Quantitative Fault Diagnosability Evaluation** 1890
Yongzhao Hua, *Beihang Univ.*
Qingdong Li, *Beihang Univ.*
Zhang Re, *Beihang Univ.*
Chengrui Liu, *Beijing Inst. of Control Engineering Science and Tech. on Space Intelligent Control Laboratory*
- 11:30-11:50 SunA08-5 Variable Forgetting Factor Identification Algorithm for Fault Diagnosis of Wind Turbines** 1895
Dinghui Wu, *Jiangnan Univ.*
Jin Song, *Jiangnan Univ.*
Yanxia Shen, *Jiangnan Univ.*
- 11:50-12:10 SunA08-6 Dissipativity-based Fault Detection for Markov Jump Systems with Mode-dependent Time-varying Delays** 1901
Bo Liu, *Beijing Inst. of Spacecraft Environment Engineering*
Tao Liao, *Beijing Inst. of Spacecraft Environment Engineering*

Session	SunA09: Control Applications (II)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 09
Chair	Yanan Wu, <i>Beihang Univ.</i>
Co-Chair	Haoping Wang, <i>Nanjing Univ. of Science & Tech.</i>

- 10:10-10:30 SunA09-1 Implement on APF using the Optimal Design of Digital Low Pass Filter** 1908
Xifeng Guo, *Shenyang Jianzhu Univ.*
Sen Tan, *Northeastern Univ.*
Yunlu Li, *Northeastern Univ.*
Jinxiang Pian, *Shenyang Jianzhu Univ.*
Rui Zhang, *Shenyang Jianzhu Univ.*
- 10:30-10:50 SunA09-2 Analysis of the Self-escape Trajectories for Manned Spacecraft** 1914
Yong Shi, *Nanjing Univ. of Aeronautics and Astronautics*
Inst. of Manned Space System Engineering, CAST
Yanze Hou, *Inst. of Manned Space System Engineering, CAST*
Guang Zuo, *Inst. of Manned Space System Engineering, CAST*

- 10:50-11:10 SunA09-3** **Research on Coordination Control System in Greenhouse with Multi-Agent Technology** 1918
 Qi Li, *Coll. of Information & Electrical Engineering, CAU*
 Yifei Chen, *Coll. of Information & Electrical Engineering, CAU*
Inst. of Sensors and Intelligent Control, CAU
 Manling Wu, *Coll. of Information & Electrical Engineering, CAU*
 Shangfeng Du, *Coll. of Information & Electrical Engineering, CAU*
Inst. of Sensors and Intelligent Control, CAU
 Qiaoxue Dong, *Coll. of Information & Electrical Engineering, CAU*
Inst. of Sensors and Intelligent Control, CAU
 Hongwei Yin, *Coll. of Information & Electrical Engineering, CAU*
 Dan Wang, *Coll. of Information & Electrical Engineering, CAU*
- 11:10-11:30 SunA09-4** **Design of Vehicle Rescue Information Interaction System based on Embedded Technology** 1922
 Jiangchun Xu, *Kunming Univ. of Science and Tech.*
 Jie Ren, *Kunming Univ. of Science and Tech.*
 Xiangyang Ren, *Kunming Univ. of Science and Tech.*
- 11:30-11:50 SunA09-5** **Event-triggered PCS based Control for Discrete Tracking: Trade-off between Network Bandwidth and Tracking Performance** 1927
 Chengcheng Song, *Nanjing Univ. of Science & Tech.*
 Haoping Wang, *Nanjing Univ. of Science & Tech.*
 Yang Tian, *Nanjing Univ. of Science & Tech.*
- 11:50-12:10 SunA09-6** **On-line Trajectory Generation Based on Approximate Analytical Solutions** 1933
 Yanan Wu, *Beihang Univ.*
 Ran Zhang, *Beihang Univ.*
 Huifeng Li, *Beihang Univ.*

Session	SunA10: Signal Processing (I)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 10
Chair	Qianru Jiang , <i>Zhejiang Univ. of Tech.</i>
Co-Chair	Jinhai Liu , <i>Northeastern Univ.</i>

- 10:10-10:30 SunA10-1** **Action Temporal-Spatial Semantic Guide for 3D Human Pose Tracking** 1940
 Jialin Yu, *South China Univ. of Tech.*
 Jifeng Sun, *South China Univ. of Tech.*
- 10:30-10:50 SunA10-2** **Robust Stochastic Gradient-based Adaptive Filtering Algorithms to Realize Compressive Sensing against Impulsive Interferences** 1946
 Chen Ye, *Akita Prefectural Univ.*
 Guan Gui, *NUPT*
 Shinya Matsushita, *Akita Prefectural Univ.*
 Li Xu, *Akita Prefectural Univ.*
- 10:50-11:10 SunA10-3** **An ELM-based Classifier about MFL Inspection of Pipeline** 1952
 Jinhai Liu, *Northeastern Univ.*
 Mingrui Fu, *Northeastern Univ.*
 Zhenning Wu, *Northeastern Univ.*
 Hanguang Su, *Northeastern Univ.*

- 11:10-11:30** **SunA10-4** **Low-Rank Optimization Algorithm for Accelerated Dynamic MRI** 1956
Min Yang, *Nanjing Univ. of Posts and Telecommunications*
- 11:30-11:50** **SunA10-5** **Block Recursive Least Squares Dictionary Learning Algorithm** 1961
Qianru Jiang, *Zhejiang Univ. of Tech.*
Sheng Li, *Zhejiang Univ. of Tech.*
Zeru Lu, *Zhejiang Univ. of Tech.*
Binbin Sun, *Zhejiang Univ. of Tech.*
- 11:50-12:10** **SunA10-6** **Super-pixel Based Single Image Haze Removal** 1965
Minmin Yang, *Northeastern Univ.*
Zhengguo Li, *Inst. for Infocomm Research*
Jianchang Liu, *Northeastern Univ.*

Session	SunA11: Data Processing (I)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 11
Chair	Jiuwen Cao, <i>Hangzhou Dianzi Univ.</i>
Co-Chair	Tianli Ma, <i>Northwestern Polytechnical Univ.</i>

- 10:10-10:30** **SunA11-1** **Label Information-based Weighted Regularized Sparsity Preserving Embedding for Face Recognition** 1970
Dongling Zhai, *Yangzhou Univ.*
Zhenqun Wang, *Yangzhou Univ.*
Xue Zhou, *Yangzhou Univ.*
Chunlin Xu, *North Laser Tech. Group CO, LTD*
- 10:30-10:50** **SunA11-2** **Excavation Equipments Classification based on Short-Time Frame Acoustic Energy Ratio** 1976
Wei Wang, *Hangzhou Dianzi Univ.*
Jiuwen Cao, *Hangzhou Dianzi Univ.*
Jianzhong Wang, *Hangzhou Dianzi Univ.*
Ruirong Wang, *Hangzhou Dianzi Univ.*
- 10:50-11:10** **SunA11-3** **Research on Improved Normalized Cut Spectral Clustering Algorithm** 1981
Quan Zheng, *Kunming Univ. of Science and Tech.*
Zengli Liu, *Kunming Univ. of Science and Tech.*
- 11:10-11:30** **SunA11-4** **Immune-based Abnormal Sample Identification for Spectral Quantitative Analysis** 1985
Fan Yu, *Xi'an Technological Univ.*
Minghui Liu, *Xi'an Technological Univ.*
Jixin Li, *Xi'an Technological Univ.*
Hui Cao, *Xi'an Jiaotong Univ.*
- 11:30-11:50** **SunA11-5** **A Novel Quantum Genetic Algorithm for Detection Sonar Image** 1991
Xingmei Wang, *Harbin Engineering Univ.*
Shu Liu, *Harbin Engineering Univ.*
Jianchuang Sun, *Harbin Engineering Univ.*
Xinyu Wang, *Harbin Engineering Univ.*

11:50-12:10 SunA11-6 **A Track Initiation Algorithm Based on the Feature Weighted Denstream Clustering** 1997
 Tianli Ma, *Northwestern Polytechnical Univ.*
 Xinmin Wang, *Northwestern Polytechnical Univ.*
 Ting Li, *Northwestern Polytechnical Univ.*
 Peng Cheng, *Northwestern Polytechnical Univ.*

Session	SunA12: Instrumentation Systems
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 12
Chair	Xin Huo, <i>Harbin Inst. of Tech.</i>
Co-Chair	Qiangqiang Yin, <i>Wuhan Univ. of Tech.</i>
10:10-10:30	SunA12-1 A New Type of Intelligent Linear Electric Actuator and Vibration Detection 2003 Haiyan Shao, <i>Univ. of Jinan</i> Tao Wu, <i>Jinan Huibang automatic control instrument Co., Ltd Univ. of Jinan</i> Fangzhen Song, <i>Univ. of Jinan</i>
10:30-10:50	SunA12-2 The Application of FFT in Mobile Energy Efficiency Detection Terminal and the Implementation by DSP 2007 Qiangqiang Yin, <i>Wuhan Univ. of Tech.</i> Xianglian Xu, <i>Wuhan Univ. of Tech.</i> Gang Huang, <i>Wuhan Univ. of Tech.</i> Yuchen Wang, <i>Wuhan Univ. of Tech.</i> Kai Zhang, <i>Wuhan Univ. of Tech.</i> Qingning Wang, <i>Wuhan Univ. of Tech.</i>
10:50-11:10	SunA12-3 Vibration Analysis of Flex-gimbal System with High Spinning Velocity 2012 Zhaosheng Guo, <i>Harbin Inst. of Tech.</i> Xin Huo, <i>Harbin Inst. of Tech.</i> Xiaoming Zhang, <i>Shanghai Inst. of Spaceflight Control Tech.</i> Weishan Chen, <i>Harbin Inst. of Tech.</i> Yu Yao, <i>Harbin Inst. of Tech. Harbin Engineering Univ.</i>
11:10-11:30	SunA12-4 Research and Realization of Hand-held Mobile Bacon Detection Based on Neural Network Pattern Recognition 2018 Peiyuan Guo, <i>Beijing Tech. and Business Univ.</i> Man Bao, <i>Beijing Tech. and Business Univ.</i>
11:30-11:50	SunA12-5 The Design of Frequency Tracking Control Circuit in Induction Heating Power Supply based on SG3525 2022 Lijuan Wu, <i>Electronics and Information Inst. of Science and Tech. Univ.</i> Xuesong Li, <i>Electronics and Information Inst. of Science and Tech. Univ.</i>
11:50-12:10	SunA12-6 Spatial Filtering Velocimeter for Gas Solid Flow Based On Ring-Type Capacitance Sensor 2027 Gang Yang, <i>Northeastern Univ.</i> Daoqin Shen, <i>Northeastern Univ.</i> Yutao Wang, <i>Northeastern Univ.</i>

Session	SunA13: Intelligent Building Control and Management (I)
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 13
Chair	Yahui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
Co-Chair	Qingshan Jia, <i>Tsinghua Univ.</i>
10:10-10:30	SunA13-1 <i>A Review of Occupant Behavior Models in Residential Building: Sensing, Modeling, and Prediction</i> 2032 Chao Zhang, <i>Tsinghua Univ.</i> Qingshan Jia, <i>Tsinghua Univ.</i>
10:30-10:50	SunA13-2 <i>Study on Centralized Photovoltaic Array Output Characteristics</i> 2038 Yihao Tan, <i>Beijing Univ. of Civil Engineering and Architecture</i> Yahui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Junhong Zhang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
10:50-11:10	SunA13-3 <i>Classification of Building Electrical System Faults Based on Probabilistic Neural Networks</i> 2043 Fucheng Zhang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Yahui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Fangwen Chen, <i>Beijing Univ. of Civil Engineering and Architecture</i>
11:10-11:30	SunA13-4 <i>Counting People by Using a Single Camera without Calibration</i> 2048 Jianzhao Cao, <i>Shenyang Jianzhu Univ.</i> Liangliang Sun, <i>Shenyang Jianzhu Univ.</i> Manfred Gilbert Odoom, <i>Shenyang Jianzhu Univ.</i> Fangjun Luan, <i>Shenyang Jianzhu Univ.</i> Xiaoyu Song, <i>Shenyang Jianzhu Univ.</i>
11:30-11:50	SunA13-5 <i>Study on Energy Consumption of Hotel Based on Extended STIRPAT Model</i> 2052 Zongjie Du, <i>Qingdao Univ. of Science & Tech.</i> Shanliang Zhu, <i>Qingdao Univ. of Science & Tech.</i> Wei Shao, <i>Qingdao Univ. of Science & Tech.</i> Shulin Sui, <i>Qingdao Univ. of Science & Tech.</i>
11:50-12:10	SunA13-6 <i>Key Technology and Application of Digital Community Based on Private Cloud</i> 2057 Deyue Xing, <i>Jiangnan Univ.</i> Jun Tao, <i>Jiangnan Univ.</i> <i>Rowan Univ.</i> Gui Wu, <i>Jiangnan Univ.</i>

Session	SunA14: Modeling, Control and Simulations of Biological Systems
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 14
Chair	Chunyan Zhou, <i>Xi'an Univ. of Tech.</i> <i>North Univ. of Nationalities</i>
Co-Chair	Chao Liu, <i>Northeastern Univ.</i> <i>State Key Lab. of Integrated Automation of Process Industry</i>
10:10-10:30	SunA14-1 Modeling Human Hand Movement with Motor Signature Based on Velocity Segment 2061 Chao Zhai, <i>Univ. of Hong Kong</i> Michael Z. Q. Chen, <i>Univ. of Hong Kong</i>
10:30-10:50	SunA14-2 Objective Resolution Measurement in Single Particle Reconstructions Based on a New Spectral Signal-to-Noise Ratio Estimation 2067 Shuai Wang, <i>Shanghai Jiao Tong Univ.</i> Biao Zhang, <i>Shanghai Jiao Tong Univ.</i> Hongbin Shen, <i>Shanghai Jiao Tong Univ.</i> <i>Key Laboratory of System Control and Information Processing, Ministry of Education of China</i>
10:50-11:10	SunA14-3 Dynamical Analysis in an Exploited Two-Species Competition Model with Double Time Delays 2073 Na Lu, <i>Northeastern Univ.</i> <i>State Key Lab. of Integrated Automation of Process Industry</i> Chao Liu, <i>Northeastern Univ.</i> <i>State Key Lab. of Integrated Automation of Process Industry</i> Jingmei Guo, <i>Northeastern Univ.</i>
11:10-11:30	SunA14-4 A Robust Cell Tracking Framework by Fusing Global and Local Optimization Algorithms 2079 Shu Meng, <i>Shanghai Jiao Tong Univ.</i> <i>Key Laboratory of System Control and Information Processing, Ministry of Education of China</i> Hongbin Shen, <i>Shanghai Jiao Tong Univ.</i> <i>Key Laboratory of System Control and Information Processing, Ministry of Education of China</i>
11:30-11:50	SunA14-5 SOM Neural Network for Clustering Plant and Plant Stress Based on Kinetic Imaging of Chlorophyll Fluorescence 2085 Chunyan Zhou, <i>Xi'an Univ. of Tech.</i> <i>North Univ. of Nationalities</i> Dengxin Hua, <i>Xi'an Univ. of Tech.</i> Jing Le, <i>Xi'an Univ. of Tech.</i> Jia Zhang, <i>Xi'an Univ. of Tech.</i>
11:50-12:10	SunA14-6 Application of the Fuzzy C-means Clustering Algorithm in Plantar Pressure Analysis 2089 Jie Wang, <i>Univ. of Science and Tech. Beijing</i> Hongshi Huang, <i>Peking Univ. Third Hospital</i> Xiaoli Li, <i>Beijing Univ. of Tech.</i> <i>Univ. of Science and Tech. Beijing</i> Yingfang Ao, <i>Peking Univ. Third Hospital</i>

Session	SunAIS: Interactive Session
Date/Time	Sunday, 29 May 2016 / 10:10-12:10
Venue	Room 15

SunAIS-01 A Hesitant Fuzzy Linguistic Multi-Criteria Decision-Making Method Based On the Quasi-Arithmetic Mean And Harmonic Mean Operators 2095

Sumin Yu, *Central South Univ.*
 Jing Wang, *Central South Univ.*
Central South Univ. of Forestry and Tech.
 Zhangpeng Tian, *Central South Univ.*
 Huan Zhou, *Central South Univ.*
 Jianqiang Wang, *Central South Univ.*

SunAIS-02 Noise Propagation and Equilibrium Multiplicity 2101

Qingduo Zeng, *Beihang Univ.*
 Duxue Huang, *Beihang Univ.*
 Xu Teng, *Beihang Univ.*

SunAIS-03 Analysis on the Innovation Model Establishing and Innovation Ability of Agriculture Industry Cluster Network 2106

Yumei Wang, *Qingdao Univ. of Science and Tech.*
 Chen Zhang, *Qingdao Univ. of Science and Tech.*
 Linghui Wang, *Qingdao Univ. of Science and Tech.*

SunAIS-04 Study on Comprehensive Assessment System of Software Reliability 2111

Xiaohui Wang, *Henan Univ. of Chinese Medicine*
 Yulong Xu, *Henan Univ. of Chinese Medicine*

SunAIS-05 Design of the Optimization Scheme about the Vehicle logistics Loading 2115

Jie Zhang, *Northeast Dianli Univ.*
 Yang Lei, *Northeast Dianli Univ.*
 Yang Yu, *Northeast Dianli Univ.*

SunAIS-07 A Method for Emergency Plan Evaluation under Group Decision Makers based on 2-Tuple Prioritized OWA Operator 2120

Lei Li, *Zhe Jiang Normal Univ.*
 Lijuan Zheng, *Zhe Jiang Normal Univ.*
 Ge Guo, *China Academy of Railway Sciences*

SunAIS-08 A Method of Competition Result Evaluation Based on Social Choice Theory 2126

Wei Cai, *Kunming Univ. of Science and Tech.*
 Xiaodong Fu, *Kunming Univ. of Science and Tech.*
 Li Liu, *Kunming Univ. of Science and Tech.*
 Lijun Liu, *Kunming Univ. of Science and Tech.*
 Qingsong Huang, *Kunming Univ. of Science and Tech.*

- SunAIS-09 A Evaluation Method of Wind Farm Power Prediction Based on Principal Component Analysis and Entropy Methods** 2132
 Qi Yao, *North China Electric Power Univ.*
North China Electric Power Research Institute Co., Ltd.
 Yu Liu, *North China Electric Power Research Institute Co., Ltd.*
State Grid Wind-Photovoltaic-Energy Storage Hybrid Power Generation Tech. Laboratory
 Kai Bai, *North China Electric Power Research Institute Co.*
 Rongfu Sun, *State Grid Jibei Electric Power Company*
 Peng Song, *North China Electric Power Research Institute Co., Ltd.*
 Yuhui Wu, *North China Electric Power Research Institute Co., Ltd.*
- SunAIS-11 Research on LAP Routing Algorithm based on Traversal Tree** 2137
 Lan Shi, *Northeastern Univ.*
 Zihao Xie, *Northeastern Univ.*
 Jianhui Lv, *Northeastern Univ.*
- SunAIS-12 Allowable Missile Launch Zone Calculation for Multi-Fighter Coordination Attack under Network Targeting Environment** 2143
 Guanglei Meng, *Shenyang Aerospace Univ.*
 Haibing Pan, *Shenyang Aerospace Univ.*
 Xiao Liang, *Shenyang Aerospace Univ.*
 Feng Tian, *Shenyang Aerospace Univ.*
- SunAIS-13 Based on Two Element Neighborhood Search Quantum Genetic Algorithm to Solve the Vehicle Scheduling Problem** 2147
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 Jianlin Mao, *Kunming Univ. of Science and Tech.*
 Ning Guo, *Kunming Univ. of Science and Tech.*
 Changzheng Wang, *Kunming Univ. of Science and Tech.*
 Weixian Qu, *Kunming Univ. of Science and Tech.*
- SunAIS-14 Optimal Manufacturing/Remanufacturing Decisions Considering Capital Constraint** 2151
 Yongjian Wang, *Southeast Univ.*
 Weida Chen, *Southeast Univ.*
 Yanhua Zhang, *Southeast Univ.*
Xizang Minzu Univ.
- SunAIS-15 Application of Improved Ant Colony Optimization Algorithm on Traveling Salesman Problem** 2156
 Xue Yang, *Univ. of Science and Tech. Liaoning*
 Jiesheng Wang, *Univ. of Science and Tech. Liaoning*
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 Yuelin Gao, *Beifang Unive. of Nationalities*
 He Yang, *Beifang Unive. of Nationalities*
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 Huizhi Ren, *Shenyang Univ. of Tech.*
 Han Xu, *Shenyang Univ. of Tech.*
 Shenshen Sun, *Shenyang Univ.*

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 Danyang Zheng, *Kunming univ. of science and tech.*
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 Jianlin Mao, *Kunming univ. of science and tech.*
 Ning Guo, *Kunming univ. of science and tech.*
- SunAIS-19** *Single Machine Scheduling Problem with Cost Constraints based on Customer Driven and Its Noncooperative Game* 2177
 Yanping Zhou, *Qingdao Univ. of Science and Tech.*
 Naiping Hu, *Qingdao Univ. of Science and Tech.*
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 Chenyang Gao, *Beifang Univ. of Nationalities*
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 Jie Lian, *Dalian Univ. of Tech.*
 Jun Wang, *Dalian Univ. of Tech.*
 Dong Wang, *Dalian Univ. of Tech.*
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 Xinghua Liu, *Univ. of Science and Tech. of China*
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 Zhile Wei, *Shenyang Univ.*
 Yingsong Jiang, *Shenyang Univ.*

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- SunAIS-28 Switched Control for Nonlinear Discrete Singular Systems and Application** 2225
 Xiuhua Zhang, *Northeastern Univ.*
- SunAIS-29 Stability Analysis of Discrete-Time Switched Nonlinear Systems with Delays and Perturbations** 2230
 Xingwen Liu, *Southwest Univ. for Nationalities of China*
- SunAIS-30 Mixed 2/8 Model Predictive Control for a Class of Switched Singular Systems** 2236
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- SunAIS-42** *An Improved Routing Mechanism based on Trust Value Evaluation*
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- SunAIS-54 Weighted Group-Consensus of Multi-Agent Systems with Bipartite Topologies** 2368
 Yinggao He, *Wuxi Inst. of Arts & Tech.*
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- SunAIS-55 Energy-Efficient Cooperative Spectrum Sensing for Cognitive Sensor Networks with Energy Harvesting** 2373
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- SunAIS-57 A Node Schedule Method for Multi-coverage Probability Based on Probabilistic Coverage in WSNs** 2385
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- SunAIS-59 A New Resource Management Algorithm of a Virtual Internet architecture** 2397
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- SunAIS-60 The Gateway Anomaly Detection And Diagnosis In WSNs** 2401
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- SunAIS-61 Farmland Solid Remote Monitoring System Based on Embedded Technology and BS Mode** 2407
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 Yongfeng Ju, *Huaiyin Inst. of Tech.*
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- SunAIS-64 Research on Intelligence, Surveillance and Reconnaissance Mission Planning Model and Method for Naval Fleet** 2419
 Li Duan, *Naval Univ. of Engineering*
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- SunAIS-67** *The choice of manufacturer's online customization channel under different pricing models* 2435
Yongmei Liu, *Central South Univ.*
Ruyi Yang, *Central South Univ.*
- SunAIS-68** *The Bullwhip Effect in Marketing E-business System and Its Control Strategy* 2441
Zhiyong Zhang, *Northeastern Univ.*
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Xiaoqing Li, *Northeastern Univ.*

Session	SunB01: Adaptive Control (III)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 01
Chair	Yanli Du, Nanjing University of Aeronautics and Astronautics
Co-Chair	Zhihao Cai, Beihang Univ.
13:30-13:50	<p>SunB01-1 <i>Two tracking control method to improve solar cell photoelectric efficiency</i> 2446 Xiuxia Zhang, <i>HeFei University of Tech.</i> <i>Beifang University of nationalities</i> Rong Fan, <i>HeFei University of Tech.</i> <i>Beifang University of nationalities</i> Xiaocong Yang, <i>Beifang University of nationalities</i> Guannan Du, <i>Beifang University of nationalities</i> Shuyi Wei, <i>Beifang University of nationalities</i> Lingchun Zhang, <i>Beifang University of nationalities</i> sHaicheng Wei, <i>Beifang University of nationalities</i></p>
13:50-14:10	<p>SunB01-2 <i>A Fuzzy Self-Tuning PD Controller for a Quadrotor: Design and Implementation</i> 2448 YanJun Lu, <i>Shenyang Aerospace Univ.</i> Tianqi Xu, <i>Shenyang Aerospace Univ.</i> Xiaodong Zhang, <i>Shenyang Aerospace Univ.</i></p>
14:10-14:30	<p>SunB01-3 <i>Chaotic Synchronization and Parameter Identification of Fractional-order Unified Systems</i> 2454 Shaoying Wang, <i>Yellow River Communications Inst.</i> Qiongyao Li, <i>Nanjing-Shanghai Speedway Limited-liability Company</i> Jun Dong, <i>The first Aeronautical Institute of Air Force</i> Aiguo Wu, <i>Unit No.94235 of PLA</i></p>

- 14:30-14:50 SunB01-4 Self-organizing Functional-Link-Network-based Control for Hypersonic Glide Vehicles** 2460
Yanli Du, *Nanjing University of Aeronautics and Astronautics*
Dongyang Sun, *Nanjing University of Aeronautics and Astronautics*
Xuefei Leng, *Nanjing University of Aeronautics and Astronautics*
Jian Fu, *Nanjing University of Tech.*
- 14:50-15:10 SunB01-5 Modeling and Fuzzy Sliding Decoupling Control of Looper Multivariable System** 2467
Boqun Li, *University of Scie. and Tech.*
Xuan Fan, *University of Scie. and Tech.*
Daqing Zhang, *University of Scie. and Tech.*
Guanjie Jiang, *Northeastern Univ.*
- 15:10-15:30 SunB01-6 An L1 Adaptive Roll and Pitch Angle Controller for Quadrotors** 2473
Ningjun Liu, *Beihang Univ.*
Zhihao Cai, *Beihang Univ.*
Yingxun Wang, *Beihang Univ.*

Session	SunB02: Robust Control (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 02
Chair	<i>Shuping Ma, Shandong Univ.</i>
Co-Chair	<i>Hao Liu, Beihang Univ.</i>

- 13:30-13:50 SunB02-1 Robust H 8 Control of Uncertain Nonlinear Continuous-Time Singular Semi-Markov Jump Systems** 2479
Jimin Wang, *Shandong Univ.*
Shuping Ma, *Shandong Univ.*
Zhumahan Kulan, *Changji Coll.*
- 13:50-14:10 SunB02-2 Robust stabilization of positive switched systems with polytopic uncertainty** 2485
Linli Ma, *Hangzhou Dianzi Univ.*
Shaosheng Zhou, *Hangzhou Dianzi Univ.*
- 14:10-14:30 SunB02-3 Robust Control for Hypersonic Vehicles with Multiple Uncertainties and Time-varying Delays** 2491
Kuo Li, *Beihang Univ.*
Zhaoying Li, *Beihang Univ.*
Hao Liu, *Beihang Univ.*
- 14:30-14:50 SunB02-4 Robust Control for Spacecraft Rendezvous System with Thrust Saturation** 2497
Qian Wang, *Hangzhou Dianzi Univ.*
Anke Xue, *Hangzhou Dianzi Univ.*
- 14:50-15:10 SunB02-5 Adaptive Attitude Controller Design with Bounded Tracking Error** 2503
Chunwu Yin
Mingshan Hou
Mingxiang Li
- 15:10-15:30 SunB02-6 Sliding-mode Dynamic Surface Control for MDF Continuous Hot pressing Hydraulic System** 2509
Liangkuan Zhu, *Northeast Forestry Univ.*
Zibo Wang, *Northeast Forestry Univ.*
Yaqiu Liu, *Northeast Forestry Univ.*
Wenlong Song, *Northeast Forestry Univ.*

Session	SunB03: Co-operative Control (II)		
Date/Time	Sunday, 29 May 2016 / 13:30-15:30		
Venue	Room 03		
Chair	Chunjie Yang, Zhejiang Univ.		
Co-Chair	XiangKe Wang, National Univ. of Defense Tech.		
13:30-13:50	SunB03-1	Observer-based Event-triggered Control for Consensus of Multi-agent Systems with Time Delay 2515 Wenhui Liu, <i>Zhejiang Univ.</i> Chunjie Yang, <i>Zhejiang Univ.</i> Youxian Sun, <i>Zhejiang Univ.</i> Jiaxiang Qin, <i>Zhejiang Univ.</i>	
13:50-14:10	SunB03-2	Multi-UAV Formation Control Method Based on Modified Artificial 2523 Yu Fu, <i>National Univ. of Defense Tech.</i> XiangKe Wang, <i>National Univ. of Defense Tech.</i> Liu Huan, <i>National Univ. of Defense Tech.</i> HuaYong Zhu, <i>National Univ. of Defense Tech.</i>	
14:10-14:30	SunB03-3	Coordinated Control for Multi-Agent Systems Based on Networked Predictive Control Schemes 2530 Haoran Tan, <i>Central South Univ.</i> Min Wu, <i>China Univ. of Geosciences</i> Zhiwu Huang, <i>Central South Univ.</i>	
14:30-14:50	SunB03-4	Distributed output-feedback adaptive consensus tracking control of nonlinear multi-agent systems with guaranteed transient performance 2536 Yanfeng Guan, <i>Chongqing Univ.</i> Gang Chen, <i>Chongqing Univ.</i>	
14:50:15:10	SunB03-5	Moving Target Tracking Of A UAV Formation 2542 Kai Chang, <i>Mechanical Engineering Coll.</i> Yuanqing Xia, <i>Beijing Inst. of Tech.</i> Kaoli Huang, <i>Mechanical Engineering Coll.</i> Dailiang Ma, <i>Beijing Inst. of Tech.</i>	
15:10-15:30	SunB03-6	A Unified Communication and Control Approach for Decentralized Heading Alignment in Robot Networks 2548 Yongqiang Wang, <i>Clemson Univ.</i> Teddy Maxwell, <i>Clemson Univ.</i> Edward Bear, <i>Clemson Univ.</i> Timothy Anglea, <i>Clemson Univ.</i>	

Session	SunB04: Nonlinear Systems (III)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 04
Chair	Zhen Pan, <i>Beihang Univ.</i>
Co-Chair	Xuefeng Zhang, <i>Northeastern Univ.</i>

- 13:30-13:50 SunB04-1 Three Dimensional Integrated Guidance and Control for Slide to Turn Missile with Input Saturation 2554**
Zhen Pan, *Beihang Univ.*
Weihong Wang, *Beihang Univ.*
Shaofeng Xiong, *Beihang Univ.*
Ke Lu, *Science and Technology on Rotorcraft Aeromechanics Laboratory*
- 13:50-14:10 SunB04-2 Semiglobal Distributed Output Regulation of Switching Multi-agent Systems via Dynamic Feedback 2560**
Xiaoli Wang, *Harbin Inst. of Tech. at Weihai*
Tianhua Song, *Harbin Inst. of Tech. at Weihai*
Yaxiao Wu, *Harbin Inst. of Tech. at Weihai*
- 14:10-14:30 SunB04-3 Sliding Mode Control for Nonlinear System with Hysteresis Based on RBFNN Approximation 2566**
Haipeng Pan, *Zhejiang Sci-Tech Univ.*
Xianfeng Qian, *Zhejiang Sci-Tech Univ.*
Xinlong Zhao, *Zhejiang Sci-Tech Univ.*
- 14:30-14:50 SunB04-4 Nonlinear Time-Varing Fractional Order System Simulation based on MATLAB 2573**
Ying Xiao, *Northeastern Univ.*
Xuefeng Zhang, *Northeastern Univ.*
Huaxun Huang, *Northeastern Univ.*
- 14:50:15:10 SunB04-5 Robust Stabilization of Input Constrained Uncertain Systems with Nonhomogeneous Markov Switching 2579**
Yanyan Yin, *Jiangnan Univ.*
Zongli Lin, *Univ. of Virginia*
- 15:10-15:30 SunB04-6 Saturated Backstepping Control for Boat with Disturbance Estimator 2585**
Zhenning Yu, *Beijing Normal Univ.*

Session	SunB05: Networked Control Systems (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 05
Chair	Feixiang Peng, <i>Tianjin Univ. of Tech.</i>
Co-Chair	Hongru Gu, <i>Tianjin Polytechnic Univ.</i>

- 13:30-13:50 SunB05-1 Co-design of dynamic scheduling and H 8 filter for networked control systems with communication constraints 2591**
Yong Zhang, *China Univ. of Petroleum*
Ning Wang, *China Univ. of Petroleum*
Jingjing Hu, *China Univ. of Petroleum*

- 13:50-14:10 SunB05-2 Feedback Control for Uncertain Networked Control Systems with Random Input Time Delay** 2597
Chuanxu Qiu, *Jiangnan Univ.*
Jiwei Wen, *Jiangnan Univ.*
Li Peng, *Jiangnan Univ.*
- 14:10-14:30 SunB05-3 The Structure-conserving Module for Network Control System Based On Petri Nets** 2602
Liankun Sun, *Tianjin Polytechnic Univ.*
Hongru Gu, *Tianjin Polytechnic Univ.*
- 14:30-14:50 SunB05-4 Robust Guaranteed Cost Fault-tolerant Control for Uncertain Networked Control System with Time Delay and Packet Dropout** 2607
Liyang Wang, *Hubei Univ. of Science and Tech.*
Yang Wang, *Hubei Univ. of Science and Tech.*
Xiaofen Wang, *Hubei Univ. of Science and Tech.*
Honghai Lian, *Hunan Univ. of Tech.*
- 14:50:15:10 SunB05-5 Design of 4G Remote Data Transmission System Based on ARM** 2613
Hong He, *Tianjin Univ. of Tech.*
Feixiang Peng, *Tianjin Univ. of Tech.*
Zhihong Zhang, *Tianjin Univ. of Tech.*
Tianjin Radio and TV Station
- 15:10-15:30 SunB05-6 Probability-Based Robust H8 Filtering for Time-Varying Systems with Randomly Occurring Gain Variations and Fading Channels** 2617
Xia Zhao, *Nanjing Coll. of Information Tech.*
Engang Tian, *Nanjing Normal Univ.*
Lei Wang, *Nanjing Normal Univ.*
Hongyan Li, *Nanjing Coll. of Information Tech.*

Session	SunB06: Distributed Control Systems (I)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 06
Chair	<i>Yi Dong, Nanjing Unive. of Science and Tech.</i>
Co-Chair	<i>Jie Qi, Donghua Univ.</i>
13:30-13:50 SunB06-1 Containment Control of Multiple Uncertain Lagrangian Systems 2623	<i>Yi Dong, Nanjing Unive. of Science and Tech.</i> <i>Shengyuan Xu, Nanjing Unive. of Science and Tech.</i>
13:50-14:10 SunB06-2 Distributed Control Laws for Multi-Agent System Formation Tracking Modeled by a Wave PDE 2629	<i>Jiaheng Zhang, Donghua Univ.</i> <i>Jie Qi, Donghua Univ.</i>
14:10-14:30 SunB06-3 Distributed adaptive output consensus control of nonlinear strict-feedback systems using neural networks 2635	<i>Gang Wang, Univ. of Shanghai for Science and Tech.</i> <i>Chaoli Wang, Univ. of Shanghai for Science and Tech.</i> <i>Weidong Xu, Univ. of Shanghai for Science and Tech.</i>
14:50:15:10 SunB06-5 Try again till you are satisfied: convergence, outcomes and mean-field limits 2641	<i>Alain Tcheukam, New York Univ.</i> <i>Hamidou Tembine, New York Univ.</i>

15:10-15:30 SunB06-6 A Fault-Tolerant Scheduling Algorithm for Distributed Control System with Possible Hardware and Software Faults 2646
 Huai Liu, *Nanjing Normal Univ.*
 Jianxin Huang, *Nanjing Normal Univ.*

Session	SunB07: Neural Networks (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 07
Chair	Yuhang Guo, <i>Beihang Univ.</i>
Co-Chair	Jie Fu, <i>Chongqing Univ.</i>

13:30-13:50 SunB07-1 Study of Full Interval Feed-forward Neural Network Shouping Guan Northeastern Univ. 2652
 Rongye Liang, *Northeastern Univ.*

13:50-14:10 SunB07-2 Neural Network Tracking Control of the 3-DOF Helicopter with Input Saturation 2656
 Yuhang Guo, *Beihang Univ.*
 Zewei Zheng, *Beihang Univ.*
 Ming Zhu, *Beihang Univ.*
 Zhe Wu, *Beihang Univ.*

14:10-14:30 SunB07-3 Improved Passivity Analysis for Uncertain Neural Networks with Time-varying Delay 2661
 Shiyong Peng, *Guangdong Univ. of Tech.*
 Shiguo Peng, *Guangdong Univ. of Tech.*

14:30-14:50 SunB07-4 Neural Network Modeling of Magneto-rheological Elastomer Isolator 2668
 Guanyao Liao, *Chongqing Univ.*
 Jie Fu, *Chongqing Univ.*
 Peidong Li, *Chongqing Univ.*
 Miao Yu, *Chongqing Univ.*

14:50-15:10 SunB07-5 Research on the evaluation of enterprise competitiveness based on the wavelet neural network forecasting system 2674
 Zhiyuan Zhao, *Inst. of Scientific and Technical Information of China*
 Yanning Zheng, *Inst. of Scientific and Technical Information of China*
 Xiaoyuan Zhao, *Inst. of Scientific and Technical Information of China*
 Yamin Jia, *Inst. of Scientific and Technical Information of China*

17:10-17:30 SunB07-6 Short-Term Wind Power Forecasting Based on Elman Neural Network with Particle Swarm Optimization 2678
 Lei Xu, *Beifang Univ. of Nationalities*
 Jiandong Mao, *Beifang Univ. of Nationalities*

Session	SunB08: Fault Diagnosis and Fault-Tolerant Control (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 08
Chair	Bin Jiang, <i>Nanjing Univ. of Aeronautics and Astronautics</i>
Co-Chair	Ke Zhang, <i>Nanjing Univ. of Aeronautics and Astronautics</i>
13:30-13:50	<p>SunB08-1 Finite-Time Tracking for Underactuated Vehicles with Parametric Uncertainties 2682 Xiuli Wang, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Bin Jiang, <i>Nanjing Univ. of Aeronautics and Astronautics</i> Ningyun Lu, <i>Nanjing Univ. of Aeronautics and Astronautics</i></p>
13:50-14:10	<p>SunB08-2 Based on Wavelet Packet and The LS - SVM Ship With Warship Engine Fault Diagnosis 2687 Shijie Ma, <i>Qingdao Univ. of Tech.</i> Hong Wang, <i>Qingdao Univ. of Tech.</i></p>
14:10-14:30	<p>SunB08-3 Nonlinear Fermentation Process Fault Monitoring Based on JITL Strategy 2692 Yakun Zhang, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Xuejin Gao, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Yafen Li, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Xichang Wang, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Pu Wang, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i></p>
14:30-14:50	<p>SunB08-4 Path Following Control for a Stratospheric Airship with Constrained Control Allocation 2698 Hui Lv, <i>Beihang Univ.</i> Zewei Zheng, <i>Beihang Univ.</i> Ming Zhu, <i>Beihang Univ.</i> Zhe Wu, <i>Beihang Univ.</i></p>

- 14:50-15:10** **SunB08-5** *Dissipativity-Based Fault Estimation Observer Design for Linear Multi-Agent Systems with Disturbances* 2705
 Yang Cui, *Nanjing Univ. of Aeronautics and Astronautics*
 Ke Zhang, *Nanjing Univ. of Aeronautics and Astronautics*
 Bin Jiang, *Nanjing Univ. of Aeronautics and Astronautics*
- 17:10-17:30** **SunB08-6** *Methods of Evaluation of Navigation Errors in Platform Inertial Navigation Systems based on PSVR* 2710
 Chao Huang, *Harbin Inst. of Tech.*
 Guoxing Yi, *Harbin Inst. of Tech.*
 Qingshuang Zen, *Harbin Inst. of Tech.*
 Ziyang Qi, *Harbin Inst. of Tech.*
 Mingyang Yang, *Harbin Inst. of Tech.*

Session	SunB09: Control Applications (III)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 09
Chair	<i>Ming Li, Beihang Univ.</i>
Co-Chair	<i>Hongbo Wang, Hefei Univ. of Tech.</i>

- 13:30-13:50** **SunB09-1** *Study of Touch Screen on Marine Power Station Based on Fuzzy PID Control Algorithm* 2717
 Tingting Huang, *Guangzhou Maritime Inst.*
 Ming Bai, *Guangzhou Maritime Inst.*
 Yuanming Zeng, *Guangzhou Maritime Inst.*
 Guopiao Li, *Guangzhou Maritime Inst.*
 Yiyi Zhan, *Guangzhou Maritime Inst.*
- 13:50-14:10** **SunB09-2** *Unbalance Disturbance Restraining for Inertial Stabilized Platform* 2723
 Ming Li, *Beihang Univ.*
 Jie Li, *Beihang Univ.*
 Renqiang Zhang, *Beihang Univ.*
- 14:10-14:30** **SunB09-3** *Building Dynamic Evacuation Based on a Fly Optimization* 2729
 Lijie Zhang, *Northeastern Univ.*
Ningxia Inst. of Science and Tech.
 Jianchang Liu, *Northeastern Univ.*
 Shubin Tan, *Northeastern Univ.*
- 14:30-14:50** **SunB09-4** *Research on Hierarchical Control of Automobile Adaptive Cruise System Based on the Mode Switching* 2733
 Hongbo Wang, *Hefei Univ. of Tech.*
 Xiaowen Sun, *Hefei Univ. of Tech.*
 Jiang You, *Hefei Univ. of Tech.*
- 14:50-15:10** **SunB09-5** *Construction and Synchronization for a New Time-delayed Chaotic System* 2739
 Keyong Shao, *Northeast Petroleum Univ.*
 Tingting Zhang, *Northeast Petroleum Univ.*
 Xiang Xu, *Northeast Petroleum Univ.*
 Di Ma, *Northeast Petroleum Univ.*
 Baiquan Chen, *Northeast Petroleum Univ.*
 Deyang Wen, *Sixth Oil Production Plant Test Brigade*

15:10-15:30 SunB09-6 Design of Network Control System for Automotive Proving Ground 2743
 Daqian Liu, *North China Univ. of Tech.*
 Lei Gao, *North China Univ. of Tech.*
 Cunwu Han, *North China Univ. of Tech.*
 Jinhuan Wang, *North China Univ. of Tech.*

Session	SunB10: Signal Processing (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 10
Chair	Dongyue Chen, <i>Northeastern Univ.</i>
Co-Chair	Jun Xu, <i>Harbin Univ. of Science and Tech.</i>

13:30-13:50 SunB10-1 Online Hash Tracking 2747
 Jianwu Fang, *Chang'an Univ.*
 Rixing Zhu, *Chang'an Univ.*
 Hongke Xu, *Chang'an Univ.*
 Shan Lin, *Chang'an Univ.*

13:50-14:10 SunB10-2 Ventricle Detection based on Boolean Maps and Geometric Features 2753
 Dongyue Chen, *Northeastern Univ.*
 Jingfeng Zhang, *Northeastern Univ.*
 Huazhao Chen, *Northeastern Univ.*
 Tong Jia, *Northeastern Univ.*
 Chengdong Wu, *Northeastern Univ.*

14:10-14:30 SunB10-3 Optimizing the framework of Image Denoising based on Sparse and Redundant Representations 2757
 Shuting Cai, *Guangdong Univ. of Tech.*
 Shaojia Weng, *Guangdong Univ. of Tech.*
 Binling Luo, *Guangdong Univ. of Tech.*
 Daolin Hu, *Guangdong Univ. of Tech.*
 Simin Yu, *Guangdong Univ. of Tech.*

14:30-14:50 SunB10-4 Gesture Recognition Based on Wearable Sensing 2763
 Jun Xu, *Harbin Univ. of Science and Tech.*
 Yinglong Dong, *Harbin Univ. of Science and Tech.*
 Yanan Tang, *Harbin Univ. of Science and Tech.*

14:50-15:10 SunB10-5 A Research and Strategy of Space Super-Resolution Imaging System Based on Sandroid CubeSat 2769
 Hailu Wang, *Chinese Academy of Sciences*
 Junsuo Zhao, *Chinese Academy of Sciences*
 Fengge Wu, *Chinese Academy of Sciences*

15:10-15:30 SunB10-6 AC Quantity Calculation of Wide Variable Frequency Electric Power System for Aircraft with Recursive DFT 2776
 Zhongtian Tai, *The First Aircraft Inst. of AVIC*
 Weipeng Yang, *Xi'an Jiao Tong Univ.*
 Mingya Wang, *The First Aircraft Inst. of AVIC*
 Xin Yao, *The First Aircraft Inst. of AVIC*
 Xiaofan Niu, *The First Aircraft Inst. of AVIC*

Session	SunB11: Data Processing (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 11
Chair	Biao Wang, <i>Northeastern Univ.</i>
Co-Chair	Min Lin, <i>Guizhou Univ.</i>
13:30-13:50	SunB11-1 Collaborative Filtering Recommendation Algorithm Based on Weighted Item Category 2782 Jie Qin, <i>PLA Univ. of Science and Tech.</i> Lei Cao, <i>PLA Univ. of Science and Tech.</i> Hui Peng, <i>PLA Univ. of Science and Tech.</i>
13:50-14:10	SunB11-2 Grayscale image encryption based on Latin square and Cellular Neural Network 2787 Min Lin, <i>Guizhou Univ.</i> Fei Long, <i>Guizhou Univ.</i> Lu Guo, <i>Guizhou Univ.</i>
14:10-14:30	SunB11-3 Stumble Mode Identification of Prosthesis Based on the Dempster-Shafer Evidential Theory 2794 Huijun Zhang, <i>Heibei Univ. of Tech.</i> Zuojun Liu, <i>Heibei Univ. of Tech.</i> Guoxing Chen, <i>Heibei Univ. of Tech.</i> Yan Zhang, <i>Heibei Univ. of Tech.</i>
14:30-14:50	SunB11-4 Outliers Screening for Photovoltaic Electric Power Based on the Least Square Method 2799 Li Yu, <i>Beijing Forestry Univ.</i> Hongqing Wang, <i>Beijing Forestry Univ.</i> Jianfeng Che, <i>China Electric Power Research Inst.</i> Jing Lu, <i>China Electric Power Research Inst.</i> Xueming Zheng, <i>Beijing Forestry Univ.</i>
14:50-15:10	SunB11-5 Evaluation of Inputs for Mach Number Prediction Model Based on ANFIS 2805 Biao Wang, <i>Northeastern Univ.</i> Zhizhong Mao, <i>Northeastern Univ.</i>
15:10-15:30	SunB11-6 A point cloud registration method combining enhanced particle swarm optimization and iterative closest point method 2810 Yuqin Ge, <i>Nanjing Univ. of Post and Telecommunications</i> Baoyun Wang, <i>Nanjing Univ. of Post and Telecommunications</i> Jianhui Nie, <i>Nanjing Univ. of Post and Telecommunications</i> Bo Sun, <i>Nanjing Univ. of Post and Telecommunications</i>

Session	SunB12: Perception Systems
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 12
Chair	<i>De Xu, Inst. of Automation, Chinese Acad. of Scie.</i>
Co-Chair	<i>Hao Liu, Inst. of Automation, Chinese Acad. of Scie.</i>
13:30-13:50	SunB12-1 Width Estimation of Glue Line for Engine Oil Sump Based on Planar Vision 2816 Changguo Yan, <i>Inst. of Automation, Chinese Acad. of Scie.</i> De Xu, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Yan Liu, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Feng Zhang, <i>Inst. of Automation, Chinese Acad. of Scie.</i>
13:50-14:10	SunB12-2 Design of Elastic Component of Optic Intensity Force Sensing Catheter Based on Finite Element Analysis 2822 Yun Zou, <i>Shenyang Ligong Univ.</i> <i>Inst. of Automation, Chinese Acad. of Scie.</i> Hao Liu, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Anzhu Gao, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Yuanyuan Zhou, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Siwen Hao, <i>Inst. of Automation, Chinese Acad. of Scie.</i>
14:10-14:30	SunB12-3 Teaching Behavior Evaluation Model Establishment and Feature Extraction 2828 Yinjia Shi, <i>Univ. of Science and Tech. Beijing</i> Jiwei Liu, <i>Univ. of Science and Tech. Beijing</i> Ye Zhang, <i>CECEP Wind-power Corporation Co.,Ltd</i> Xin Zhao, <i>Univ. of Science and Tech. Beijing</i> Chaowen Yan, <i>Univ. of Science and Tech. Beijing</i>
14:30-14:50	SunB12-4 The Calculation of the Center for Metal Rectangle Based on Gray Level Difference 2834 Jingyi Zheng, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Zaojun Fang, <i>Inst. of Automation, Chinese Acad. of Scie.</i> En Li, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Zize Liang, <i>Inst. of Automation, Chinese Acad. of Scie.</i>
14:50-15:10	SunB12-5 Research on Branches Recognition of Apple Harvesting Robot 2839 Jidong Lv, <i>Changzhou Univ.</i> Fan Wang, <i>Changzhou Univ.</i> Genrong Shen, <i>Changzhou Univ.</i> Zhenghua Ma, <i>Changzhou Univ.</i>
15:10-15:30	SunB12-6 Motion Saliency Detection based on Spatiotemporal Amplitude Spectrum Modulation 2843 Mingguo Zheng, <i>Northeastern Univ.</i> Dongyue Chen, <i>Northeastern Univ.</i> Chengdong Wu, <i>Northeastern Univ.</i>

Session	SunB13: Intelligent Building Control and Management (II)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 13
Chair	Yahui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
Co-Chair	Qingshan Jia, <i>Tsinghua Univ.</i>

13:30-13:50	SunB13-1	Prediction of Population Distribution on Campus Based on Historical Location Data 2849 Mingzhang Zhu, <i>Shanghai Jiao Tong Univ.</i> Changchun Pan, <i>Shanghai Jiao Tong Univ.</i> Genke Yang, <i>Shanghai Jiao Tong Univ.</i> Haichun Liu, <i>Shanghai Jiao Tong Univ.</i>
13:50-14:10	SunB13-2	Research of the DC Microgrid Topology 2855 Zhuying Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Zhixin Chen, <i>Beijing Univ. of Civil Engineering and Architecture</i> Xiaohui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
14:10-14:30	SunB13-3	Research of indoor localization based on inertial navigation technology 2860 Tiechun Li, <i>Beijing Univ. of Civil Engineering and Architecture</i> Jia Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Zhixin Chen, <i>Beijing Univ. of Civil Engineering and Architecture</i>
14:30-14:50	SunB13-4	Research on integrated application of Virtual Reality technology based on BIM 2865 Shengyi Li, <i>Beijing Univ. of Civil Engineering and Architecture</i> Jia Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
14:50:15:10	SunB13-5	Video Monitoring System of Security based on Wi-Fi 2869 Wenjie Qi, <i>Beijing Univ. of Civil Engineering and Architecture</i> Yahui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i> Cuimei Li, <i>Beijing Univ. of Civil Engineering and Architecture</i> De Zhang
15:10-15:30	SunB13-6	Research on energy saving control of chilled water system of central air conditioning system 2875 Zhuangju Li, <i>Beijing Univ. of Civil Engineering and Architecture</i> Cai Lv, <i>Beijing Univ. of Civil Engineering and Architecture</i> Jie Mei, <i>Beijing Univ. of Civil Engineering and Architecture</i>

Session	SunB14: Smart Grids (III)
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 14
Chair	Zhiyu Xu, <i>Tongji Univ.</i>
Co-Chair	Yan Li, <i>Central South Univ.</i>

13:30-13:50	SunB14-1	Price-based Generation Control in Flow Constrained Power Grid 2879 Zhiyu Xu, <i>Tongji Univ.</i> Weihui Shao, <i>Tongji Univ.</i> Ning Wang, <i>Tongji Univ.</i> Weisheng Xu, <i>Tongji Univ.</i>
13:50-14:10	SunB14-2	An improved droop control with tunable virtual impedance 2883 Yan Li, <i>Central South Univ.</i>

- 14:10-14:30 SunB14-3 Based on the Internet of things a self-cleaning solar power system of the household micro-grid** 2889
 Guannan Du, *Beifang Univ. of Nationalities*
 Xiuxia Zhang, *Beifang Univ. of Nationalities*
HeFei Univ. of Tech.
 Shuyi Wei, *Beifang Univ. of Nationalities*
 Qianyu Ji, *Beifang Univ. of Nationalities*
 Haicheng Wei, *Beifang Univ. of Nationalities*
- 14:30-14:50 SunB14-4 Prediction of the Wind Speed Series Based on Genetic Hysteretic Elman Network** 2891
 Tingting Yu, *Tianjin Light Industry Vocational Technical Coll.*
 Xiumei Yang, *Tianjin Xingye Engineering Cost Consulting Co., Ltd.*
 Chunbo Xiu, *Tianjin polytechnic Univ.*
 Liu Wang, *Tianjin polytechnic Univ.*
- 14:50:15:10 SunB14-5 An Overview on V2G Strategies to Impacts from EV Integration into Power System** 2895
 Youjie Ma, *Tianjin Univ. of Tech.*
 Bin Zhang, *Tianjin Univ. of Tech.*
 Xuesong Zhou, *Tianjin Univ. of Tech.*
 Zhiqiang Gao, *Tianjin Univ. of Tech.*
 Yanjuan Wu, *Tianjin Univ. of Tech.*
 Jinliang Yin, *Tianjin Univ. of Tech.*
 Xiaoning Xu, *Tianjin Univ. of Tech.*
- 15:10-15:30 SunB14-6 An Overview on Energy Router based on Various Forms of Energy** 2901
 Xuesong Zhou, *Tianjin Univ. of Tech.*
 Fuzhi Wang, *Tianjin Univ. of Tech.*
 Youjie Ma, *Tianjin Univ. of Tech.*
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 Yanjuan Wu, *Tianjin Univ. of Tech.*
 Jinliang Yin, *Tianjin Univ. of Tech.*
 Xiaoning Xu, *Tianjin Univ. of Tech.*

Session	SunBIS: Interactive Session
Date/Time	Sunday, 29 May 2016 / 13:30-15:30
Venue	Room 15

SunBIS-01 Sliding mode quantized feedback control for uncertain linear systems with unknown actuator faults 2907

Liyang Hao, *Dalian Ocean Univ.*
Dalian Maritime Univ.
 Mengying Gao, *Dalian Ocean Univ.*
 Hui Li, *Dalian Maritime Univ.*

SunBIS-02 Damaged Modelling for Supersonic Near Space Vehicles under Vertical Tail Loss 2913

Jing Zhao, *Nanjing Univ. of Posts and Telecommunications*
 Fei Xie, *Nanjing Normal Univ.*
 Zhifeng Gao, *Nanjing Univ. of Posts and Telecommunications*
 Yufei Xu, *Shanghai Inst. of satellite engineering*
 Teng Cao, *Nanjing Univ. of Posts and Telecommunications*

- SunBIS-03 Adapting TSVM for Fault Diagnosis with Imbalanced Class Data** 2919
 Anna Wang, *Northeastern Univ.*
 Limei Liu, *Shenyang Inst. of Engineering*
 Xin Jin, *Northeastern Univ.*
 Yapei Li, *Northeastern Univ.*
- SunBIS-04 Design and Realization of Vibration Signal Acquisition & Analysis System Based on STM32** 2924
 Gangjing Huang, *Kunming Univ. of Science and Tech.*
 Yugang Fan, *Kunming Univ. of Science and Tech.*
- SunBIS-05 Steady-state Characteristics Analysis of Induction Motor Under the Condition of Asymmetrical Faults in Stator** 2929
 Li Li, *Huaqiao Univ.*
 Ping Li, *Huaqiao Univ.*
 Fujiang Jin, *Huaqiao Univ.*
- SunBIS-06 Combining Unsupervised and Supervised Fault Diagnosis Method with Ensemble Learning** 2935
 Jian Wang, *Bohai Univ.*
 Zhiyan Han, *Bohai Univ.*
- SunBIS-07 The Fault Diagnosis Based on Self-organizing Fuzzy Clustering Elman Network in Wind Turbines** 2940
 Yang Yu, *Shenyang Ligong Univ.*
 Chuxin Li, *Shenyang Ligong Univ.*
 Qing Yang, *Shenyang Ligong Univ.*
 Zilong Wang, *Shenyang Ligong Univ.*
- SunBIS-08 Fault diagnosis of power electronic device based on wavelet and neural network** 2946
 Lijun Fu, *Shenyang Ligong Univ.*
 Qing Yang, *Shenyang Ligong Univ.*
 Guangxin Wang, *Shenyang Ligong Univ.*
 Huixuan Ren, *Shenyang Ligong Univ.*
- SunBIS-09 Fault Detection of Chiller Based on Improved KPCA** 2951
 Nanhua Zhang, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
 Xuejin Gao, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
 Yafen Li, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
 Pu Wang, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System

- SunBIS-10** **Fault Detection for Networked Control Systems with Uncertain Time-varying Sampling Periods** 2956
 Yu Cao, *Zhengzhou Univ.*
 Minglei Gao, *Zhengzhou Univ.*
 Duanjin Zhang, *Zhengzhou Univ.*
- SunBIS-11** **A Power Bond Graph based Diagnostic Algorithm for CCBII Brake** 2961
 Lu Xiong, *Central South Univ*
 Yingze Yang, *Central South Univ*
 Zhiwu Huang, *Central South Univ*
 Liran Li, *Central South Univ*
- SunBIS-12** **Fault Diagnosis of Rolling Bearing Based on Permutation Entropy and Extreme Learning Machine** 2966
 Yazhuo Li, *Kunming Univ. of Science and Tech. Engineering Research Center for Mineral Pipeline Transportation*
 Xiaodong Wang, *Kunming Univ. of Science and Tech. Engineering Research Center for Mineral Pipeline Transportation*
 Jiande Wu, *Kunming Univ. of Science and Tech. Engineering Research Center for Mineral Pipeline Transportation*
- SunBIS-13** **A Residual Lifetime Prediction Method based on the Offset Distance to Cooling Fan** 2972
 Xiaoqin Wen, *South China Univ. of Tech.*
 Linru You, *South China Univ. of Tech.*
- SunBIS-14** **Fault Detection and Diagnosis for Sensor in an Aero-Engine System** 2977
 Zhen Zhao, *Civil Aviation Univ. of China*
 Yigang Sun, *Civil Aviation Univ. of China*
 Jun Zhang, *Civil Aviation Univ. of China*
- SunBIS-15** **Detection of Rail Squats Based on Hilbert-Huang Transform by Using Bogie Acceleration Measurement** 2983
 Xiukun Wei, *Beijing Jiaotong Univ. Shanghai Key Laboratory of Computer Software Evaluating & Testing*
 Yuxin Liu, *Beijing Jiaotong Univ.*
 Xianxian Yin, *Beijing Jiaotong Univ.*
- SunBIS-16** **Research on fault diagnosis for rail vehicle compartment of LED lighting system of analog circuit based on WP-EE and BP neural network** 2989
 Bangcheng Zhang, *Changchun Univ. of Tech.*
 Ran Xu, *Changchun Univ. of Tech.*
 Xiaojing Yin, *Changchun Univ. of Tech.*
 Zhi Gao, *Changchun Univ. of Tech.*
- SunBIS-17** **Distributed Adaptive Fault-Tolerant Control of Leader-Following Multi-Agent Systems with Unmatched Uncertainties** 2994
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- SunBIS-18** **Vehicle Routing Problem with Simultaneous Pickups and Deliveries and Time Windows Considering Fuel Consumption and Carbon Emissions** 3000
 Hao Gang, *Tianjin Univ. of Tech.*
 Gou Zhijing, *Tianjin Univ. of Tech.*
 Yang Peng, *Tianjin Univ. of Tech.*
 Sun Junqing, *Tianjin Univ. of Tech.*

- SunBIS-19** **Anti-disturbance Control for Flexible Spacecraft with Time-varying Input Delay** 3006
 Xiaofeng Xu, *Nanjing Univ. of Information Science and Tech.*
 Bin Zhang, *Nanjing Univ. of Information Science and Tech.*
 Tao Li, *Nanjing Univ. of Information Science and Tech.*
 Bochao Zheng, *Nanjing Univ. of Information Science and Tech.*
- SunBIS-20** **State Estimation for T-S Fuzzy Neural Networks with Mixed Time Delays Using Secondary Delay Partitioning Method** 3012
 Jiaojiao Ren, *Univ. of Electronic Science and Tech. of China*
Univ. of Waterloo
 Xinzhi Liu, *Univ. of Waterloo*
 Hong Zhu, *Univ. of Electronic Science and Tech. of China*
 Shouming Zhong, *Univ. of Electronic Science and Tech. of China*
 Yong Zeng, *Univ. of Electronic Science and Tech. of China*
- SunBIS-21** **Sequential Covariance Intersection Fusion Kalman Filter for Multi-Sensor Systems with Multiple Time Delayed Measurements** 3018
 Jun Wang, *Heilongjiang Univ.*
 Yuan Gao, *Heilongjiang Univ.*
 Chenjian, *Ran Heilongjiang Univ.*
- SunBIS-23** **Analysis and Design Concerning State Estimator for BAM Neural Networks with Time-varying Delays of Neutral Type** 3023
 Jia Liu, *Tianjin Univ. of Tech. and Education Inst. of Semiconductors, Chinese Academy of Sciences*
 Yunxi Zhang, *Tianjin Univ. of Tech. and Education*
 Kuansheng Zou, *Jiangsu Normal Univ.*
 Jigong Li, *Tianjin Univ. of Tech. and Education*
- SunBIS-24** **UK Population Forecast Using Twice-Pruning Chebyshev-Polynomial WASD Neuronet** 3029
 Yunong Zhang, *Sun Yat-sen Univ.*
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 Wan Li, *Sun Yat-sen Univ.*
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 Binbin Qiu, *Sun Yat-sen Univ. SYSU-CMU Shunde International Joint Research Inst. Key Laboratory of Autonomous Systems and Networked Control*
 Hongzhou Tan, *Sun Yat-sen Univ. SYSU-CMU Shunde International Joint Research Inst.*
 Ziyi Luo, *Sun Yat-sen Univ. SYSU-CMU Shunde International Joint Research Inst. Key Laboratory of Autonomous Systems and Networked Control*
- SunBIS-25** **Neural Network High-Order Sliding Mode Control for a Flexible Air-Breathing Hypersonic Flight Vehicle** 3035
 Hailiang Zhou, *Tianjin Inst. of Metrological Supervision and Testing*
 Shun Gao, *Tianjin Inst. of Metrological Supervision and Testing*
 Yong Ran, *Tianjin Inst. of Metrological Supervision and Testing*
 Yuanyao Li, *Tianjin Inst. of Metrological Supervision and Testing*
- SunBIS-26** **Choice of Tobacco Leaf Features Based on Selected Probability of Particle Swarm Algorithm** 3041
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- SunBIS-27** **Deterministic Learning for Human Gait Recognition** Feifei Yang
South China Univ. of Tech. 3045
Wenjie Si, *South China Univ. of Tech.*
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Qian Wang, *South China Univ. of Tech.*
- SunBIS-28** **A Method of Dynamic System Identification based on Memory RBF Network** 3051
Qiang Lv, *Academy of Armored Force Engineering*
Yang Zhang, *Academy of Armored Force Engineering*
Huican Lin, *Academy of Armored Force Engineering*
- SunBIS-29** **A neural network compound control algorithm for complex nonlinear electric gas pressure regulating system** 3055
Yuanchang Zhong, *Chongqing Univ.*
Wenjin Xie, *Chongqing Univ.*
Ziaofan Zhang, *Chongqing Univ.*
- SunBIS-30** **Neural Network-Sliding Mode Control of Permanent Magnet Synchronous Linear Motor** 3061
Long Li, *Guidaojiaotong Polytechnic Inst.*
Zhongping Gu, *Guidaojiaotong Polytechnic Inst.*
Jingfeng Tian, *Guidaojiaotong Polytechnic Inst.*
- SunBIS-31** **The research on the coordinated control system of PID neural network based on artificial fish swarm algorithm** 3065
Xinyue Liu, *Electric power college Inner Mongolia Univ. of Tech.*
Kaiyao Yu, *Electric power college Inner Mongolia Univ. of Tech.*
Dongmin Xi, *Electric power college Inner Mongolia Univ. of Tech.*
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Jianchuan Yin, *Dalian Maritime Univ.*
Cheng Liu, *Dalian Maritime Univ.*
Xianguang Zhang, *Shanghai Univ. of Engineering Science*
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Yan Ji, *QingDao Univ. of Science and Tech.*
Southeast Univ.
Ximei Liu, *QingDao Univ. of Science and Tech.*
Longjin Wang, *QingDao Univ. of Science and Tech.*
- SunBIS-34** **Iron Ore Pellets Compressive Strength Prediction Model Based on KPCA - RBF** 3080
Yukun Wang, *Univ. of Science and Tech. Liaoning*
Lin Wang, *Anshan QuanSheng Electronic Power co., LTD*
Yunqi Liang, *Univ. of Science and Tech. Liaoning*
- SunBIS-35** **A Self-Tuning Fuzzy PID speed control Strategy for Switched reluctance motor** 3084
Cunhe Li, *Dalian Maritime Univ.*
Guofeng Wang, *Dalian Maritime Univ.*
Yunsheng Fan, *Dalian Maritime Univ.*
Yiming Bai, *Dalian Maritime Univ.*

- SunBIS-36** *Sequence interval-valued fuzzy soft set and its application in decision making* 3090
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Zhi Kong, *Northeastern Univ. At Qinhuangdao*
Liqian Wang, *Northeastern Univ. At Qinhuangdao*
Lifu Wang, *Northeastern Univ. At Qinhuangdao*
- SunBIS-37** *Fuzzy PID Control of Disk-shaped Magnetic Suspended Rotor System Subject to Lateral Base Motion* 3096
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Tingting Wang, *Hohai Univ.*
- SunBIS-38** *All-terrain Camouflage Design on Frequency analysis* 3101
Wenyan Zhu, *Northeastern Univ. at Qinhuangdao*
Yanyan Zhang, *Northeastern Univ. at Qinhuangdao*
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Chenyong Zheng, *Northeastern Univ. at Qinhuangdao*
Jianbo Liu, *Northeastern Univ. at Qinhuangdao*
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Daqing Zhang, *Univ. of Science and Tech. Liaoning*
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Yunsheng Fan, *Dalian Maritime Univ.*
- SunBIS-42** *The Simulation of the Wind Power System Vector Control based on Fuzzy PI* 3114
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Zehuan Yu, *Shenyang Univ. of Tech.*
Xiangdong Wang, *Shenyang Univ. of Tech.*
Xihui Su, *Shenyang Univ. of Tech.*
- SunBIS-43** *A Fuzzy Power Flow Calculation Based on Forward-Backward Sweep Method* 3118
Cun Hua, *State Grid Jinzhou Electric Power Supply Company*
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Fei Han, *State Grid Jinzhou Electric Power Supply Company*
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Xuesong Xu, *East China Jiaotong Univ.*
- SunBIS-45** *Design of Fuzzy PID Controller for Ship Dynamic Positioning* 3130
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- SunBIS-46** *Automatic Control strategies for disturbance rejection in a solar fresh air system coupled with Latent Heat Thermal Storage tank* 3136
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Dingnai Xiu, *Qingdao Univ. of Science and Tech.*
Wangmei Jia, *Qingdao Publishing & Media Co., Ltd.*
- SunBIS-47** *Robust control of T-S fuzzy hyperbolic delay model for a class of nonlinear systems with time-varying delay* 3141
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- SunBIS-54** *Design of Direct Torque Optimal Controller of Interior Permanent Magnet Synchronous Motor Based on Model Prediction Control* 3180
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- SunBIS-67** *Design for Motor Speed Fractional Order Controller Based on Improved Artificial Bee Colony Algorithm* 3244
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- SunBIS-68** *Attitude Stabilization and Tracking of Quadrotors* 3250
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- SunBIS-69** *Control in Impact Vibration of Non-contact Satellite* 3255
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- SunBIS-70** *Research on the Rotary-Linear Motion Magnetic Gear Based on ANSYS* 3259
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Session	SunC02: Robust Control (III)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 02
Chair	Zhihong Guan, <i>Huazhong University of Scie. and Tech.</i>
Co-Chair	Guodong Yin, <i>Southeast Univ.</i>
15:50-16:10	SunC02-1 <i>Essentials of the Fourth-Order Linear Active Disturbance Rejection Control and Its Application in a Cascade Control System</i> 3265 Congzhi Huang, <i>North China Electric Power Univ.</i> Qing Zheng, <i>Gannon Univ.</i>
16:10-16:30	SunC02-2 <i>Robust Speed Control of a Permanent Magnet Synchronous Motor System</i> 3271 Yang Zhao, <i>Cleveland State Univ.</i> Lili Dong, <i>Cleveland State Univ.</i>
16:30-16:50	SunC02-3 <i>Active Steering of Autonomous Vehicle Using Model Predictive Control with Legendre Function</i> 3277 Guodong Yin, <i>Southeast Univ.</i> Zhenyu Wang, <i>Southeast Univ.</i> Xianjian Jin, <i>Southeast Univ.</i>
16:50-17:10	SunC02-4 <i>Non-fragile Robust H8 Controller Design for 4WS-4WD Vehicle</i> 3282 Guodong Yin, <i>Southeast Univ.</i> Hao Wu, <i>Southeast Univ.</i> Xianjian Jin, <i>Southeast Univ.</i>
17:10-17:30	SunC02-5 <i>Fault-tolerant Consensus of Leader-follower Multi-agent Systems</i> 3288 Dan Zhao, <i>Huazhong University of Scie. and Tech.</i> Yonghong Wu, <i>Wuhan University of Tech.</i> Chao Yang, <i>Huazhong University of Scie. and Tech.</i> Guang Ling, <i>Huazhong University of Scie. and Tech.</i> Yanjun Shen, <i>China Three Gorges Univ.</i> Zhihong Guan, <i>Huazhong University of Scie. and Tech.</i>
17:30-17:50	SunC02-6 <i>H8 output feedback control for polytopic Delta operator systems</i> 3294 Xinwei Wang, <i>Shenzhen Institute of Information Tech.</i> Ying Zhang, <i>Harbin Institute of Tech.</i> Rui Zhang, <i>Shenzhen Institute of Information Tech.</i>

Session	SunC03: Identification and Estimation (I)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 03
Chair	Dahai Yu, <i>Beijing Univ. of Posts and Telecommunications</i>
Co-Chair	Junsheng Ren, <i>Dalin Maritime Univ.</i>
15:50-16:10	SunC03-1 <i>Design of the PID controller for industrial processes based on the stability margin</i> 3300 Ling Xu, <i>Wuxi Vocational Inst. of Commerce</i> Feng Ding, <i>Jiangnan Univ.</i>
16:10-16:30	SunC03-2 <i>Improving the Estimation Precision of Causal Effects by Selecting Covariates</i> 3305 Xueli Wang, <i>Beijing Univ. of Posts and Telecommunications</i> Dahai Yu, <i>Beijing Univ. of Posts and Telecommunications</i> Yuda Wang, <i>Beijing Univ. of Posts and Telecommunications</i>

- 16:30-16:50 SunC03-3 Online Calibration Method Based on Dual-axis Rotation-modulating Laser Gyro SINS** 3311
Chong Qin, *Beijing Inst. of Tech.*
Jiabin Chen, *Beijing Inst. of Tech.*
Yongqiang Han, *Beijing Inst. of Tech.*
Chunlei Song, *Beijing Inst. of Tech.*
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- 16:50-17:10 SunC03-4 On the Identification of Coupled Pitch and Heave Motions using Support Vector Machine** 3316
Weiming Luo, *Dalin Maritime Univ.*
Traffic Management Research Inst. of Ministry of Public Security
Junsheng Ren, *Dalin Maritime Univ.*
- 17:10-17:30 SunC03-5 Identification of the Superheated Steam Temperature System Based on the Variable Step Improved Fruit Fly Optimization Algorithm** 3322
Le Wei, *North China Electric Power Univ.*
Yuanyuan Yan, *North China Electric Power Univ.*
Xiaolong Jiang, *Shenhua Shenwan Hefei Lujiang Power Generation Co.Ltd*
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- 17:30-17:50 SunC03-6 Acceleration Harmonic Identification for an Electro-hydraulic Shaking Table Based on BP Network** 3328
Jianjun Yao, *Harbin Engineering Univ.*
Qingtao Niu, *Harbin Engineering Univ.*
Tao Wang, *Harbin Engineering Univ.*
Mingjie Qin, *Harbin Engineering Univ.*
Le Zhang, *Harbin Engineering Univ.*
Cheng Sun, *Harbin Engineering Univ.*
Zhenshuai Wan, *Harbin Engineering Univ.*

Session	SunC04: Intelligent Systems (II)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 04
Chair	<i>Xiaoyi Zhang, Beihang Univ.</i>
Co-Chair	<i>Yuhan Liu, Univ. of Science and Tech. Beijing</i>

- 15:50-16:10 SunC04-1 Image Classification Via Multi-View Model** 3333
Yanyun Cheng, *Nanjing Univ. of Posts and Telecommunications*
Songhao Zhu, *Nanjing Univ. of Posts and Telecommunications*
Zhiwei Liang, *Nanjing Univ. of Posts and Telecommunications*
Guozheng Xu, *Nanjing Univ. of Posts and Telecommunications*
- 16:10-16:30 SunC04-2 Target Detection Via Statistical Model Learning** 3338
Xian Sun, *Nanjing Univ. of Posts and Telecommunications*
Songhao Zhu, *Nanjing Univ. of Posts and Telecommunications*
Dongliang Jin, *Nanjing Univ. of Posts and Telecommunications*
Zhiwei Liang, *Nanjing Univ. of Posts and Telecommunications*
Guozheng Xu, *Nanjing Univ. of Posts and Telecommunications*
- 16:30-16:50 SunC04-3 A Topology Attack on Averaging Consensus Convergence** Hao Wu
Lab, CNCERT/CC 3343
Xianglei Dang, *Lab, CNCERT/CC*
Bin Li, *HAEPIC Electric Power Research Institute*

- 16:50-17:10** **SunC04-4 Compressive Tracking with Multi-Feature Weighting Based on Kalman Predictor** 3349
 Hongge Ren, *North China Univ. of Science and Tech.*
 Weimin Liu, *North China Univ. of Science and Tech.*
 Fujin Li, *North China Univ. of Science and Tech.*
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- 17:10-17:30** **SunC04-5 A Random and Coverage-based Approach for Fault Localization Prioritization** 3354
 Xiaoyi Zhang, *Beihang Univ.*
 Dave Towey, *The Univ. of Nottingham Ningbo China*
 Tsong Yueh, *Chen Swinburne Univ. of Tech.*
 Zheng Zheng, *Beihang Univ.*
 Kaiyuan Cai, *Beihang Univ.*
- 17:30-17:50** **SunC04-6 Application of Monte Carlo & Optimized UCT Algorithm in WTN Chess** 3362
 Yuhan Liu, *Univ. of Science and Tech. Beijing*
 Luxi Xing, *Univ. of Science and Tech. Beijing*
 Xiang Tian, *Univ. of Science and Tech. Beijing*
 Zhen Wang, *Univ. of Science and Tech. Beijing*

Session	SunC05: Sensor Network Systems (II)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 05
Chair	Meng Zhao, Hangzhou Dianzi Univ.
Co-Chair	Xu Luo, Zunyi Medical Univ.

- 15:50-16:10** **SunC05-1 Sensor Assignment Method Based on Time-Varying Measurement Variance for Tracking Multi-targets** 3368
 Meng Zhao, *Hangzhou Dianzi Univ.*
 Yan Zuo, *Hangzhou Dianzi Univ.*
 Yuyu Fang, *Hangzhou Dianzi Univ.*
 Mingdi Li, *Hangzhou Dianzi Univ.*
- 16:10-16:30** **SunC05-2 Water Pollution Source Localization Based on the Contour in Sensor Networks** 3373
 Xu Luo, *Zunyi Medical Univ.*
 Jun Yang, *Wuhan Univ. of Science and Tech.*
 Li Chai, *Wuhan Univ. of Science and Tech.*
- 16:30-16:50** **SunC05-3 Survey of Multi-sensors Autonomous Cooperative Mission Planning in anti-NSHV Systems** 3378
 Wen Sun, *Air Force Engineering Univ.*
 Gang Wang, *Air Force Engineering Univ.*
 Jiangjiang Wang, *Air Force Engineering Univ.*
 Tao Li, *Air Force Engineering Univ.*
 Min Zhao, *Air Force Engineering Univ.*
- 16:50-17:10** **SunC05-4 Distributed State Estimations Based on Cubature Kalman Filtering** 3384
 Qian Chen, *Hohai Univ.*
 Wancheng Wang, *Hohai Univ.*
 Chao Yin, *Southwest Univ.*
- 17:10-17:30** **SunC05-5 Distributed Camera Network with Naive Nodes** 3390
 Guoliang Liu, *Shandong Univ.*
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17:30-17:50 **SunC05-6** **The Research of Performance Test Method of Urban Rail Train Safety Detection Sensor Network** 3395
 Ruhao Zhao, *Beijing Jiaotong Univ. Beijing Engineering Research Center*
 Honghui Dong, *Beijing Jiaotong Univ. Beijing Engineering Research Center*
 Limin Jia, *Beijing Jiaotong Univ. Beijing Engineering Research Center*
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 Zhiwei Teng, *Beijing Jiaotong Univ. Beijing Engineering Research Center*
 Xiaoping Ma, *Beijing Jiaotong Univ. Beijing Engineering Research Center*

Session	SunC06: Decision Supporting System and Production Planning and Scheduling (I)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 06
Chair	Kaihua Wu, <i>South China Univ. of Tech. Engineering Research Centre</i>
Co-Chair	Fei Tang, <i>Northeastern Univ. Shenyang Univ. of tech.</i>

15:50-16:10 **SunC06-1** **An improved genetic algorithm for the re-entrant and flexible job-shop scheduling problem** 3399
 Mei Zhang, *South China Univ. of Tech. Engineering Research Centre*
 Kaihua Wu, *South China Univ. of Tech. Engineering Research Centre*

16:10-16:30 **SunC06-2** **Research of Aircraft Ground Service Scheduling Problems** 3405
 Fei Tang, *Northeastern Univ. Shenyang Univ. of tech.*
 Shu'an Liu, *Northeastern Univ.*

16:30-16:50 **SunC06-3** **Mixed integer programming formulations for new jobs rescheduling on single machine to minimize maximum waiting-times** 3411
 Yandong Guo, *Bohai Univ. Jinzhou Northeastern Univ.*
 Min Huang, *Northeastern Univ.*
 Qin Wang, *Northeastern Univ.*
 Kai Yang, *Northeastern Univ.*

16:50-17:10 **SunC06-4** **Differential Evolution Algorithm for Solving Coil Scheduling Problem in Parallel Continuous Annealing Lines** 3417
 Shengnan Zhao, *Northeastern Univ.*
 Yang Yang, *Northeastern Univ.*

17:10-17:30 **SunC06-5** **Modelling and Optimization of Heating Dispatch in Thermal Power Plant** 3423
 Lixia Xie, *Xi'an Univ. of Tech.*
 Yali Wu, *Xi'an Univ. of Tech.*
 Xianyong Peng, *Emerson Process Management Co. Ltd.*
 Lei Li, *Xi'an Univ. of Tech.*
 Fan Yi, *Emerson Process Management Co. Ltd.*

Session	SunC07: Neural Networks (III)	
Date/Time	Sunday, 29 May 2016 / 15:50-17:50	
Venue	Room 07	
Chair	Zeqiang He, Harbin Inst. of Tech.	
Co-Chair	Xiaoyu Liu, Wuhan Univ. of Science and Tech.	
15:50-16:10	SunC07-1	A new method for general work piece recognition based on Neural Network 3428 Zeqiang He, <i>Harbin Inst. of Tech.</i> Jiachen Ma, <i>Harbin Inst. of Tech.</i> Zonglin Li, <i>Harbin Inst. of Tech.</i>
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16:10-16:30	SunC07-3	Prediction of mechanical properties of CSP using greedy unsupervised pre-trained BP neural network 3439 Binbin Wang, <i>Univ. of Science and Tech. Beijing</i> Jing Wang, <i>Univ. of Science and Tech. Beijing</i> Fei Zhang, <i>Univ. of Science and Tech. Beijing</i>
16:50-17:10	SunC07-4	ELM Weighted Hybrid Modeling and its Online Modification 3443 Shaoming Yang, <i>Central South Univ.</i> Yaling Wang, <i>Central South Univ.</i> Bei Sun, <i>Central South Univ.</i> Kai Peng, <i>Central South Univ.</i> Xu Zhang, <i>Central South Univ.</i>
17:10-17:30	SunC07-5	A Novel Chaotic Neural Network with Self-feedback 3449 Yaoqun Xu, <i>Harbin Univ. of Commerce</i> Jian Liu, <i>Harbin Univ. of Commerce</i>
17:30-17:50	SunC07-6	The Application of Li-Function Activated RNN to Acceleration-Level Robots' Kinematic Control via Time-Varying Matrix Inversion 3455 Dongsheng Guo, <i>Huaqiao Univ.</i> Kene Li, <i>Guangxi Univ. of Science and Tech.</i> Laicheng Yan, <i>Huaqiao Univ.</i> Zhuoyun Nie, <i>Huaqiao Univ.</i> Fujiang Jin, <i>Huaqiao Univ.</i>

Session	SunC08: Fault Diagnosis and Fault-Tolerant Control (III)	
Date/Time	Sunday, 29 May 2016 / 15:50-17:50	
Venue	Room 08	
Chair	Xuejin Gao, <i>Beijing Univ. of Tech.</i>	
Co-Chair	Guannan He, <i>Beijing Univ. of Chemical Tech.</i>	
15:50-16:10	SunC08-1	Fault Detection of Batch Process Based on MSICA-OCSVM 3461 Xuejin Gao, <i>Beijing Univ. of Tech. Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i> Rong Ma, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Laboratory of Computational Intelligence and Intelligent System</i>
16:10-16:30	SunC08-2	Observer-based Scheme for Fault Estimation and Robust Tolerant Control: An LMI Approach 3466 Guannan He, <i>Beijing Univ. of Chemical Tech.</i> Yang Liu, <i>Beijing Automatic Engineering School</i> Jing Ji, <i>Guangdong Univ. of Tech.</i> Wensheng Yu, <i>Beijing Univ. of Posts and Telecommunications</i>
16:30-16:50	SunC08-3	On the use of EEMD and SVM based approach for bearing fault diagnosis of wind turbine gearbox 3472 Chunzhi Hu, <i>Zhejiang Univ.</i> Miaoying Huang, <i>Zhejiang Univ.</i> Qiang Yang, <i>Zhejiang Univ.</i> Wenjun Yan, <i>Zhejiang Univ.</i>
16:50-17:10	SunC08-4	Nonlinear Tracking Control Methods Applied to Qball-X4 Quadrotor UAV against Actuator Faults 3478 Huanhuan Wang, <i>Xi'an Univ. of Tech.</i> Youmin Zhang, <i>Xi'an Univ. of Tech.</i> Yingmin Yi, <i>Xi'an Univ. of Tech.</i> Jing Xin, <i>Xi'an Univ. of Tech.</i> Ding Liu, <i>Xi'an Univ. of Tech.</i>
17:10-17:30	SunC08-5	Initial Fault Feature Extraction for Rolling Bearings Based on Piecewise Matching Pursuit 3484 Weimin Li, <i>Tangshan Vocational and Technical Coll.</i> Jizhao Ma, <i>Tangshan Vocational and Technical Coll.</i> Fajun Yu, <i>Zhongyuan Univ. of Tech.</i>
17:30-17:50	SunC08-6	Research of the Incipient Fault Detection Method for an Airfoil Based on Near Flutter Analysis 3489 Zhen Yu, <i>Xiamen Univ.</i> Nanjie Xie, <i>Xiamen Univ.</i> Lijun Liu, <i>Xiamen Univ.</i> Chunhui Zhu, <i>Xiamen Univ.</i>

Session	SunC09: Control Applications (IV)	
Date/Time	Sunday, 29 May 2016 / 15:50-17:50	
Venue	Room 09	
Chair	Jie Li, National Univ. of Defense Tech.	
Co-Chair	Lihong Dai, Univ. of Science and Tech. Liaoning	
15:50-16:10	SunC09-1	Design of Energy-saving Control System on Escalator Based on LOGO! And Frequency Converter 3494 Lihong Dai, <i>Univ. of Science and Tech. Liaoning</i> Maoxiang Chu, <i>Univ. of Science and Tech. Liaoning</i> Bin Hong, <i>Univ. of Science and Tech. Liaoning</i> Peng Feng, <i>Univ. of Science and Tech. Liaoning</i> Peng Yao, <i>Univ. of Science and Tech. Liaoning</i>
16:10-16:30	SunC09-2	The Exponential Reaching Law Sliding Mode Control of Magnetic Levitation System 3500 Xuejuan Shao, <i>Taiyuan Univ. of Science and Tech.</i> Fanbin Meng, <i>Taiyuan Univ. of Science and Tech.</i> Zhimei Chen, <i>Taiyuan Univ. of Science and Tech.</i> Qiusheng He, <i>Taiyuan Univ. of Science and Tech.</i>
16:30-16:50	SunC09-3	Rapid Detection System for Pesticide Residue Based on Embedded Technology 3504 Zhiqin He, <i>Guizhou Univ.</i> Yufang Huang, <i>Guizhou Univ.</i> Xianglei Liu, <i>Guizhou Univ.</i> Xiangping Chen, <i>Guizhou Univ.</i>
16:50-17:10	SunC09-4	An Performance Assessment Method for Suspension Control System of Maglev Train 3509 Peichang Yu, <i>National Univ. of Defense Tech.</i> Jie Li, <i>National Univ. of Defense Tech.</i> Danfeng Zhou, <i>National Univ. of Defense Tech.</i> Zhaoyu Guo, <i>National Univ. of Defense Tech.</i> Junyu Wei, <i>National Univ. of Defense Tech.</i>
17:10:17:30	SunC09-5	Parafoil Air-dropped Control with Fixed Set-point Based on Interval Type II Fuzzy Logic 3515 Yongxin Li, <i>Nankai Univ.</i> Kuansheng Zou, <i>Jiangsu Normal Univ.</i> Yunxi Zhang, <i>Tianjin Univ. of Tech. and Education</i>
17:30-17:50	SunC09-6	Heavyweight airdrop flight control using backstepping sliding mode with adaptive function approximation 3520 Ri Liu, <i>Air Force Engineering Univ.</i> Xiuxia Sun, <i>Air Force Engineering Univ.</i> Wenhan Dong, <i>Air Force Engineering Univ.</i> Dong Wang, <i>Air Force Engineering Univ.</i>

Session	SunC10: Signal Processing (III)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 10
Chair	Wei Xie, <i>South China Univ. of Tech.</i>
Co-Chair	Shuai Li, <i>Beijing Inst. of Tech.</i>
15:50-16:10	SunC10-1 <i>Salt & pepper image denoising based on Adaptive Fractional integral</i> 3525 Bo Li, <i>South China Univ. of Tech.</i> Wei Xie, <i>South China Univ. of Tech.</i> Langwen Zhang, <i>South China Univ. of Tech.</i> Zhongwei He, <i>South China Univ. of Tech.</i>
16:10-16:30	SunC10-2 <i>An Iterative Approach to FIR Filter Design with Reduced Group Delay Error via Semidefinite Programming</i> 3529 Binbin Sun, <i>Zhejiang Univ. of Tech.</i> Zeru Lu, <i>Zhejiang Univ. of Tech.</i> Dacai Xu, <i>Zhejiang Univ. of Tech.</i>
16:30-16:50	SunC10-3 <i>A Fast SAR Image Position Algorithm for Maritime Target Location</i> 3534 Linglin Wang, <i>Inner Mongolia Univ.</i> Yongxin Liu, <i>Inner Mongolia Univ.</i> Hui Zhang, <i>Inner Mongolia Univ.</i>
16:50-17:10	SunC10-4 <i>A novel smoke detection algorithm based on Fast Self-tuning background subtraction</i> 3539 Shuai Li, <i>Beijing Inst. of Tech.</i> Bo Wang, <i>Beijing Inst. of Tech.</i> Ranran Dong, <i>Beijing Inst. of Tech.</i> Zhiqiang Zhou, <i>Beijing Inst. of Tech.</i> Sun Li, <i>Beijing Inst. of Tech.</i>
17:10-17:30	SunC10-5 <i>Harmonic Separation Method Based on Sparse Representation for Power System</i> 3544 Fen Liang, <i>Zhongyuan Univ. of Tech.</i> Xuehua Tao, <i>Zhongyuan Univ. of Tech.</i> Fajun Yu, <i>Zhongyuan Univ. of Tech.</i> <i>Wuhan Univ. of Science and Tech.</i>
17:30-17:50	SunC10-6 <i>Multi-frequency Periodic Weak Signal Detection Based on Single-well Potential Stochastic Resonance</i> 3548 Mingxia Xiao, <i>Hefei Univ. of Tech.</i> <i>Beifang Univ. of Nationalities</i> Changhua Lu, <i>Hefei Univ. of Tech.</i> Weiwei Jiang, <i>Hefei Univ. of Tech.</i> Haicheng Wei, <i>Beifang Univ. of Nationalities</i> Zhiying Tao, <i>Hefei Univ. of Tech.</i> Bai Zhang, <i>Beifang Univ. of Nationalities</i>

Session	SunC11: Data-driven Control (I)	
Date/Time	Sunday, 29 May 2016 / 15:50-17:50	
Venue	Room 11	
Chair	<i>Wei Wei, Beijing Tech. and Business Univ.</i>	
Co-Chair	<i>Lili Zhang, North China Univ. of Tech.</i>	
15:50-16:10	SunC11-1	Improvement on Mixed-control Algorithm for On-ramp Metering 3554 Haibo Zhang, <i>North China Univ. of Tech.</i> Lili Zhang, <i>North China Univ. of Tech.</i> Li Wang, <i>North China Univ. of Tech.</i> Min Li, <i>North China Univ. of Tech.</i> Zhengxin Li, <i>North China Univ. of Tech.</i>
16:10-16:30	SunC11-2	Off-ramp of Urban Freeway and Close to Cohesion Intersection Coordinated Control 3560 Lili Zhang, <i>North China Univ. of Tech.</i> Li Wang, <i>North China Univ. of Tech.</i> Min Li, <i>North China Univ. of Tech.</i> Dai Li, <i>Beijing Jiaotong Univ.</i> Haibo Zhang, <i>North China Univ. of Tech.</i> Zhengxi Li, <i>North China Univ. of Tech.</i>
16:30-16:50	SunC11-3	Improving the Efficiency of Extended State Observer under Noisy Measurements by Low-pass Filter 3566 Wei Wei, <i>Beijing Tech. and Business Univ.</i> Bo Liang, <i>Beijing Tech. and Business Univ.</i> Donghai Li, <i>Tsinghua Univ.</i> Weijun Su, <i>Beijing Tech. and Business Univ.</i>
16:50-17:10	SunC11-4	Coordination control of Entrance Ramp Metering and Upstream Signal Control based on CPN 3570 Min Li, <i>North China Univ. of Tech.</i> Lili Zhang, <i>North China Univ. of Tech.</i> Li Wang, <i>North China Univ. of Tech.</i> Haibo Zhang, <i>North China Univ. of Tech.</i> Zhengxi Li, <i>North China Univ. of Tech.</i>
17:10-17:30	SunC11-5	A Robust Pruning Method for Reduced Weighted Least Squares Support Vector Machine 3576 Gangquan Si, <i>Xi'an Jiaotong Univ.</i> Zhang Guo, <i>Xi'an Jiaotong Univ.</i> Jianquan Shi, <i>Xi'an Jiaotong Univ.</i>
17:30-17:50	SunC11-6	Density Clustering Pruning Method Based on Reconstructed Support Vectors for Sparse LSSVM 3582 Gangquan Si, <i>Xi'an Jiaotong Univ.</i> Jianquan Shi, <i>Xi'an Jiaotong Univ.</i> Zhang Guo, <i>Xi'an Jiaotong Univ.</i> Yanbin Zhang, <i>Xi'an Jiaotong Univ.</i>

Session	SunC12: Visual Servoing
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 12
Chair	Zengfu Wang, <i>Univ. of Science and Tech. of China</i>
Co-Chair	Chunbo Xiu, <i>Tianjin Polytechnic Univ.</i>

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16:10-16:30	SunC12-2	Novel Hybrid IBVS Based on The Unified Projection Model 3594 Guoqiang Ye, <i>South China Univ. of Tech.</i> Weiguang Li, <i>South China Univ. of Tech.</i> Hao Wan, <i>South China Univ. of Tech.</i> Zhen Li, <i>South China Univ. of Tech.</i>
16:30-16:50	SunC12-3	Target Tracking Based on the Improved Camshift Method 3600 Chunbo Xiu, <i>Tianjin Polytechnic Univ.</i> Fushan Ba, <i>Tianjin Polytechnic Univ.</i>
16:50-17:10	SunC12-4	Multi-sensor Fusion based Real-time Hovering for A Quadrotor without GPS in Assigned Position 3605 Wei Zheng, <i>China Ship Building Industry Corporation</i> Jing Wang, <i>China Ship Building Industry Corporation</i> Zengfu Wang, <i>Univ. of Science and Tech. of China</i>
17:10-17:30	SunC12-5	Improved Discriminative Sparsity Preserving Projections for Image Recognition 3611 Jianbo Zhang, <i>Northeastern Univ.</i> Jinkuan Wang, <i>Northeastern Univ. at Qinhuangdao</i>
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Session	SunC13: Intelligent Building Control and Management (III)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 13
Chair	Yahui Wang, <i>Beijing Univ. of Civil Engineering and Architecture</i>
Co-Chair	Qingshan Jia, <i>Tsinghua Univ.</i>

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- 16:30-16:50** **SunC13-3** *Optimization of MonteCarlo mobile node localization algorithm based on least squares fitting* 3630
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 Zhi Tan, *Beijing Univ. of Civil Engineering and Architecture*
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- 16:50-17:10** **SunC13-4** *Air Source Heat Pump Energy Storage HeatingSystem for Smart Building* 3635
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 Xiaojing Zhang, *Shenyang Jianzhu Univ.*
 Hai Zhao, *Northeastern Univ.*
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 Yayun Wei, *Beijing Univ. of Civil Engineering and Architecture*
 Jia Wang, *Beijing Univ. of Civil Engineering and Architecture*
- 17:30-17:50** **SunC13-6** *The model reference adaptive control method of submerged arc welding power supply system* 3646
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Beijing Key Lab. of Robot Bionics and Function Research
 Xingang Miao, *Beijing Univ. of Civil Engineering and Architecture*
Beijing Key Lab. of Robot Bionics and Function Research
 Chenxi Zhang, *Beijing Univ. of Civil Engineering and Architecture*
Beijing Key Lab. of Robot Bionics and Function Research

Session	SunC14: Smart Grids (IV)
Date/Time	Sunday, 29 May 2016 / 15:50-17:50
Venue	Room 14
Chair	Qiang Zhao, <i>Northeastern Univ.</i>
Co-Chair	Yunzhi Qiu, <i>Tianjin Univ. of Tech.</i>

- 15:50-16:10** **SunC14-1** *Multi-Objective Security-Constrained Unit Commitment Model Considering Wind Power and EVs* 3650
 Haiyong Liu, *Northeastern Univ.*
 Qiang Zhao, *Northeastern Univ.*
 Jinkuan Wang, *Northeastern Univ.*
 Yinghua Han, *Northeastern Univ.*
 Xiaolong Qian, *Northeastern Univ.*
- 16:10-16:30** **SunC14-2** *A Study on the Capacity of Shunt Hybrid Active Power Filter* 3656
 Zhiqiang Gao, *Tianjin Univ. of Tech.*
 Yunzhi Qiu, *Tianjin Univ. of Tech.*
 Xuesong Zhou, *Tianjin Univ. of Tech.*
 Youjie Ma, *Tianjin Univ. of Tech.*
 Yanjuan Wu, *Tianjin Univ. of Tech.*
 Jinliang Yin, *Tianjin Univ. of Tech.*
 Xiaoning Xu, *Tianjin Univ. of Tech.*
- 16:30-16:50** **SunC14-3** *Intelligent Distribution Network in the New Situation* 3661
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 Mingpeng Sun, *Tianjin Univ. of Tech.*
 Youjie Ma, *Tianjin Univ. of Tech.*
 Zhiqiang Gao, *Tianjin Univ. of Tech.*
 Yanjuan Wu, *Tianjin Univ. of Tech.*
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 Xiaoning Xu, *Tianjin Univ. of Tech.*

- 16:50-17:10 SunC14-4 An Overview on Distribution Automation System 3667**
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 Pengda Xiang, *Tianjin Univ. of Tech.*
 Youjie Ma, *Tianjin Univ. of Tech.*
 Zhiqiang Gao, *Tianjin Univ. of Tech.*
 Yanjuan Wu, *Tianjin Univ. of Tech.*
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 Xiaoning Xu, *Tianjin Univ. of Tech.*
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 Changhao Sun, *North China Electric Power Univ.*
 Zhenyu Zhou, *North China Electric Power Univ.*
 Li Zhang, *The Ministry of Science and Tech.*
 Zihang Liang, *North China Electric Power Univ.*
- 17:30-17:50 SunC14-6 Based on Curve Fitting Method to Analyze and Calculate the Equalizing Resistance of Sub-modules in Series of MMC System 3677**
 Longfei Luo, *Xi'an Jiaotong Univ.*
 Hui Cao, *Xi'an Jiaotong Univ.*
 Dapeng Yan, *Xi'an Jiaotong Univ.*
 Yanbin Zhang, *Xi'an Jiaotong Univ.*

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Venue	Room 15

- SunCIS-01 Plantwide Control for the Electricity Power Demand Control System 3682**
 Fei Hao, *NR Electric Co., LTD*
 Zhen Yuan, *NR Electric Co., LTD*
 Genjun Chen, *NR Electric Co., LTD*
 Quan Gu, *NR Electric Co., LTD*
- SunCIS-02 The Debugging Research of Large Shipboard Antenna Servo System Simulation Platform 3687**
 Yongjiang Sun, *China Satellite Maritime Tracking & Control Department*
 Xin Wang, *China Satellite Maritime Tracking & Control Department*
 Huasong Jin, *China Satellite Maritime Tracking & Control Department*
 Jiancheng Yu, *China Satellite Maritime Tracking & Control Department*
 Kai Yao, *China Satellite Maritime Tracking & Control Department*

- SunCIS-03** **Research on Event-B based formal modeling and verification of automatic production line** 3690
 Kaiming Fu, *Beijing Univ. of Tech.*
The Ministry of Education P.R.C. Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
 Bin Fang, *Beijing Univ. of Tech.*
The Ministry of Education P.R.C. Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
 Yafen Li, *Beijing Univ. of Tech.*
The Ministry of Education P.R.C. Engineering Research Center of Digital Community
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
 Huijie Li, *Beijing Univ. of Tech.*
The Ministry of Education P.R.C. Engineering Research Center of Digital Community
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Zhejiang Univ. of Water Resources and Electric Power
 Mingsheng Jin, *Zhejiang Univ. of Tech.*
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 Xihuan Huang, *Zhejiang Univ. of Tech.*
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 Yi Yang, *Nantong Univ.*
 Junhong Li, *Nantong Univ.*
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 Ye Zhang, *Nantong Univ.*
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 Leping Yang, *National Univ. of Defense Tech.*
 Yanwei Zhu, *National Univ. of Defense Tech.*
 Honjun Ao, *National Univ. of Defense Tech.*
 Dawei Qi, *National Univ. of Defense Tech.*
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 Xueqin Chen, *Harbin Inst. of Tech.*
 Baolin Wu, *Harbin Inst. of Tech.*
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- SunCIS-11** *Observer-based Impulsive Stabilization for Spacecraft Rendezvous* 3732
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- SunCIS-15** *Application Research on the Synchronization Strategy of both Independent and Double-Cross Methods in the Air-Bearing Linear Stages of a Lithographic Machine* N/A
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 Xiaofeng Yang, *Fudan Univ.*
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Jie Chen, *Wuhan Univ. of Tech.*
Guanyan Li, *Wuhan Univ. of Tech.*
- SunCIS-65** *Closed Loop Management of PFMEA Combined with WBS* 4003
Jing Xue, *Beihang Univ.*
Min Huang, *Beihang Univ.*

SunCIS-66 Research on Knowledge Maps of Life Cycle Cost Control Based on Roles 4009

Qinglan Han, *Central South Univ.*

Gai Guo, *Central South Univ.*

Lan Gao, *Central South Univ.*

SunCIS-67 PSO and Genetic Algorithm Optimization BP Neural Network Contrast in Collaboration Innovation Performance Evaluation 4014

Junjie Xin, *Zhejiang Univ. City Coll.*

Mingyang Zhang, *Zhejiang Univ. City Coll.*

Xuejie Wang, *Zhejiang Univ. City Coll.*

Session	MonA01: Adaptive Control (IV)(Chinese)	
Date/Time	Monday, 30 May 2016 / 8:00-10:00	
Venue	Room 01	
Chair	Hongwei Wang, Dalian University of Tech.	
Co-Chair	Dejun Bian, National University of Defense Tech.	
8:00-8:20	MonA01-1	MRAC for Nonlinear Systems with Unknown Gain Signs and Unmodeled Dynamics 4019 Ningning Wang, <i>Yangzhou Univ.</i> Tianping Zhang, <i>Yangzhou Univ.</i> Hongchun Li, <i>Yangzhou Polytechnic Inst.</i> Meizhen Xia, <i>Yangzhou Univ.</i>
8:20-8:40	MonA01-2	Self-Tuning Control Scheme of Non-Uniformly Sampled Data Systems with Time Delay and Unknown Colored Noise 4025 Hongwei Wang, <i>Dalian University of Tech.</i> Hao Xia, <i>Dalian University of Tech.</i>
8:40-9:00	MonA01-3	Adaptive synchronization of the fractional order chaotic system based on passive control 4031 Zhuxiang Dai, <i>Nanjing University of Information Scie. & Tech.</i> Tao Li, <i>Nanjing University of Information Scie. & Tech.</i> <i>Collaborative Innovation Center on Atmospheric Environment and Equipment Tech.</i> Wenwen Yu, <i>Nanjing University of Information Scie. & Tech.</i>
9:00-9:20	MonA01-4	Learning from Adaptive Neural Control of Manipulator Using an ISS-Modular Approach 4036 Anle Yang, <i>South China University of Tech.</i> Min Wang, <i>South China University of Tech.</i>
9:40-10:00	MonA01-6	A hybrid AR-DWT-EMD model for the short-term prediction of nonlinear and non-stationary ship motion 4042 Dejun Bian, <i>National University of Defense Tech.</i> Shiqiao Qin, <i>National University of Defense Tech.</i> Wei Wu, <i>National University of Defense Tech.</i>

Session	MonA02: Robust Control (IV) (Chinese)	
Date/Time	Monday, 30 May 2016 / 8:00-10:00	
Venue	Room 02	
Chair	Defeng He, Zhejiang University of Tech.	
Co-Chair	Kun Ni, Beihang Univ.	
8:00-8:20	MonA02-1	Overlapping Robust Decentralized Connective Stabilization for Interconnected Systems with Loop Structure via Dynamic State Feedback 4048 Yang Liu, <i>Northeastern Univ.</i> Xiaohua Li, <i>University of Scie. and Tech. Liaoning</i> Yuanwei Jing, <i>Northeastern Univ.</i> Nan Jiang, <i>Northeastern Univ.</i>
8:20-8:40	MonA02-2	Direct Yaw-moment Control of Vehicle Stability Based on Robust Sliding Mode Observer 4054 Niaona Zhang, <i>Changchun University of Tech. Jilin Univ.</i> Congcong Cao, <i>Changchun University of Tech.</i> Caimao Xu, <i>Changchun University of Tech.</i> Wenling Yan, <i>Changchun University of Tech.</i>
8:40-9:00	MonA02-3	Input-to-State Stable MPC Algorithms for Constrained LPV Systems 4060 Defeng He, <i>Zhejiang University of Tech.</i> Yu Sun, <i>Zhejiang University of Tech.</i> Hongjie Ni, <i>Zhejiang University of Tech.</i>
9:00-9:20	MonA02-4	Robust Model Predictive Control of Uncertain Discrete-Time T-S Fuzzy Systems 4066 Haofei Xie, <i>Ministry of Education. Chongqing University of Posts and Telecommunications</i> Jun Wang, <i>Ministry of Education. Chongqing University of Posts and Telecommunications</i> Xiaoming Tang, <i>Ministry of Education. Chongqing University of Posts and Telecommunications</i>
9:20-9:40	MonA02-5	Robustness Optimization Approach for Hypersonic Vehicle Controller Based on Parallel Computing 4072 Kun Ni, <i>Beihang Univ.</i> Qingzhen Zhang, <i>Beihang Univ.</i> Lin Cheng, <i>Beihang Univ.</i>
9:40-10:00	MonA02-6	Observer-based Robust Switching Control of Switched Fuzzy Time-delay Systems 4079 Hong Yang, <i>Shenyang Univ.</i> Le Zhang, <i>Shenyang Univ.</i> Guannan Tao, <i>Shenyang Univ.</i>

Session	MonA03: Complex Networks and Systems (III) (Chinese)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 03
Chair	Lang Cao, Zhengzhou Univ.
Co-Chair	Xiwei Liu, Tongji Univ. The Key Laboratory of Embedded System and Service Computing

8:00-8:20	MonA03-1 Time Synchronization of Wireless Sensor Networks with Stochastic Switching Topology 4085 Haian Yin, <i>Southeast Univ.</i> Wen Xie, <i>Nanjing Housing Provident Fund Management Center</i> He Wang, <i>Southeast Univ.</i>
8:20-8:40	MonA03-2 Finite-time Cluster Synchronization of Complex Networks With Time-Varying Delays 4091 Xiwei Liu, <i>Tongji Univ.</i> <i>The Key Laboratory of Embedded System and Service Computing</i> Shaohua Li, <i>Tongji Univ.</i>
8:40-9:00	MonA03-3 Roles of shortcuts in the diffusion process over hierarchical networks 4097 Lang Cao, <i>Zhengzhou Univ.</i> Xun Li, <i>Fudan Univ.</i>
9:00-9:20	MonA03-4 Bifurcation Analysis in A Delayed Fractional Cohen-Grossberg Network 4103 Chengdai Huang, <i>Southeast Univ.</i> Jinde Cao, <i>Southeast Univ.</i> <i>King Abdulaziz Univ.</i>
9:20-9:40	MonA03-5 Research on the Method of Detecting Small Single-Frequency Cycle-Slips Based on EEMD-HT of BDS 4108 Kaiqiang Yu, <i>Kunming Univ. of Science and Tech.</i> Guoyong Huang, <i>Kunming Univ. of Science and Tech.</i> <i>Engineering Research Center for Mineral Pipeline Transportation YN</i> Yang Gao, <i>Engineering Research Center for Mineral Pipeline Transportation YN</i>
9:40-10:00	MonA03-6 Coarse Graining of Complex Networks: A k-means Clustering Approach 4113 Shuang Xu, <i>Henan Univ.</i> Pei Wang, <i>Henan Univ.</i>

Session	MonA04: Nonlinear Systems (IV) (Chinese)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 04
Chair	Lianchun Wang, National Univ. of Defense Tech.
Co-Chair	Qianqian Xia, Nankai Univ.

8:00-8:20	MonA04-1 The Underlying Principles of Self-Excited Vibration in Maglev Vehicle-Bridge Coupled System 4119 Lianchun Wang, <i>National Univ. of Defense Tech.</i> Jinhui Li, <i>Science and Tech. on Near-Surface Detection Laboratory</i> Danfeng Zhou, <i>National Univ. of Defense Tech.</i> Jie Li, <i>National Univ. of Defense Tech.</i>
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- 8:20-8:40** **MonA04-2** **Control Systems of Second-order Type Induced by Lifting** 4125
Xia Qianqian, *Nankai Univ.*
- 8:40-9:00** **MonA04-3** **Stability analysis and controller synthesis for non-linear quadratic systems with time delay** 4130
Jin Gao, *Shanxi Normal Univ.*
Shugui Kang, *Shanxi Datong Univ.*
Fu Chen, *Shanxi Datong Univ.*
- 9:00-9:20** **MonA04-4** **Robust Global Asymptotic Position Stabilization for Uncertain Underactuated Surface Vessels Without Velocity Measurement** 4135
Wenjing Xie, *Southwest Univ.*
Lixia Yan, *Beihang Univ.*
Baoli Ma, *Beihang Univ.*
- 9:20-9:40** **MonA04-5** **High-order Nonsingular Terminal Sliding Mode Control of Wind Energy Conversion Systems** 4141
Jianyong Li, *Zhengzhou Univ. of Light Industry*
Yanhong Liu, *Zhengzhou Univ.*
Huige Shi, *State Grid Nanyang Electric Power Supply Company*
Xiushan Cai, *Zhejiang Normal Univ.*
- 9:40-10:00** **MonA04-6** **Finite-time Guaranteed Cost Control for Uncertain Lipschitz Nonlinear System with Time-Delay** 4147
Xia Chen, *Anhui Univ.*
Shuping He, *Anhui Univ.*

Session	MonA05: Decision-Making Theory And Method (IV) (Chinese)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 05
Chair	Hongyu Zhang, Central South Univ.
Co-Chair	Yun Wang, Dalian Naval Academy
8:00-8:20	MonA05-1 A Subsethood Measure with the Hausdorff Distance for Interval Neutrosophic Sets and its Relations with Similarity and Entropy Measures 4152 Pu Ji, <i>Central South Univ.</i> Hongyu Zhang Central South Univ.
8:20-8:40	MonA05-2 A Modified Firefly Algorithm for Fuzzy Portfolio Optimization Model 4158 Yun Wang, <i>Dalian Naval Academy</i> Wei Chen, <i>Dalian Naval Academy</i>
8:40-9:00	MonA05-3 Investment Decision Using D Numbers 4164 Xiaozhong Huang, <i>Hubei Univ. for Nationalities</i> Ningkui Wang, <i>Hubei Univ. for Nationalities</i> Daijun Wei, <i>Hubei Univ. for Nationalities</i> <i>Key Laboratory of Biologic Resources Protection and Utilization of Hubei Province</i>
9:00-9:20	MonA05-4 Forecasting of dissolved gas in transformer oil by optimized nonlinear Grey Bernoulli Markov model 4168 Heng Ma, <i>Kunming Univ. of Tech. and Science</i> Hua Lai, <i>Kunming Univ. of Tech. and Science</i> Meng Wang, <i>Kunming Univ. of Tech. and Science</i>
9:20-9:40	MonA05-5 A rule based case maintenance method for the performance of CBR classifier 4174 Hui Zhao, <i>Tsinghua Univ.</i>

Liangshun Wang Tsinghua Univ.
 Wei Dong, *Tsinghua Univ.*
 Xinya Sun, *Tsinghua Univ.*
 Yindong Ji, *Tsinghua Univ.*

9:40-10:00 **MonA05-6** **Rational Expectation and Information Leakage with Imperfect Competition** 4180
 Binbin Chen, *Beihang Univ.*
 Shancun Liu, *Beihang Univ.*

Session	MonA06: DDCLS-Iterative Learning Control (I)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 06
Chair	Deqing Huang, <i>Southwest Jiaotong Univ.</i>
Co-Chair	Chiang-Ju Chien, <i>Huafan Univ.</i>

8:00-8:15 **MonA06-1** **2-D H 8 Based Iterative Learning Control Design for Linear Discrete-Time Uncertain Systems with Multiple High Order Internal Models** 4185
 Qiao Zhu, *Southwest Jiaotong Univ.*
 Jian-Xin Xu, *National Univ. of Singapore*
 Deqing Huang, *Southwest Jiaotong Univ.*
 Neng Xiong, *Southwest Jiaotong Univ.*

8:15-8:30 **MonA06-2** **On Adaptive Iterative Learning From Tracking Tasks with Different Magnitude and Time Scales** 4191
 Xuefang Li, *National Univ. of Singapore*
 Jian-Xin Xu, *National Univ. of Singapore*

8:30-8:45 **MonA06-3** **Study of a Class of Sampled-Data ILC from the Point of Performance Improvement and Memory Capacity** 4197
 Chiang-Ju Chien, *Huafan Univ.*
 Ya-Syuan Shu, *Huafan Univ.*

8:45-9:00 **MonA06-4** **Iterative Learning Control for Biped Walking Robot with Varying Iteration Lengths** 4203
 Wei Zhang, *Beijing Univ. of Chemical Tech.*
 Lanjing Wang, *Beijing Univ. of Chemical Tech.*
 Dong Shen, *Beijing Univ. of Chemical Tech.*

9:00-9:15 **MonA06-5** **Robust Quantized ILC design for Linear Systems Using a 2-D Model** 4209
 Yanling Yin, *Henan Polytechnic Univ.*
 Xuhui Bu, *Henan Polytechnic Univ.*
 Shuaike Yan, *Henan Polytechnic Univ.*
 Jian Liu, *Henan Polytechnic Univ.*

9:15-9:30 **MonA06-6** **Application of Iterative Learning Tuning to a Dragonfly-like Flapping Wing Micro Aerial Vehicle** 4215
 Chang-ping Du, *Zhejiang Univ.*
National Univ. of Singapore
 Jian-xin Xu, *National Univ. of Singapore*
 Yao Zheng, *Zhejiang Univ.*

- 9:30-9:45 **MonA06-7** **Gene Selection for Cancer Classification Using Improved Group Lasso** 4221
 Juntao Li, *Henan Normal Univ.*
 Wenpeng Dong, *Henan Normal Univ.*
 Deyuan Meng, *Beihang Univ.*
 Huimin Xiao, *Henan Univ. of Economics and Law*
- 9:45-10:00 **MonA06-8** **Bidirectional joint torque prediction with EMG of multiple channels: both agonist and antagonist muscles are necessary** 4226
 Zhan Li, *Univ. of Electronic Science and Tech. of China*
 Jing Guo, *Univ. of Montpellier*
 Deqing Huang, *Southwest Jiaotong Univ.*

Session	MonA07: DDCLS-Iterative Learning Control (II)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 07
Chair	
Co-Chair	

- 8:00-8:15 **MonA07-1** **Iterative Learning Control for Switched Linear Parabolic Systems in SpaceW_{1,2}** 4232
 Panpan Gu, *Suzhou Univ. of Science and Tech.*
 Qin Fu, *Suzhou Univ. of Science and Tech.*
 Xiangdong Li, *Suzhou Univ. of Science and Tech.*
- 8:15-8:30 **MonA07-2** **High Order Internal Model Iterative Learning Control for Impulsive Differential Systems** 4237
 Zijian Luo, *GuiZhou Univ.*
 Jinrong Wang, *GuiZhou Univ.*
 Wei Wei, *GuiZhou Univ.*
Guizhou Minzu Univ.
- 8:30-8:45 **MonA07-3** **Velocity Tracking Control of Wheeled Mobile Robots by Fuzzy Adaptive Iterative Learning Control** 4242
 Xiaochun Lu, *Hohai Univ.*
 Juntao Fei, *Hohai Univ.*
Jiangsu Key Lab. of Power Transmission & Distribution Equipment Tech.
- 8:45-9:00 **MonA07-4** **Logarithmic Error Approach to D-type Iterative Learning Control for SISO-Bilinear Systems** 4248
 Bing Chen, *Guangxi Univ. of Science and Tech.*
 Xisheng Dai, *Guangxi Univ. of Science and Tech.*
Guilin Univ. of Electronic Tech.
 Senping Tian, *South China Univ. of Tech.*
 Guang Li, *Guilin Univ. of Electronic Tech.*
- 9:00-9:15 **MonA07-5** **A Class of Second Order Strong Hyperbolic Distributed Parameter Systems for Iterative Learning Control** 4252
 Jianhuan Su, *Hechi Univ.*
 Yinjun Zhang, *Hechi Univ.*
Air Force Engineering Univ.
 Yinghui Li, *Air Force Engineering Univ.*

9:15-9:30 **MonA07-6** *Global State-feedback Control for a Class of High-order Stochastic Upper-triangular Systems with Input Time-varying Delay* 4257
 Liang Liu, *Bohai Univ.*
Nanjing Univ. of Science and Tech.
 Yifan Zhang, *Bohai Univ.*

9:45-10:00 **MonA07-8** *A Closed-loop PD-type Iterative Learning Algorithm for Discrete Singular Systems* 4262
 Youqiang Zhang, *South China Univ. of Tech.*
 Qian Liu, *South China Univ. of Tech.*
 Senping Tian, *South China Univ. of Tech.*
 Yanbo Luo, *South China Univ. of Tech.*

Session	MonA08: Computer Games (I) (Invited Session)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 08
Chair	<i>Xinhe Xu, Northeastern Univ.</i>
Co-Chair	<i>Yajie Wang, Shenyang Aerospace Univ.</i>

8:00-8:20 **MonA08-1** *The Design and Implementation of Tibetan-go Game Software* 4266
 Xinyang Wang, *Minzu Univ. of China*
 Xiali Li, *Minzu Univ. of China*
 Licheng Wu, *Minzu Univ. of China*

8:20-8:40 **MonA08-2** *Design and implementation of personalized interface of Chinese army chess* 4271
 Shuqin Li, *Computer Coll. of Beijing Info. Science and Tech. Univ.*
 Xiaohua Yuan, *Shanghai Oceanic Univ.*
 Kai Cao, *Computer Coll. of Beijing Info. Science and Tech. Univ.*

8:40-9:00 **MonA08-3** *Application and Design of Advanced Algorithms in NoGo Game of Computer Games* 4275
 Jun Tao, *Jiangnan Univ.*
 Gui Wu, *Jiangnan Univ.*

9:00-9:20 **MonA08-4** *Design and Application of Machine Learning Algorithm Computer in Connect6 of Computer Games System* 4279
 Gui Wu, *Jiangnan Univ.*
 Jun Tao, *Jiangnan Univ.*
Rowan Univ.

9:20-9:40 **MonA08-5** *Study on System Modeling and Optimization of Static Evaluation Based on the Computer Game of Draughts* 4283
 Youru Li, *Shenyang Aerospace Univ.*
 Xueping Liu, *Shenyang Aerospace Univ.*
 Hekai Zhang, *Shenyang Aerospace Univ.*
 Yuting Xi, *Shenyang Aerospace Univ.*

9:40-10:00 **MonA08-6** *Using Heuristic Solver to Optimize Monte Carlo Tree Search in Dots-And-Boxes* 4288
 Junkai Lu, *Shenyang Aerospace Univ.*
 Hang Yin, *Shenyang Aerospace Univ.*

Session	MonA09: Control Applications (V)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 09
Chair	Yunlong Li, Chinese Academy of Sciences
Co-Chair	Qibo Chu, Shenyang Univ. of Tech.

8:00-8:20	MonA09-1 FO Based-LQR Stabilization of the Rotary Inverted Pendulum 4292 Arturo Rojas-Moreno, <i>Univ. de Ingenieria y Tecnologia</i> Juan Hernandez-Garagatti, <i>Univ. de Ingenieria y Tecnologia</i> Oscar Pacheco-De la Vega, <i>Univ. de Ingenieria y Tecnologia</i> Luis Lopez-Lozano, <i>Univ. de Ingenieria y Tecnologia</i>
8:20-8:40	MonA09-2 Observer-based event-triggered trajectory tracking for nonlinear systems 4298 Yunlong Li, <i>Chinese Academy of Sciences</i>
8:40-9:00	MonA09-3 Intelligent Decoupling of Gas Collector Pressure based on Internal Model Control 4302 Yongqiang Hu, <i>Guidaojiaotong Plytechnic Inst.</i> Guojun Liu, <i>Guidaojiaotong Plytechnic Inst.</i>
9:00-9:20	MonA09-4 The optimal guidance method for fixed-time and fixed-point orbit injecting 4306 Jian Wang, <i>Beijing Aerospace Automation Control Inst.</i> Feng Qiu, <i>Beijing Aerospace Automation Control Inst.</i> Xiaoming Cheng, <i>Beihang Univ.</i>
9:20-9:40	MonA09-5 The optimal guidance of rocket fixed-attitude and fixed-point orbit injection 4311 Jian Wang, <i>Beijing Aerospace Automation Control Inst.</i> Xiaoming Cheng, <i>Beihang Univ.</i> Feng Qiu, <i>Beijing Aerospace Automation Control Inst.</i>
9:40-10:00	MonA09-6 Modeling and Control of Automobile Waste Heat Driven Ejector Refrigeration System 4317 Qibo Chu, <i>Shenyang Univ. of Tech.</i> Xiangdong Wang, <i>Shenyang Univ. of Tech.</i> Shujiang Li, <i>Shenyang Univ. of Tech.</i>

Session	MonA10: Signal Processing (IV)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 10
Chair	Haicheng Wei, Beifang Univ. of Nationalities
Co-Chair	Fang Li, Zhejiang Univ. Guilin Univ. of Electronic Tech.

8:00-8:20	MonA10-1 Study on Monitoring Technology of UAV Aerial Image Enhancement for Burning Straw 4321 Haicheng Wei, <i>Beifang Univ. of Nationalities</i> Mingxia Xiao, <i>Beifang Univ. of Nationalities</i> Ling Zhu, <i>Beifang Univ. of Nationalities</i> Miaojun Wang, <i>Beifang Univ. of Nationalities</i> Xing Wei, <i>Beifang Univ. of Nationalities</i> Xiuxia Zhang, <i>Beifang Univ. of Nationalities</i> Bai Zhang, <i>Beifang Univ. of Nationalities</i>
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- 8:20-8:40** **MonA10-2** **A New Variable Step Size Algorithm Applied in LMS Adaptive Signal Processing** 4326
Ying Qian, *Beifang Univ. of Nationalities*
- 8:40-9:00** **MonA10-3** **The Design of Signal Acquisition and Processing of Rotational Raman Temperature Measuring Lidar System** 4330
Ying Sun, *Beifang Univ. of Nationalities*
Jiandong Mao, *Beifang Univ. of Nationalities*
- 9:00-9:20** **MonA10-4** **Tracking of Stribeck Friction based on Second-Order Linear Extended State Observer** 4334
Lijun Wang, *Univ. of Science and Tech. Beijing*
Qing Li, *Univ. of Science and Tech. Beijing*
Ruihua Jiao, *Univ. of Science and Tech. Beijing*
Yixin Yin, *Univ. of Science and Tech. Beijing*
Yinan Feng, *Univ. of Science and Tech. Beijing*
Yichang Liu, *Univ. of Science and Tech. Beijing*
- 9:20-9:40** **MonA10-5** **Study of CORDIC Algorithm based on FPGA** 4338
Junwei Li, *Inner Mongolia Univ. of Tech.*
Jiandong Fang, *Inner Mongolia Univ. of Tech.*
Bajin Li, *Inner Mongolia Univ. of Tech.*
Yudong Zhao, *Inner Mongolia Agriculture and Animal Husbandry Information Center*
- 9:40-10:00** **MonA10-6** **Double Sparse Dictionary Learning for Image Super Resolution** 4344
Fang Li, *Zhejiang Univ.*
Guilin Univ. of Electronic Tech.
Sanyuan Zhang, *Zhejiang Univ.*

Session	MonA11: Signal Processing (VI) (Chinese)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 11
Chair	<i>Haihu Tan, Hunan Univ. of Tech.</i>
Co-Chair	<i>Enwei Gao, Hangzhou Dianzi Univ.</i>

- 8:00-8:20** **MonA11-1** **A novel color image hologram watermarking algorithm based on QDFT-DWT** 4349
Yong Xie, *Hunan Univ. of Tech.*
Haihu Tan, *Hunan Univ. of Tech.*
Kaili Wang, *Hunan Univ. of Tech.*
- 8:20-8:40** **MonA11-2** **An Improved Interest Point Detector for Human Action Recognition** 4355
Songtao Ding, *Northwestern Polytechnical Univ.*
Shiru Qu, *Northwestern Polytechnical Univ.*
- 8:40-9:00** **MonA11-3** **Study on reconstruction technology of underwater echo based on compressed sensing** 4361
Enwei Gao, *Hangzhou Dianzi Univ.*
Tongjing Sun, *Hangzhou Dianzi Univ.*
Anke Xue, *Hangzhou Dianzi Univ.*
Ke Ning, *Hangzhou Dianzi Univ.*

9:00-9:20	MonA11-4	A Novel Fusion Technique for CT and MRI Medical Image Based on NSST 4367 Jingming Yang, <i>Shenyang Aerospace Univ.</i> Yanyan Wu, <i>Shenyang Aerospace Univ.</i> Yajie Wang, <i>Shenyang Aerospace Univ.</i> Yulin Xiong, <i>Shenyang Aerospace Univ.</i>
9:20-9:40	MonA11-5	Unified robust weighted fusion Kalman estimators with uncertain-variance linearly correlated white noises 4373 Xuemei Wang, <i>Heilongjiang Univ.</i> <i>Heilongjiang Coll. of Business and Tech.</i> Wenqiang Liu, <i>Heilongjiang Univ.</i> Zili Deng, <i>Heilongjiang Univ.</i>
9:40-10:00	MonA11-6	Application of Kalman Filter in Microseismic Data Denoising Based on Identified Signal Model 4381 Sen Xia, <i>China Univ. of Petroleum</i> Weibo Wang, <i>China Univ. of Petroleum</i> Shurong Li, <i>China Univ. of Petroleum</i> Zhiwei Wang, <i>China Univ. of Petroleum</i>

Session	MonA12: Robot Control (I)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 12
Chair	<i>Huimin Lu, National Univ. of Defense Tech.</i>
Co-Chair	<i>Fengshui Jing, Inst. of Automation, Chinese Acad. of Scie.</i>

8:00-8:20	MonA12-1	A Trapezoidal Fuzzy Support Vector Regression System for Humanoid Robots 4386 Liyang Wang, <i>Department of Electronic Engineering, Shunde Polytechnic</i> Ming Chen, <i>Department of Electronic Engineering, Shunde Polytechnic</i>
8:20-8:40	MonA12-2	RGB-D sensor-based Auto Path Generation Method for Arc Welding Robot 4390 Jing Li, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Fengshui Jing, <i>Inst. of Automation, Chinese Acad. of Scie.</i> En Li, <i>Inst. of Automation, Chinese Acad. of Scie.</i>
8:40-9:00	MonA12-3	A Control System for Active Ball Handling in the RoboCup Middle Size League 4396 Junkai Ren, <i>National Univ. of Defense Tech.</i> Chenggang Xie, <i>National Univ. of Defense Tech.</i> Junhao Xiao, <i>National Univ. of Defense Tech.</i> Kaihong Huang, <i>National Univ. of Defense Tech.</i> Huimin Lu, <i>National Univ. of Defense Tech.</i>

- 9:00-9:20 **MonA12-4** **Design of an Active and Passive Type Walking Assistant Robot for Human** 4403
 Lijuan Zhang, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Yunqi Lv, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Jun Zhao, *China rehabilitation research center*
 Tong Zhang, *China rehabilitation research center*
 Yu Mu, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
Adil Shahzad, School of Mechatronical Engineering, Beijing Inst. of Tech.
Dengqi Cui, School of Mechatronical Engineering, Beijing Inst. of Tech.
Han Dong, School of Mechatronical Engineering, Beijing Inst. of Tech.
Xueshan Gao, School of Mechatronical Engineering, Beijing Inst. of Tech.
- 9:20-9:40 **MonA12-5** **Cooperative-Manipulation Scheme of Routh-Hurwitz Type for Simultaneous Repetitive Motion Planning of Two-Manipulator Robotic Systems** 4409
 Yunong Zhang, *Sun Yat-sen Univ.*
SYSU-CMU Shunde International Joint Research Inst., Key Laboratory of Autonomous Systems and Networked Control, Ministry of Education
 Maotai Zou, *Sun Yat-sen Univ.*
SYSU-CMU Shunde International Joint Research Inst. Key Laboratory of Autonomous Systems and Networked Control, Ministry of Education
 Huinan Xiao, *Sun Yat-sen Univ.*
SYSU-CMU Shunde International Joint Research Inst. Key Laboratory of Autonomous Systems and Networked Control, Ministry of Education
 Jianfeng Wen, *Sun Yat-sen Univ.*
SYSU-CMU Shunde International Joint Research Inst. Key Laboratory of Autonomous Systems and Networked Control, Ministry of Education
Guangdong Polytechnic Normal Univ.
 Ying Wang, *Sun Yat-sen Univ.*
SYSU-CMU Shunde International Joint Research Inst. Key Laboratory of Autonomous Systems and Networked Control, Ministry of Education
- 9:40-10:00 **MonA12-6** **Variable Structure Synchronized Control of Multi-manipulator Robots** 4415
 Khalid Bouabaz, *Harbin Engineering Univ.*
 Qidan Zhu, *Harbin Engineering Univ.*

Session	MonA13: Electric Vehicles and Intelligent Transportation (I)		
Date/Time	Monday, 30 May 2016 / 8:00-10:00		
Venue	Room 13		
Chair	Dewei Li, <i>Shanghai Jiao Tong Univ.</i>		
Co-Chair	Yilin Zhang, <i>Jilin Univ.</i>		
8:00-8:20	MonA13-1	Short Term Urban Traffic Mode Prediction Based on VOMM 4421 Chengjue Yuan, <i>Shanghai Jiao Tong Univ.</i> Dewei Li, <i>Shanghai Jiao Tong Univ.</i> Yugeng Xi, <i>Shanghai Jiao Tong Univ.</i>	
8:20-8:40	MonA13-2	Slip Ratio Estimation for Electric Vehicle with In-wheel Motors based on EKF without Detection of Vehicle Velocity 4427 Yilin Zhang, <i>Jilin Univ.</i> Haiyan Zhao, <i>State Key Lab. of Automotive Simulation and Control Jilin Univ.</i> Lei Yuan, <i>Jilin Univ.</i> Hong Chen, <i>State Key Lab. of Automotive Simulation and Control Jilin Univ.</i>	
8:40-9:00	MonA13-3	Stability analysis for the lattice model considering the effects of bilateral gaps 4433 Yongfu Li, <i>Chongqing Univ. of Posts and Telecommunications</i> Yu Song, <i>Chongqing Univ. of Posts and Telecommunications</i> Hao Zhu, <i>Chongqing Univ. of Posts and Telecommunications</i> Fenglan Sun, <i>Chongqing Univ. of Posts and Telecommunications</i>	
9:00-9:20	MonA13-4	Real-Time Lane-Vehicle Detection and Tracking System 4438 Guan Huang, <i>Ins. of Automation, Chinese Acad. of Sciences</i> Xingang Wang, <i>Ins. of Automation, Chinese Acad. of Sciences</i> Wenqi Wu, <i>Ins. of Automation, Chinese Acad. of Sciences</i> Han Zhou, <i>Beijing Information Science & Tech. Univ.</i> Yuanyuan Wu, <i>Beijing Information Science & Tech. Univ.</i>	
9:20-9:40	MonA13-5	The Torque Distribution and Anti-slip Regulation Control for Two-wheel Independent Drive Electric Vehicle 4444 Guodong Yin, <i>Southeast Univ.</i> Chengjie Zhang, <i>Southeast Univ.</i> Ning Zhang, <i>Southeast Univ.</i>	
9:40-10:00	MonA13-6	A Research on Driving Cycle for Electric Cars in Beijing 4450 Fei Zhang, <i>Beijing Inst. of Tech.</i> Fen Guo, <i>Beijing Inst. of Tech.</i> Hong Huang, <i>Beijing Inst. of Tech.</i>	

Session	MonA14: Smart Grids (V) (Chinese)
Date/Time	Monday, 30 May 2016 / 8:00-10:00
Venue	Room 14
Chair	Zhigang Ren, <i>Xi'an Jiaotong Univ.</i>
Co-Chair	Qiwu Zu, <i>East China Univ. of Science & Tech.</i>

8:00-8:20	MonA14-1	Study on Charging Strategy of Electric Vehicle Parking Lot Based on Improved PSO 4456 Pengfei Zhang, <i>Shanghai Electric Power Company, State Grid Corporation of China</i> Weihui Shao, <i>Tongji Univ.</i> Haini Qu, <i>Shanghai Electric Power Company, State Grid Corporation of China</i> Weisheng Xu, <i>Tongji Univ.</i> Zhiyu Xu, <i>Tongji Univ.</i>
8:40-9:00	MonA14-3	Sizing of a stand-alone Photovoltaic/Wind Energy System with Hydrogen and Battery Storage based on Improved Ant Colony Algorithm 4461 Weiqiang Dong, <i>Zhejiang Univ. City Coll.</i> Yanjun Li, <i>Zhejiang Univ.</i> Ji Xiang, <i>Zhejiang Univ.</i>
9:00-9:20	MonA14-4	Digital Substation Cyber Security Analysis with SYN-Flood Attack as a Simulation Case 4467 Lianquan Hou, <i>Hangzhou Dianzi Univ.</i> Jianmin Zhang, <i>Hangzhou Dianzi Univ.</i> Naizheng Jin, <i>Dispatch & Control Center, State Grid Shaoxing Electric Power Supply Company</i> Ma Zhu, <i>Dispatch & Control Center, State Grid Shaoxing Electric Power Supply Company</i> Yong Li, <i>Dispatch & Control Center, State Grid Shaoxing Electric Power Supply Company</i>
9:40-10:00	MonA14-6	Consensus-Based Improved Droop Control for Suppressing Circulating Current Using Adaptive Virtual Impedance in Microgrids 4473 Sunghyok Kim, <i>Northeastern Univ.</i> Kim Chaek, <i>Univ. of Tech.</i> Huaguang Zhang, <i>Northeastern Univ.</i> Qiuye Sun, <i>Northeastern Univ.</i>

Session	MonAIS: Interactive Session
Date/Time	Monday, 30 May 2016 / 08:00-10:00
Venue	Room 15

MonAIS-01	Research on the Influencing Factors of Consumer Purchase Behavior of Green Food in Harbin 4479 Dawei Zhao, <i>Harbin Univ. of Commerce</i> Mengdi Wu, <i>Agricultural Bank of China co., LTD</i>
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- MonAIS-02** ***The Research on Construction and Application of College Students Entrepreneurship Crowdfunding Platform*** 4483
 Zhanyang Song, *Shenyang Aerospace Univ.*
 Danhong Chen, *Shenyang Aerospace Univ.*
 Tianyu Yi, *Bohai Univ.*
- MonAIS-03** ***Research on WeChat marketing path of enhancing customer marketing experiences*** 4487
 Haiyan Zhang, *Shijiazhuang Posts and telecommunications Technical Coll.*
 Qi Wang, *Shijiazhuang Posts and telecommunications Technical Coll.*
 Xuan Ma, *Shijiazhuang Posts and telecommunications Technical Coll.*
- MonAIS-04** ***The Risk of Corporate Information Disclosure based internet and Three-dimensional Regulation Mode*** 4491
 Lingyan Ou, *Fuzhou Univ.*
- MonAIS-05** ***An agent-based approach for crowdsourcing software design*** 4497
 Hui Li, *Dalian Maritime Univ.*
 Liying Hao, *Dalian Maritime Univ.*
Dalian Ocean Univ.
 Xin Ge, *Dalian Maritime Univ.*
 Jian Gao, *Dalian Maritime Univ.*
 Shikai Guo, *Dalian Maritime Univ.*
- MonAIS-06** ***The influencing factors of fresh agricultural products logistics in Liaoning Province based on the analytic hierarchy process*** 4502
 Qi Qi, *Shenyang Agricultural Univ.*
 Jing Zhou, *Shenyang Agricultural Univ.*
 Peng Ji, *Northeastern Univ.*
 Xiaosheng Yu, *Northeastern Univ.*
 Nan Hu, *Northeastern Univ.*
- MonAIS-07** ***A Framework Research on Railway Emergency Intelligent Decision Support System(REIDSS)*** 4507
 Lei Li Zhe, *Jiang Normal Univ.*
 Fuzhang Wang, *China Acad. of Railway Sciences*
 Qiang Wei, *Zhe Jiang Normal Univ.*
- MonAIS-08** ***The study of channel members advertising strategies subject to Nerlove-Arrow model with lagged effect*** 4513
 Hui Yu, *Harbin Univ. of Science and Tech.*
 Dongyan Chen, *Harbin Univ. of Science and Tech.*
 Zhihui Wu, *Harbin Univ. of Science and Tech.*
- MonAIS-09** ***Research on Coordinating a Dual-channel Supply Chain Base on Risk-aversion*** 4519
 Daoping Wang, *Univ. of Science and Tech. Beijing*
 Chunli Ai, *Univ. of Science and Tech. Beijing*
 GU Chun-xiao, *Univ. of Science and Tech. Beijing*
- MonAIS-10** ***Simulation on RFID-Enable CONWIP Control Strategy for Multi-Echelon Inventory of Supply Chain*** 4526
 Xiaoju Han, *Northeastern Univ.*
Northeast Dianli Univ.
 Dingwei Wang, *Northeastern Univ.*

- MonAIS-11** **Joint Optimization of Schedule and Route in Container Supply Chain** 4531
Yanyan Zhang, *Beijing Jiaotong Univ.*
Yisong Li, *Beijing Jiaotong Univ.*
- MonAIS-12** **Research of IVD Reagents Logistics Optimization Based on Hybrid Improved Algorithm of FSACO** 4536
Liling Chen, *Beijing Tech. and Business Univ.*
Min Zuo, *Beijing Tech. and Business Univ.*
Kejing Xiao, *Beijing Tech. and Business Univ.*
- MonAIS-13** **Efficient Feasibility Testing and Scheduling for Dial-a-ride Problem with Time-dependent Travel Time** 4543
Jingmei Guo, *Northeastern Univ.*
Chao Liu, *Northeastern Univ.*
Yunpeng Bai, *Northeastern Univ.*
Junye Yan, *Northeastern Univ.*
- MonAIS-14** **Optimization for Logistics Network Based on the Demand Analysis of Customer** 4547
YanQiu Liu, *Shenyang Univ. of Tech.*
Hao Wang, *Shenyang Univ. of Tech.*
- MonAIS-15** **A Study on the External Financing and Coordination Strategies of Supply Chain Based on Retailer's Capital Constraints** 4553
Bo Hou, *Northeastern Univ.*
Jun Shi, *Northeastern Univ.*
Xintian Zhuang, *Northeastern Univ.*
- MonAIS-16** **Lead Relation Research between Rebar Futures Prices and Spot Prices** 4559
Yan Li, *Northeastern Univ.*
Xinying Xie, *Northeastern Univ.*
Xiaoyun Liu, *Northeastern Univ.*
Xintian Zhuang, *Northeastern Univ.*
- MonAIS-17** **Optimization for Service Supply Network Base on the User's Delivery Time under the Background of Big Data** 4564
YanQiu Liu, *Shenyang Univ. of Tech.*
Hao Wang, *Shenyang Univ. of Tech.*
- MonAIS-18** **Dynamic Game Analysis of R&D Investment in Low Carbon Supply Chain** 4570
Huijuan Zhao, *Beijing Jiaotong Univ.*
Zhen Li, *Qingdao Univ. of Science and Tech.*
- MonAIS-19** **The supply chain coordination for non-instantaneous deteriorating items with stock and price sensitive demand** 4574
Hongpei Lu, *Nanjing Univ.*
Jing Zhou, *Nanjing Univ.*
- MonAIS-20** **Analysis on the Buyback Contract Game Model Based on Predominated by the Supplier** 4582
Jingmin Wei, *Northeastern Univ.*
Shenyang Inst. of Engineering
- MonAIS-22** **Optimal Output Tracking Control for Chemical Process of Non-isothermal CSTR** 4588
Dexin Gao, *Qingdao Univ. of Science & Tech.*
Huan Liu, *Qingdao Univ. of Science & Tech.*
Jie Cheng, *Qingdao Univ. of Science & Tech.*

- MonAIS-23** **A Method for Measuring the Position of Discharging Billet in Heating Furnace Based on Image Recognition** 4593
 Xiaobo Chen, *Northeastern Univ.*
 Ruixiang Song, *Northeastern Univ.*
 Yongcai Qiu, *Northeastern Univ.*
 Yinghua Yang, *Northeastern Univ.*
- MonAIS-24** **A Step-wise Algorithm for Heading Estimation via a Smartphone** 4598
 Xiaokun Yang, *Inner Mongolia Univ.*
 Baoqi Huang, *Inner Mongolia Univ.*
 Qing Miao, *Inner Mongolia Univ.*
- MonAIS-25** **An Improved Genetic Algorithm for Degree Constrained Minimum Spanning Trees** 4603
 Kai Shi, *Key Lab of Intelligent Computing and Novel Software Tech.*
Key Laboratory of Computer Vision and System, Ministry of Education
 Qingfeng Song, *Tianjin Chengjian Univ.,*
 Sheng Lin, *Key Lab of Intelligent Computing and Novel Software Tech.*
Key Laboratory of Computer Vision and System, Ministry of Education
 Guangping Xu, *Key Lab of Intelligent Computing and Novel Software Tech.*
Key Laboratory of Computer Vision and System, Ministry of Education
 Zhanxu Cao, *Key Lab of Intelligent Computing and Novel Software Tech.*
Key Laboratory of Computer Vision and System, Ministry of Education
- MonAIS-26** **Harmony Search Resampling Particle Filter** 4608
 Qiao Sun, *Xian Research Inst. of Hi-Tech*
 Shengxiu Zhang, *Xian Research Inst. of Hi-Tech*
 Lijia Cao, *Sichuan Univ. of Science & Engineering*
 Xiaofeng Li, *Xian Research Inst. of Hi-Tech*
- MonAIS-27** **Study on Energy Cross feed Dual Linear Induction Motor Testing System** 4612
 Fucheng Lang, *Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd.*
High Voltage and Large Current Laboratory of State Grid Corporation
 Hongkui Zhang *CCTEG Shenyang Research Inst.*
- MonAIS-29** **Study on PID Controller Based on Fuzzy RBF Neural Network in Rolling Mill Hydraulic AGC System** 4616
 Yong Zhang, *Univ. of Science and Tech. Liaoning*
 Huichao Lv, *Univ. of Science and Tech. Liaoning*
- MonAIS-30** **An Intelligent Optimization Method for Oil-gas Gathering and Transportation Pipeline Network Layout** 4621
 Qiang Liu, *Liaoning Shihua Univ.*
 Li Mao, *Liaoning Shihua Univ.*
 Fangfang Li, *Liaoning Shihua Univ.*

- MonAIS-31** **Fast Compressive Tracking with Improved Classifiers** 4627
Mingqi Luo, *Xi'an Jiaotong Univ.*
Tuo Wang, *Xi'an Jiaotong Univ.*
Lihong Wang, *Longqiao Coll. of Lanzhou Commercial Coll.*
- MonAIS-32** **Optimization of PID Controller Based on PSO-BFO Algorithm** 4633
Yukun Wang, *Univ. of Science and Tech. Liaoning*
Jiesheng Wang, *Univ. of Science and Tech. Liaoning*
- MonAIS-34** **Research on Avionic Component Simulation Model Based on SCM** 4639
Jingjie Chen, *Civil Aviation Univ. of China*
Lina Gao, *Civil Aviation Univ. of China*
Bo Li, *Civil Aviation Univ. of China*
- MonAIS-35** **A Novel Method for Modeling and Kinematic Analysis of Transmissions** 4645
Chenlu Geng, *Soochow Univ.*
Liang Chen, *Soochow Univ.*
Xiaojie Guo, *Soochow Univ.*
- MonAIS-36** **Multi-redundant Aircraft Modeling System Based on Improved Reachability Matrix** 4650
Jingjie Chen, *Civil Aviation Univ.*
Yongjie Wu, *Civil Aviation Univ.*
Yujuan Zhu, *Civil Aviation Univ.*
- MonAIS-37** **Multi-scale Frequency Spectra Kernel Latent Feature Extraction based on Mutual Information for Modeling Mill load Parameters** 4656
Jian Tang, *Northern Jiaotong Univ.*
Northeastern Univ.
Zhuo Liu, *Northeastern Univ.*
Meiying Jia, *Northern Jiaotong Univ.*
Tianyou Chai, *Northeastern Univ.*
Xiaojie Zhou, *Northeastern Univ.*
- MonAIS-38** **Wind Turbine Performance Monitoring based on Nonlinear State Estimate Technique** 4662
Manli Jiang, *North China Electric Power Univ.*
Peng Guo, *North China Electric Power Univ.*
- MonAIS-39** **Modeling and Simulation of Steam Pipeline Network with Multiple Supply Sources in Iron & Steel Plants** 4667
Xianxi Luo, *Jiangxi Province Engineering Research Center of New Energy Tech. and Equipment*
Shubo Liu, *Jiangxi Province Engineering Research Center of New Energy Tech. and Equipment*
Menghua Xu, *Jiangxi Province Engineering Research Center of New Energy Tech. and Equipment*
Ying Huang, *Jiangxi Province Engineering Research Center of New Energy Tech. and Equipment*

- MonAIS-40** **Performance Comprehensive Assessment System for the Manufacturing System of Automotive Assembly Line** 4672
 Qing Ju, *Shenyang Inst. of Automation, Chinese Acad. of Sciences*
Univ. of Chinese Acad. of Sciences
Key Laboratory of Network Control System, Chinese Acad. of Sciences
 Fucheng Pan, *Shenyang Inst. of Automation, Chinese Acad. of Sciences*
Key Laboratory of Network Control System, Chinese Acad. of Sciences
- MonAIS-41** **The Off-site Severe Accident Consequence Analysis In The Nuclear Power Plant** 4677
 Liu Zhang, *China Nuclear Power Simulation Tech. Co., Ltd*
 Xu Wang, *China Nuclear Power Simulation Tech. Co., Ltd*
 Zhiguo Qin, *China Nuclear Power Simulation Tech. Co., Ltd*
 Bangqi Luo, *China Nuclear Power Simulation Tech. Co., Ltd*
- MonAIS-42** **Adaptive soft measurement method for the furnace exit gas temperature based data-driven method** 4681
 Zhenhao Tang, *Northeast Dianli Univ.*
 Haiyang Zhang, *Northeast Dianli Univ.*
 Jian Li, *Northeast Dianli Univ.*
 Qingyu Su, *Northeast Dianli Univ.*
- MonAIS-43** **Design for Measuring and Controlling System of Synthetic Test for High Voltage Circuit Breaker Based on DSP** 4686
 Fucheng Lang, *Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd.*
High Voltage and Large Current Laboratory of State Grid Corporation
 Hongkui Zhang, *CCTEG Shenyang Research Inst.*
- MonAIS-44** **A design and implement for simple smart home system for consumers** 4690
 Dacheng Peng, *Nanjing Normal Univ.*
 Chen Peng, *Nanjing Normal Univ.*

- MonAIS-45** **An Abstract Communication Service Interface of DPWS on Embedded Device in Industrial Automation** 4695
Dandan Xu, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community, Ministry of Education
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
Bin Fang, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community, Ministry of Education
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
Huijie Li, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community, Ministry of Education
Beijing Laboratory for Urban Mass Transit
Beijing Key Laboratory of Computational Intelligence and Intelligent System
- MonAIS-46** **Application of Big Data in Cyberspace Warfare** 4700
Yaoqi Li, *PLA Information Engineering Univ., Coll. of Science*
Jianjing Shen, *PLA Information Engineering Univ., Coll. of Science*
- MonAIS-47** **A Research about Remote Flow Control Based On IOT** 4703
Xiaoyi Luo, *Northeastern Univ.*
Peng Su, *Northeastern Univ.*
Chen Song, *Northeastern Univ.*
Zaiyang Tang, *Northeastern Univ.*
Zhigang Zhen, *School Of Mechanical Engineering and Automation Northeastern Univ.*
- MonAIS-48** **Decentralized Networked Control for Multi-generator Interconnected Power System Automatic Generation in the Electricity Market** 4707
Lianzeng Ma, *Northeast Univ.*
Univ. of Science and Tech. Liaoning
Xuebo Chen, *Univ. of Science and Tech. Liaoning*
Huaguang Zhang, *Northeast Univ.*
- MonAIS-49** **Design and Implementation of Intelligent Gateway for Smart Home** 4713
Zhenhua Xu, *Beijing Information Tech. Coll.*
- MonAIS-51** **HTN-based multi-robot path planning** 4719
Suying Zeng, *Huazhong Univ. of Science and Tech.*
Yuan Cheng Zhu, *Huazhong Univ. of Science and Tech.*
Chao Qi, *Huazhong Univ. of Science and Tech.*
- MonAIS-52** **Research on Mission Planning Technique of Autonomous Collaborative Manipulation for Multiple Space Robot** 4724
Hui Yan, *Acad. of Equipment*
Zihuan Wu, *Acad. of Equipment, 63883 Troops*
Yongming Gao, *Acad. of Equipment*

- MonAIS-53** **Multiple paths planning for UAVs using particle swarm optimization with sequential niche technique** 4730
Qisheng Cai, *School of Aerospace Engineering, Beijing Inst. of Tech.*
Teng Long, *School of Aerospace Engineering, Beijing Inst. of Tech.*
Zhu Wang, *School of Aerospace Engineering, Beijing Inst. of Tech.*
Yonglu Wen, *School of Aerospace Engineering, Beijing Inst. of Tech.*
Jiaxun Kou, *School of Aerospace Engineering, Beijing Inst. of Tech.*
- MonAIS-55** **Grid-plant Coordination Optimization Scheduling for Power-heat Load with Wind Power Integrated** 4735
Guili Yuan, *North China Electric Power Univ.*
Linbo Wang, *North China Electric Power Univ.*
Baoyuan Wang, *North China Electric Power Univ.*
- MonAIS-56** **Vehicle Routing with Time Windows Based on Two-stage Optimization Algorithm** 4741
Linling Liao, *Zhejiang Normal Univ.*
Xiushan Cai, *Zhejiang Normal Univ.*
Huadong Huang, *Zhejiang Normal Univ.*
Yanhong Liu, *Zhengzhou Univ.*
- MonAIS-57** **Application of Electrical Resistance Tomography to Damage Detection in Concrete** 4746
Jianyu Zhao, *Univ. of Jinan*
Chenhui Su, *Univ. of Jinan*
Hongwei Ren, *Univ. of Jinan*
Lei Qin, *Univ. of Jinan*
Biqin Dong, *Shenzhen Univ.*
Feng Xing, *Shenzhen Univ.*

- MonAIS-58** **Updated Control System for the PORTable Sub-millimeter Telescope (POST)** 4750
Wenying Duan, *Purple Mountain Observatory, Chinese Acad. of Sciences*
Key Laboratory of Radio Astronomy, Chinese Acad. of Sciences
Xuguo Zhang, *Purple Mountain Observatory, Chinese Acad. of Sciences*
Key Laboratory of Radio Astronomy, Chinese Acad. of Sciences
Kun Zhang, *Purple Mountain Observatory, Chinese Acad. of Sciences*
Key Laboratory of Radio Astronomy, Chinese Acad. of Sciences
Qijun Yao, *Purple Mountain Observatory, Chinese Acad. of Sciences*
Key Laboratory of Radio Astronomy, Chinese Acad. of Sciences
Sheng Li, *Purple Mountain Observatory, Chinese Acad. of Sciences*
Key Laboratory of Radio Astronomy, Chinese Acad. of Sciences
Graduate School of Chinese Acad. of Sciences
Shengcai Shi, *Purple Mountain Observatory, Chinese Acad. of Sciences*
Key Laboratory of Radio Astronomy, Chinese Acad. of Sciences
- MonAIS-59** **Research on RPLS Soft-Measuring Project Realization of Cement Clinker f-CaO** 4755
Chunhong Wan, *Kunming Univ. of Science and Tech. Kunming Electric Apparatus Research Inst.*
Jingna Li, *Kunming Electric Apparatus Research Inst.*
Lihui Feng, *Kunming Electric Apparatus Research Inst.*
- MonAIS-60** **Nonlinear Characteristics Measurement of Piezoelectric Ceramics Actuator Based on LabVIEW** 4760
Yanmei Liu, *Shenyang Aerospace Univ.*
Jun Shen, *Shenyang Aerospace Univ.*
Li Fu, *Shenyang Aerospace Univ.*
Jiang Cao, *Shenyang polytechnic coll.*
- MonAIS-61** **Nonlinear Coupling Characteristic Analysis of Gyrowheel** 4764
Hui Zhao, *Control and Simulation Center, Harbin Inst. of Tech.*
Xiaokun Liu, *Control and Simulation Center, Harbin Inst. of Tech.*
Yu Yao, *Control and Simulation Center, Harbin Inst. of Tech.*
Xin Huo, *Control and Simulation Center, Harbin Inst. of Tech.*
- MonAIS-62** **A New Type Multifunction Flashlight Based on SQ680S and μ C/OS-II** 4770
Jianqi Li, *Hunan Univ. of Arts & Science*
Kai Shi, *Hunan Univ. of Arts & Science*
Chuhan Chen, *Hunan Univ. of Arts & Science*
Long Liu, *Hunan Univ. of Arts & Science*
Binfang Cao, *Hunan Univ. of Arts & Science*

- MonAIS-63** **Design of a Parallel XY? Micro-Manipulating System with Large Stroke** 4775
Lilong Zhang, *Shandong Univ.*
Peng Yan, *Shandong Univ.*
Beihang Univ.
- MonAIS-64** **Selective Maintenance Model and its Solution Algorithm for Multi-state Series-parallel System under Economic Dependence** 4781
Qingzheng Xu, *Department of Information Service, Xi'an Communications Inst.*
Lemeng Guo, *Department of Information Service, Xi'an Communications Inst.*
Na Wang, *Department of Basic Courses, Xi'an Communications Inst.*
- MonAIS-65** **Fuzzy Comprehensive Evaluation of Diesel Cylinder Head Machining Scheme Based on DEMATEL and Feedback** 4789
Shumei Ma, *Tongji Univ.*
Yifan Zhang, *Tongji Univ.*
Xi Luo, *Tongji Univ.*
Aiping Li, *Tongji Univ.*
- MonAIS-66** **Selective Maintenance Model for Multi-state System under Economic Dependence** 4796
Lemeng Guo, *Department of Information Service, Xi'an Communications Inst.*
Qingzheng Xu, *Department of Information Service, Xi'an Communications Inst.*
Na Wang, *Department of Basic Courses, Xi'an Communications Inst.*
- MonAIS-67** **Partial disassembly sequence planning based on Pareto ant colony algorithm** 4804
Yufei Xing, *Shenyang Areospace Univ.*
Qiang Liu, *Liaoning Shihua Univ.*

Session	MonB01: Optimal Control and Optimization (III)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 01
Chair	Zhigang Ren, Xi'an Jiaotong Univ.
Co-Chair	Zhidong Qi, Nan Jing University of Scie. & Tech.

- 10:20-10:40** **MonB01-1** **Improved Invasive Weed Optimization Based on Clustering Strategy** 4810
Zhigang Ren, *Xi'an Jiaotong Univ.*
Shanshan Huang, *Xi'an Jiaotong Univ.*
Chenlin Sun, *Xi'an Jiaotong Univ.*
Yongsheng Liang, *Xi'an Jiaotong Univ.*
- 10:40-11:00** **MonB01-2** **Design of a New Fractional Order $PI^{\lambda}-PD^{\mu}$ Controller for Fractional Order System Based on BFGS Algorithm** 4816
Xi Zhou, *Nan Jing University of Scie. & Tech.*
Zhidong Qi, *Nan Jing University of Scie. & Tech.*
Cong Hu, *Nan Jing University of Scie. & Tech.*
Pengliang Tang, *Nan Jing University of Scie. & Tech.*

11:00-11:20	MonB01-3	Cooperating Base Station Location Optimization Using Genetic Algorithm 4820 Haijun Meng, <i>Guizhou Univ.</i> Fei Long, <i>Guizhou Univ.</i> Lu Guo, <i>Guizhou Univ.</i> Yingqun Xiao, <i>Guizhou Inst. of Tech.</i>
11:20-11:40	MonB01-4	Study of Parameter Optimization for Single Phase Heat Exchanger Model Based on Particle Swarm Optimization Algorithm 4825 Jin Ma, <i>North China Electric Power Univ.</i> Zhenqiao Hui, <i>North China Electric Power Univ.</i> Liangyu Ma, <i>North China Electric Power Univ.</i> Weiliang Liu, <i>North China Electric Power Univ.</i> Yongjie Zhai, <i>North China Electric Power Univ.</i>
11:40-12:00	MonB01-5	A Bi-population Multi-objective Algorithm for Continuous Multi-objective Optimization Problem 4830 Lili Chen, <i>Liaoning Jianzhu Vocational Univ.</i> Hongfeng Wang, <i>Northeastern Univ.</i>
12:00-12:20	MonB01-6	Suboptimal Guidance Law Design for Ground Target Localization and Tracking 4834 Tianning Wang, <i>Beijing Institute of Tech.</i> Shengjing Tang, <i>Beijing Institute of Tech.</i> Jie Guo, <i>Beijing Institute of Tech.</i>

Session	MonB02: Process Control (III) (Chinese)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 02
Chair	Lingke Zhou, Nanjing University of Scie. and Tech.
Co-Chair	Rangwen Zhang, China University of Petroleum.

10:20-10:40	MonB02-1	Research of Fuzzy predictive control Based on T-S model 4839 Yong Zhang, <i>University of Scie. and Tech.</i> Zonglong Zhang, <i>University of Scie. and Tech.</i>
11:00-11:20	MonB02-3	An Adaptive Predictive Controller based-on ARX-DIPLS Model 4845 Rangwen Zhang, <i>China University of Petroleum</i> Xuemin Tian, <i>China University of Petroleum</i> Ping Wang, <i>China University of Petroleum</i>
11:20-11:40	MonB02-4	Urban Roadside Stereo Garage and Management Method Based On GSM Network 4851 Wanli Shi, <i>Beifang University of nationalities</i> Xiuxia Zhang, <i>Beifang University of nationalities</i> <i>HeFei University of Tech.</i> Ziwei Zhao, <i>Beifang University of nationalities</i> <i>HeFei University of Tech.</i> Shuyi Wei, <i>Beifang University of nationalities</i> Guannan Du, <i>Beifang University of nationalities</i>

- 11:40-12:00 **MonB02-5** **Research on the Control of Adding Acid to Circulating Water Based on Expert Fuzzy PID Control** 4853
 Jin Liu, *Nantong Univ.*
 Peijian Zhang, *Nantong Univ.*
 Jianguo Wu, *Nantong Univ.*
 Pingfan Bu, *Nantong Univ.*
 Weifeng Chen, *Nantong Univ.*
- 12:00-12:20 **MonB02-6** **PI-PD controller design for unstable processes with time delay** 4859
 Jinggang Zhang, *Taiyuan University of Scie. and Tech.*
 Ning Li, *Taiyuan University of Scie. and Tech.*

Session	MonB03: Co-operative Control (III) (Chinese)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 03
Chair	Yangyang Chen, <i>Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering</i>
Co-Chair	Linlin Ou, <i>Zhejiang Univ. of Tech.</i>

- 10:20-10:40 **MonB03-1** **Rendezvous for the Lagrange network systems via quantized data exchange** 4863
 Huailong Wang, *Naval Univ. of Engineering*
 Xiaofeng Wu, *Minnan Normal Univ.*
 Yun Chen, *Naval Univ. of Engineering*
 Zewei Wu, *Guangzhou Navy Academy*
- 10:40-11:00 **MonB03-2** **A Geometric Extension Design for Second-Order Nonlinear Agents Formation Surrounding a Sphere** 4868
 Yangyang Chen, *Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering*
 Kaixuan Wang *Southeast Univ.*
 Ya Zhang, *Southeast Univ. Key Laboratory of Measurement and Control of Complex Systems of Engineering*
 Chenglin Liu, *Jiangnan Univ.*
 Qin Wang, *Yangzhou Univ.*
- 11:00-11:20 **MonB03-3** **Globally Stable Rigid Formation Control Using Backstepping Design** 4874
 Qin Wang, *Yangzhou Univ.*
 Qingguang Hua, *Yangzhou Univ.*
 Yadong Zhu, *Yangzhou Polytechnic Univ.*
 Yangyang Chen, *Southeast Univ.*
- 11:20-11:40 **MonB03-4** **Distributed coordinated control of multiple underactuated marine surface vehicles along one curve** 4880
 Lu Liu, *Dalian Maritime Univ.*
 Dan Wang, *Dalian Maritime Univ.*
 Zhouhua Peng, *Dalian Maritime Univ.*

- 11:40-12:00 **MonB03-5** **Research on Multi-Robot Collaborative Transportation Control System** 4886
Cheng Cheng, *Zhejiang Univ. of Tech.*
Xinyi Yu, *Zhejiang Univ. of Tech.*
Linlin Ou, *Zhejiang Univ. of Tech.*
Yongkui Guo, *Zhejiang Univ. of Tech.*
- 12:00-12:20 **MonB03-6** **Research on Distributed Task Allocation Algorithm for Unmanned Aerial vehicles based on Consensus Theory** 4892
Liang Jin, *Flight Automatic Control Research Institute*

Session	MonB04: Decision Supporting System and Production Planning and Scheduling (II)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 04
Chair	Zhenyu Gu, <i>Chongqing Univ.</i>
Co-Chair	Wangbao Xu, <i>Liaoning Univ. of Science and Tech.</i>

- 10:20-10:40 **MonB04-1** **A Flexible Job-Shop Rescheduling Method by Considering the Machine Equipment Availability** 4898
Zhenyu Gu, *Chongqing Univ.*
Linfeng Li, *Chongqing Univ.*
Jiajia Zheng, *Chongqing City Management Coll.*
Guorong Liu, *Chongqing Univ.*
- 10:40-11:00 **MonB04-2** **Zero Element Row Augmenting Path Algorithm for Linear Assignment Problems** 4903
Wangbao Xu, *Liaoning Univ. of Science and Tech.*
Genxi Rong, *Liaoning Univ. of Science and Tech.*
Xuebo Chen, *Liaoning Univ. of Science and Tech.*
- 11:00-11:20 **MonB04-3** **Data-Driven Approach of Scheduling the Ratio of Waste Paper and Pulp Properties Prediction** 4909
Zhang Liu, *South China Univ. of Tech.*
Wenhao Shen, *South China Univ. of Tech.*
- 11:20-11:40 **MonB04-4** **Assessment Model of the Maglev Train Braking System Safety Pre-warning and the Optimization of Parameters** 4915
Shengjie Hou, *National Univ. of Defense Tech.*
Fengshan Dou, *National Univ. of Defense Tech.*
Yungang Li, *National Univ. of Defense Tech.*
Zhiqiang Long, *National Univ. of Defense Tech.*
- 11:40-12:00 **MonB04-5** **Local search with controlled deterioration for multi-objective scheduling in dual-resource constrained flexible job shop** 4921
Deming Lei, *Wuhan Univ. of Tech.*
Xianfeng Tan, *Wuhan Univ. of Tech.*
- 12:00-12:20 **MonB04-6** **An Expert Ranking Method Based on ListNet with Feature Hierarchy** 4927
Shengxiang Gao, *Kunming Univ. of Science and Tech.*
Zhengtao Yu, *Kunming Univ. of Science and Tech.*
Sichao Wei, *Kunming Univ. of Science and Tech.*
Yuan Yin, *Kunming Univ. of Science and Tech.*
Yantuan Xian, *Kunming Univ. of Science and Tech.*

Session	MonB05: Decision-Making Theory and Method (V) (Chinese)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 05
Chair	Zuowei You, <i>Beihang Univ.</i>
Co-Chair	Xia Liu, <i>Beihang Univ.</i>

10:20-10:40	MonB05-1	Optimal sell order submission strategy for informed traders: limit orders or market orders? 4932 Zuowei You, <i>Beihang Univ.</i> Shancun Liu, <i>Beihang Univ.</i> Qiang Zhang, <i>Beijing Univ. of Chemical Tech.</i> Baosen Yang, <i>Tianjin Univ. of Commerce</i>
10:40-11:00	MonB05-2	Heterogeneous Information, Informed Trading and Capital Asset Pricing 4938 Xia Liu, <i>Beihang Univ.</i> Hua Jin, <i>Beihang Univ.</i> Binbin Chen, <i>Beihang Univ.</i>
11:00-11:20	MonB05-3	Dominant Gradient Strategy Based on Pareto Dominant and Gradient Method 4943 Song Zhang, <i>Northeastern Univ.</i> Hongfeng Wang, <i>Northeastern Univ.</i> Min Huang, <i>Northeastern Univ.</i>
11:20-11:40	MonB05-4	An Improved Evidence Classification Synthesis Method Combined Information Entropy 4949 Jihua Ye, <i>Jiangxi Normal Univ.</i> Yejing Wan, <i>Jiangxi Normal Univ.</i> Xiaosi Nie, <i>Jiangxi Normal Univ.</i>
11:40-12:00	MonB05-6	An intuitionistic fuzzy multi-attribute decision making model for the acceptance of genetically modified foods based on IFHA operator 4955 Yuguang Wang, <i>Beijing Inst. of Tech.</i> Yanan Li, <i>Henan Polytechnic Univ.</i> Ruifa Hu, <i>Beijing Inst. of Tech.</i>

Session	MonB06: DDCLS-Robot Control
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 06
Chair	Tianjiang Hu, <i>National Univ. of Defense Tech.</i>
Co-Chair	Yanan Li, <i>Imperial Coll. London</i>

10:35-10:50	MonB06-2	3D Pointing Gesture Recognition for Human-Robot Interaction 4959 Yuhui Lai, <i>Univ. of Illinois Urbana Champaign</i> Chen Wang, <i>National Univ. of Singapore</i> Yanan Li, <i>Imperial Coll. London</i> Shuzhi Sam Ge, <i>National Univ. of Singapore</i> Deqing Huang, <i>Southwest Jiaotong Univ.</i>
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- 10:50-11:05** **MonB06-3** **A Hierarchical Emotion Regulated Sensorimotor Model: Case Studies** 4965
Junpei Zhong, *Plymouth Univ. Waseda Univ*
Rony Novianto, *Univ. of Tech., Sydney*
Mingjun Dai, *Shenzhen Univ.*
Xinzheng Zhang, *Jinan Univ.*
Angelo Cangelosi, *Plymouth Univ.*
- 11:05-11:20** **MonB06-4** **Attitude Adjustment of Quadrotor Aircraft Platform via a Data-Driven Model Free Adaptive Control Cascaded with Intelligent PID** 4971
Shida Liu, *Beijing Jiaotong Univ.*
Zhongsheng Hou, *Beijing Jiaotong Univ.*
Jian Zheng, *Beijing Jiaotong Univ.*
- 11:20-11:35** **MonB06-5** **Three-axis Stabilized Satellite Back-stepping Adaptive Control** 4977
Aihua Zhang, *China Coll. of Engineering, BHU*
Haitao Meng, *China Coll. of Engineering, BHU*
Xing Huo, *China Coll. of Engineering, BHU*
- 11:35-11:50** **MonB06-6** **A novel SPSA-based IMC-PID Data-driven Control Method** 4981
Wei Ai, *South China Univ. of Tech.*
Xiangyang Li, *South China Univ. of Tech.*
Senping Tian, *South China Univ. of Tech.*
- 11:50-12:05** **MonB06-7** **Development of A Biofeedback Enhanced Multimedia Game** 4987
Huawei Wu, *South China Univ. of Tech.*
Chenguang Yang, *South China Univ. of Tech.*
Ruwei Wang, *South China Univ. of Tech.*
Chun-Yi Su, *South China Univ. of Tech.*
- 12:05-12:20** **MonB06-8** **Point-to-Point Tracking of Integrated Predictive Iterative Learning Control By Using Updating-Reference and CARIMA Model** 4993
Weiwei Qiu, *Tsinghua Univ.*
Zhihua Xiong, *Tsinghua Univ.*
Wanzhou Li, *Tsinghua Univ.*
Jie Zhang, *Univ. of Newcastle*

Session	MonB07: DDCLS-Learning Control, Optimization and Applications
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 07
Chair	
Co-Chair	

- 10:20-10:35** **MonB07-1** **Energy efficiency evaluation of ethylene industries based on DEA models** 4998
Yaxun Chen, *Beijing Univ. of Chemical Tech.*
Yongming Han, *Beijing Univ. of Chemical Tech.*
Yanqing Wang, *Beijing Univ. of Chemical Tech.*
Yuan Xu, *Beijing Univ. of Chemical Tech.*
Qunxiong Zhu, *Beijing Univ. of Chemical Tech.*

- 10:35-10:50** **MonB07-2** **Coordinated Optimization Control Strategy for We-Energy in Energy Internet** 5004
 Fei Teng, *Northeastern Univ.*
 Qiuye Sun, *Northeastern Univ.*
 Huaguang Zhang, *Northeastern Univ.*
- 10:50-11:05** **MonB07-3** **Generalized Policy Iteration Adaptive Dynamic Programming Algorithm for Optimal Tracking Control of a Class of Nonlinear Systems** 5009
 Qiao Lin, *Inst. of Automation, Chinese Acad. of Sciences*
 Qinglai Wei, *Inst. of Automation, Chinese Acad. of Sciences*
 Derong Liu, *Univ. of Science and Tech. Beijing*
- 11:05-11:20** **MonB07-4** **Closed-Loop Subspace Identification with Prior Information** 5015
 Yali Zhao, *Beijing Univ. of Chemical Tech.*
 Jinxu Cheng, *Beijing Univ. of Chemical Tech.*
 Youqing Wang, *Beijing Univ. of Chemical Tech.*
- 11:35-11:50** **MonB07-6** **sEMG-based prediction of Human Lower Extremity Movements by Using a Dynamic Recurrent Neural Network** 5021
 Chengkun Cui, *Inst. of Automation, Chinese Acad. of Science*
 Gui-Bin Bian, *Inst. of Automation, Chinese Acad. of Science*
 Zeng-Guang Hou, *Inst. of Automation, Chinese Acad. of Science*
 Xiao-Liang Xie, *Inst. of Automation, Chinese Acad. of Science*
 Liang Peng, *Inst. of Automation, Chinese Acad. of Science*
 Dongxu Zhang, *Inst. of Automation, Chinese Acad. of Science*
- 11:50-12:05** **MonB07-7** **Cascade-Based Control of a Benchmark System** 5027
 Xianqing Wu, *Zhejiang Univ. of Tech.*
 Xiongxiang He, *Zhejiang Univ. of Tech.*

Session	MonB08: Computer Games (II) (Invited Session)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 08
Chair	Xinhe Xu, <i>Northeastern Univ.</i>
Co-Chair	Yajie Wang, <i>Shenyang Aerospace Univ.</i>

- 10:20-10:40** **MonB08-1** **Research of Test Platform on Computer Games with Distributed System** 5032
 Jianning Quan, *Shenyang Aerospace Univ.*
 Hongkun Qiu, *Shenyang Aerospace Univ.*
 Yu Cao, *Shenyang Aerospace Univ.*
 Yajie Wang, *Shenyang Aerospace Univ.*
 Xueping Liu, *Shenyang Aerospace Univ.*
- 10:40-11:00** **MonB08-2** **The Research of UCT and Rapid Action Value Estimation in NoGo Game** 5036
 Yuxia Sun, *Shenyang Aerospace Univ.*
 Ziyang Zhang, *Shenyang Aerospace Univ.*
 Xiaoyan Wang, *Shenyang Aerospace Univ.*

11:00-11:20	MonB08-3	A Solving Strategy of Connect6 Based on K-in-a-row Types 5041 Qiang Gao, <i>Northeastern Univ.</i> Xinhe Xu, <i>Northeastern Univ.</i>
11:20-11:40	MonB08-4	The Game Model And The Probability Algorithm of Einstein Chess 5046 Zheng Chen, <i>Harbin Univ. of Science and Tech.</i> Xian Mei, <i>Harbin Univ. of Science and Tech.</i> Yuan Tian, <i>Harbin Univ. of Science and Tech.</i> Lei Bi, <i>Harbin Univ. of Science and Tech.</i> Meiqi Dong, <i>Harbin Univ. of Science and Tech.</i>
11:40-12:00	MonB08-5	Parallel Monte Carlo Tree Search in Perfect Information Game with Chance 5050 Junkai Lu, <i>Shenyang Aerospace Univ.</i> Xiaoyan Wang, <i>Shenyang Aerospace Univ.</i> Dayi Wang, <i>Shenyang Aerospace Univ.</i> Yajie Wang, <i>Shenyang Aerospace Univ.</i>
12:00-12:20	MonB08-6	Research of the Value of Pieces in EWN Based on Monte Carlo Algorithm 5054 Tianming Yu, <i>Shenyang Aerospace Univ.</i> Xiaoyan Wang, <i>Shenyang Aerospace Univ.</i> Jiwei Yang, <i>Shenyang Aerospace Univ.</i> Cheng Li, <i>Shenyang Aerospace Univ.</i> Junkai Lu, <i>Shenyang Aerospace Univ.</i>

Session	MonB09: Control Applications (VI) (Chinese)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 09
Chair	Yanan Wang, <i>Beijing Inst. of Tech.</i>
Co-Chair	Yuanli Cai, <i>Xi'an Jiaotong Univ.</i>

10:20-10:40	MonB09-1	Altitude Control for Unmanned Powered Parafoil Based on Backstepping Method 5058 Zili Chen, <i>Mechanical Engineering College</i> Hao Zhang, <i>Mechanical Engineering College</i>
10:40-11:00	MonB09-2	Robust Stabilizing Regions of Fractional-order PI Controllers for Permanent Magnet Synchronous Motor Control System 5065 Yanan Wang, <i>Beijing Inst. of Tech.</i> Lei Dong, <i>Beijing Inst. of Tech.</i> Xiaozhong Liao, <i>Beijing Inst. of Tech.</i>
11:00-11:20	MonB09-3	Comparative Analysis on PMSM Control System Based on SPWM and SVPWM 5071 Bo Li, <i>Xi'an Inst. of Optics & Precision Mechanics, CAS Univ. of Chinese Academy of Sciences</i> Chen Wang, <i>Xi'an Inst. of Optics & Precision Mechanics, CAS</i>
11:20-11:40	MonB09-4	Space-Indexed Aircraft Trajectory Tracking 5076 Mastura Ab Wahid, <i>Univ. Tecknologi Malaysia</i> <i>Ecole Nationale De L' Aviation Civile</i> Benjamas Panomruttanarug, <i>King Mongkut's Univ. of Tech. Thonburi, Antoine Drouin Ecole Nationale De L' Aviation Civile</i> Felix Mora-Camino, <i>Ecole Nationale De L' Aviation Civile</i>

- 11:40-12:00 **MonB09-5** **Scheduled Dual Mode Predictive Control for a Flexible Air-Breathing Hypersonic Vehicle Using Polyhedral Invariant Sets** 5082
Yu Ma, *Xi'an Jiaotong Univ.*
Yuanli Cai, *Xi'an Jiaotong Univ.*
- 12:00-12:20 **MonB09-6** **Hybrid Electric Vehicle torque distribution based on the optimal operating curve and multi-input** 5088
Niaona Zhang, *Changchun Univ. of Tech.*
Jilin Province Administration of Press, Publication, Radio, Film and Television
Caimao Xu, *Changchun Univ. of Tech.*
Liuji Fu, *Changchun Univ. of Tech.*
Yueling Qi, *Jilin Province Administration of Press, Publication, Radio, Film and Television*

Session	MonB10: Signal Processing (V)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 10
Chair	Dong Yin, Dept. Electronic Engineering & Information Science, USTC Key Laboratory of Electromagnetic Space Information, CAS
Co-Chair	Shanshan Li, Communication Univ. of China

- 10:20-10:40 **MonB10-1** **Component Surface Defect Detection based on Image Segmentation Method** 5093
Renwei Lu, *Dept. Electronic Engineering & Information Science, USTC*
Key Laboratory of Electromagnetic Space Information, CAS
Dong Yin, *Dept. Electronic Engineering & Information Science, USTC*
Key Laboratory of Electromagnetic Space Information, CAS
- 10:40-11:00 **MonB10-2** **The battleplane target detection based on sky background** 5097
Feng Liu, *Hangzhou Dianzi Univ.*
Jun Liu, *Hangzhou Dianzi Univ.*
Xuguang Wei, *Northeastern Univ. Engineering & Research Inst. Co., Ltd*
- 11:00-11:20 **MonB10-3** **Compressed Sensing Denoising Algorithm for Astronomical Images** 5102
Xiaoping Shi, *Harbin Inst. of Tech.*
Jie Zhang, *Harbin Inst. of Tech.*
Hailong Liu, *Harbin Inst. of Tech.*
- 11:20-11:40 **MonB10-4** **A Research on the Relationship between Kalman Filter and Phase Locked Loop** 5106
Youmu Shi, *Equipment Academy*
Di Yan, *Equipment Academy*
- 11:40-12:00 **MonB10-5** **A New Infrared Image Enhancement Algorithm** 5111
Shanshan Li, *Communication Univ. of China*
Jintao Wang, *Communication Univ. of China*
Liming Sun, *Communication Univ. of China*
- 12:00-12:20 **MonB10-6** **Local statistic information-driven active contours for image segmentation** 5115
Xiaosheng Yu, *Northeastern Univ.*
Qi Qi, *Shenyang Agricultural Univ.*
Nan Hu, *Northeastern Univ.*

Session	MonB11: Data Processing (III) (Chinese)	
Date/Time	Monday, 30 May 2016 / 10:20-12:20	
Venue	Room 11	
Chair	Jun Liu, Xi'an Jiaotong Univ.	
Co-Chair	Jizheng Chu, Beijing Univ. of Chemical Tech.	
10:20-10:40	MonB11-1	Calculation of Warhead Reentry Angle of Attack based on Flight Test Data 5121 Jinhua Fan, <i>Taiyuan Satellite Launch Center</i> Jianying Song, <i>Taiyuan Satellite Launch Center</i> Jie Peng, <i>Taiyuan Satellite Launch Center</i>
10:40-11:00	MonB11-2	SPSD: an Alternative Attribute for a Flow Using Packet Sampling 5125 Lei Ding, <i>Xi'an Jiaotong Univ.</i> Jun Liu, <i>Xi'an Jiaotong Univ.</i> Tao Qin, <i>Xi'an Jiaotong Univ.</i> Max Haifei, <i>Li Union Univ.</i>
11:00-11:20	MonB11-3	The Combining of Two Methods for Cycle Slips Detection and Repair of BDS Triple-frequency Data 5132 Qiqi Zhao, <i>Kunming Univ. of Science and Tech.</i> Jinhui Zou, <i>Kunming Univ. of Science and Tech.</i> <i>Engineering Research Center for Mineral Pipeline Transportation</i>
11:20-11:40	MonB11-4	Similarity Measurement Based on Cloud Models for Time Series Prediction 5138 Songda Jia, <i>Taiyuan Univ. of Tech.</i> Xinying Xu, <i>Taiyuan Univ. of Tech.</i> Yusong Pang, <i>Delft Univ. of Tech.</i> Gaowei Yan, <i>Taiyuan Univ. of Tech.</i>
11:40-12:00	MonB11-5	A study of identification of wide-sense stationary in chemical processes 5143 Minghui Tang, <i>Beijing Univ. of Chemical Tech.</i> Jizheng Chu, <i>Beijing Univ. of Chemical Tech.</i> Huipeng Zhang, <i>Beijing Univ. of Chemical Tech.</i>

Session	MonB12: Robot Control (II)	
Date/Time	Monday, 30 May 2016 / 10:20-12:20	
Venue	Room 12	
Chair	Guoyu Zuo, Beijing Univ. of Tech.	
Co-Chair	Jingyi Zheng, Inst. of Automation, Chinese Acad. of Scie.	
10:20-10:40	MonB12-1	Research on a high-speed picking-placing motion of the sorting robot based on the optimal picking point 5148 Zeqiang He, <i>Harbin Inst. of Tech.</i> Zonglin Li, <i>Harbin Inst. of Tech.</i> Jiachen Ma, <i>Harbin Inst. of Tech.</i>
10:40-11:00	MonB12-2	Dynamic Modeling and Balance Control for Bionic Kangaroo Robot during Stance Phase 5154 Guoyu Zuo, <i>Beijing Univ. of Tech.</i> Xinpeng Wang, <i>Beijing Univ. of Tech.</i> Daoxiong Gong, <i>Beijing Univ. of Tech.</i> Yuwei Liu, <i>Beijing Univ. of Tech.</i>

11:00-11:20	MonB12-3	Quadrotor helicopter Attitude Control using cascade PID 5158 Pengbo Gao, <i>Inner Mongolia Univ.</i> Yongxin Liu, <i>Inner Mongolia Univ.</i> Hui Zhang, <i>Inner Mongolia Univ.</i> Linling Wang, <i>Inner Mongolia Univ.</i>
11:20-11:40	MonB12-4	Terrain Estimation and Strategy for Quadruped Robot Body Posture and COG Adjustment 5164 Yudong He, <i>Beijing Inst. of Tech.</i> Junzheng Wang, <i>Beijing Inst. of Tech.</i> Xianfeng Ke, <i>Beijing Inst. of Tech.</i> Shoukun Wang, <i>Beijing Inst. of Tech.</i>
11:40-12:00	MonB12-5	A Control System of Human-Computer Interaction Based on Kinect Somatosensory Equipment 5170 Liang Guo, <i>Beijing Univ. of Civil Engineering and Architecture</i> <i>Beijing Key Laboratory of Robot Bionics and Function Research</i> Chenxi Liu, <i>Beijing Univ. of Civil Engineering and Architecture</i> <i>Beijing Key Laboratory of Robot Bionics and Function Research</i> Xiaoyan Wen, <i>Beijing Univ. of Civil Engineering and Architecture</i> <i>Beijing Key Laboratory of Robot Bionics and Function Research</i> Haohua Chen, <i>Beijing Univ. of Civil Engineering and Architecture</i> <i>Beijing Key Laboratory of Robot Bionics and Function Research</i> Jianghui Zhang, <i>Beijing Univ. of Civil Engineering and Architecture</i> <i>Beijing Key Laboratory of Robot Bionics and Function Research</i>
12:00-12:20	MonB12-6	Random Based Narrow Space Path Planning For Arm Manipulation With the Fixed Orientation Constraints 5176 Jingyi Zheng, <i>Inst. of Automation, Chinese Acad. of Scie.</i> En Li, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Zize Lliang, <i>Inst. of Automation, Chinese Acad. of Scie.</i>

Session	MonB13: Electric Vehicles and Intelligent Transportation (II)
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 13
Chair	Wenlong Yao, <i>Qingdao Ocean Shipping Mariners Coll</i>
Co-Chair	Guodong Yin, <i>Southeast Univ.</i>

10:20-10:40	MonB13-1	Vector Control of LNG Marine Propulsion Motor based on Improved EKF 5180 Yuan Liu, <i>Qingdao Ocean Shipping Mariners Coll.</i> Wenlong Yao, <i>Qingdao Ocean Shipping Mariners Coll.</i> Ailing Chen, <i>Qingdao Ocean Shipping Mariners Coll.</i>
10:40-11:00	MonB13-2	Differential Drive Assisted Steering Control for Electric Vehicle with Electric Motored Wheels 5184 Guodong Yin, <i>Southeast Univ.</i> Chen Shen, <i>Southeast Univ.</i> Xianjian Jin, <i>Southeast Univ.</i>

11:00-11:20	MonB13-3	The Current Research on Electric Vehicle 5190 Xuesong Zhou, <i>Tianjin Univ. of Tech.</i> Lei Zou, <i>Tianjin Univ. of Tech.</i> Youjie Ma, <i>Tianjin Univ. of Tech.</i> Zhiqiang Gao, <i>Tianjin Univ. of Tech.</i> Yanjuan Wu, <i>Tianjin Univ. of Tech.</i> Jinliang Yin, <i>Tianjin Univ. of Tech.</i> Xiaoning Xu, <i>Tianjin Univ. of Tech.</i>
11:20-11:40	MonB13-4	Traffic Sign Detection and Recognition Using Color Standardization and Zernike Moments 5195 Xing Ma, <i>Beifang Univ. of Nationalities</i> Chunyang Mu, <i>Beifang Univ. of Nationalities</i> Yan Wang, <i>Beifang Univ. of Nationalities</i> Xiaolong Wang, <i>Beifang Univ. of Nationalities</i> Xuetao Chen, <i>Beifang Univ. of Nationalities</i>
11:40-12:00	MonB13-5	A Traffic signs' Detection Method of Contour Approximation based on Concave Removal 5199 Zhe Xu, <i>Beijing Univ. of Tech.</i> Jingyi Ren, <i>Beijing Univ. of Tech.</i> Chaoqian Bao, <i>Beijing Univ. of Tech.</i>
12:00-12:20	MonB13-6	Application of Improved Adaptive Kalman Observer in the Vehicle Rollover Warning System 5205 Jiangchun Xu, <i>Kunming Univ. of Science and Tech.</i> Liling Yu, <i>Kunming Univ. of Science and Tech.</i> Xiangyang Ren, <i>Kunming Univ. of Science and Tech.</i> Shengwang Huang, <i>Kunming Univ. of Science and Tech.</i>

Session	MonB14: Micro-Electromechanical Systems
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 14
Chair	<i>De Xu, Chinese Acad. of Sciences</i>
Co-Chair	<i>Fengqi Liang, Chinese Acad. of Aerospace Aerodynamics</i>

10:20-10:40	MonB14-1	Particle Detection on Low Contrast Image of Large Aperture Optics 5209 Wendong Ding, <i>Inst. of Automation, Chinese Acad. of Scie.</i> De Xu, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Zhengtao Zhang, <i>Inst. of Automation, Chinese Acad. of Scie.</i> Dapeng Zhang, <i>Inst. of Automation, Chinese Acad. of Scie.</i>
10:40-11:00	MonB14-2	Magnetic and Force Performance Analysis of Tubular Linear Motor with Two Halbach Topologies 5215 Fengqi Liang, <i>Chinese Acad. of Aerospace Aerodynamics</i> Hui Cong, <i>Chinese Acad. of Aerospace Aerodynamics</i> Zhigang Ji, <i>Chinese Acad. of Aerospace Aerodynamics</i> Yijing Zhao, <i>Beihang Univ.</i>
11:00-11:20	MonB14-3	Optimal Controller for Interior Permanent Magnet Synchronous Motor based on Hamiltonian Control 5221 Zhitao Wu, <i>Univ. of Science and Tech. Liaoning</i> Fuyun Li, <i>Univ. of Science and Tech. Liaoning</i> Jianying Xu, <i>Univ. of Science and Tech. Liaoning</i>

11:20-11:40	MonB14-4	Comparison Study of Hysteresis Compensation of Piezostage Using Feedforward Combined With Feedback Control 5226 Yulong Zhang, <i>Univ. of Macau</i> Qingsong Xu, <i>Univ. of Macau</i>
11:40-12:00	MonB14-5	Model Predictive Control Design of a Flexure-Based Micropositioning System 5232 Piyu Wang, <i>Univ. of Macau</i> Qingsong Xu, <i>Univ. of Macau</i>
12:00-12:20	MonB14-6	A federated filtering personal navigation algorithm based on MEMS-INS/GPS integrated 5237 Kai Pan, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community, Ministry of Education</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Lab. of Computational Intelligence and Intelligent System</i> Mingrong Ren, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community, Ministry of Education</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Lab. of Computational Intelligence and Intelligent System</i> Pu Wang, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community, Ministry of Education</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Lab. of Computational Intelligence and Intelligent System</i> Yanhong Liu, <i>Beijing Univ. of Tech.</i> <i>Engineering Research Center of Digital Community, Ministry of Education</i> <i>Beijing Laboratory for Urban Mass Transit</i> <i>Beijing Key Lab. of Computational Intelligence and Intelligent System</i>

Session	MonBIS: Interactive Session
Date/Time	Monday, 30 May 2016 / 10:20-12:20
Venue	Room 15

MonBIS-01	The Research on Obstacle Avoidance of Hospital Ward Inspection Robots in Complex Environment 5242 Jinshan Yu, <i>Shandong Univ.</i> Hao Wu, <i>Shandong Univ.</i> Xin Wang, <i>Shandong Univ.</i>
MonBIS-02	Design and Implementation of the UAV Flight Stability Control Law by Fuzzy-PID 5248 Qiang Zhang, <i>Information Engineering Univ.</i> Mengqing Sun, <i>North China Univ. of Water Resources and Electric Power</i> Jianjing Shen, <i>Information Engineering Univ.</i>
MonBIS-03	Design and Control of Multitasking Lego Robots 5255 Jun Wang, <i>Hefei Univ.</i> Xiaodong Du, <i>Hefei Univ.</i>

- MonBIS-04** **Control of Balancing Mobile Robot on a Ball with Fuzzy Self-adjusting PID** 5258
 Xu Su, *Inner Mongolia Univ.*
 Cun Wang, *Inner Mongolia Univ.*
 Weiwei Su, *Inner Mongolia Univ.; Test Inst. of Aerospace Dynamic Machine in Inner Mongolia*
 Yan Ding, *Inner Mongolia Univ.*
- MonBIS-05** **Modeling and Decoupling Control for Two-Wheeled Self-Balancing Robot** 5263
 Zheng Zhang, *Wuhan Univ. of Science and Tech.*
 Teng Meng, *Wuhan Univ. of Science and Tech.*
- MonBIS-06** **Observer Based 3-D Path Following Control of Underactuated Underwater Vehicle in the Presence of Ocean Currents** 5268
 Tao Chen, *Harbin Engineering Univ. Key Laboratory of Underwater Robot Tech.*
 Da Xu, *Harbin Engineering Univ.*
 Jiajia Zhou, *Harbin Engineering Univ.*
 Anzuo Jiang, *Harbin Engineering Univ.*
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Zhi Liu, *Guangdong Univ. of Tech.*
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Falin Qi, *China Acad. of Railway Sciences, Infrastructure Inspection Research Inst.*
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Zhi Liu, *Guangdong Univ. of Tech.*
Yun Zhang, *Guangdong Univ. of Tech.*

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Qingyang Chen, *National Univ. of Defense Tech.*
Sheng Xu, *National Univ. of Defense Tech.*
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- MonBIS-34** **Infrared and visible image registration based on SIFT and Sparse Representation** 5420
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Qin Qin, *Shanghai Second Polytechnic Univ.*
Zimei Tu, *Shanghai Second Polytechnic Univ.*
Xishuai Peng, *Shanghai Jiao Tong Univ.*
Yuanxiang Li, *Shanghai Jiao Tong Univ.*
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Dongchi Zhang, *School of Automation, Beijing Inst. of Tech.*
Neil Suttora, *Northeastern Univ.*
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Qinglin Wang, *School of Automation, Beijing Inst. of Tech.*
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- MonBIS-44** **State-based Fault Diagnosis of Discrete-event Systems** 5470
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Daowen Qiu, *Sun Yat-sen Univ.*
- MonBIS-45** **Stability analysis of discrete-time quadratic periodically time-varying systems with input saturation** 5476
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Shengyan Chang, *Unit of 68036 of PLA*
Zhongguang Li, *Equipment Academy*
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- MonBIS-49** **The United States, Britain, Japan disabled Employment Guarantee Measures for the Enlightenment of our Country** 5498
Jianmei Chen, *Harbin Engineering Univ.*
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Xiyue Fang, *Harbin Univ. of Commerce*
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- MonBIS-50** **The Research of Multi-label Question Classification in Community Question Answering** 5504
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- MonBIS-53** **Center-focus Global Contrast Saliency Detection** 5519
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- MonBIS-54** **Soft-Sensor Modeling of Foot-and-Mouth Disease Vaccine Suspension Culture Based on Relevance Vector Machine** 5524
Yonghong Huang, *Jiangsu Univ.*
Huan Zang, *Jiangsu Univ.*
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Zhikai Fu, *Xinjiang Tiankang Livestock Biotechnology Limited by Share Ltd*
- MonBIS-55** **Fault Diagnosis for Glutamic Acid Fermentation Process Using Fuzzy Clustering** 5530
Guicheng Wang, *Shanghai Inst. of Tech.*
Bing Xu, *Shanghai Inst. of Tech.*
Wenping Jiang, *Shanghai Inst. of Tech.*
- MonBIS-56** **Abnormal Lung Regions Segmentation Method Based on Improved ASM** 5535
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Huizhi Ren, *Shenyang Univ. of Tech.*
Fanxing Meng, *Shenyang Univ.*
- MonBIS-57** **Noise Reduction and Feature Extraction of Gastric Magnetic Fast Wave** 5540
Anna Wang, *Northeastern Univ.*
Haishi Li, *Northeastern Univ.*
Zhiyuan Liu, *Contec Medical Systems Company Limited*
Yangyang Man, *Northeastern Univ.*

- MonBIS-58** **Rough Reduction Algorithm for Reduction of Metagenomic DNA Digital Signature** 5545
 Jian Xue, *Jilin Univ.*
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 Tao Hou, *Jilin Univ.*
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- MonBIS-59** **SVM Modeling for Glutamic Acid Fermentation Process** 5551
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 Wenping Jiang, *Shanghai Inst. of Tech.*
- MonBIS-60** **The Tree Kinematics ModelingBased on Classical Mechanics** 5556
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- MonBIS-61** **A Research of Improved Algorithm for GMM Voiceprint Recognition Model** 5560
 Jing Zhang, *Guangdong Univ. of Foreign Studies*
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- MonBIS-62** **The Dynamical Behavior Of A SEI Model:Acute And Chronic Stagesand Nonlinear Incidence Rate** 5565
 Yao Chen, *Science and Tech. Coll. of Hubei Univ. for Nationalities*
- MonBIS-63** **Mechanical Model of the Wheat and Analysis of Stem Lodging** 5570
 Qicheng Xu, *Shenyang Jianzhu Univ.*
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- MonBIS-64** **Neural network H-infinity synchronization control for time delay chaotic neuronal systems** 5575
 Yanqiu Che, *Tianjin Univ. of Tech. and Education*
 Bei Liu, *Tianjin Univ. of Tech. and Education*
 Huiyan Li, *Tianjin Univ. of Tech. and Education*
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 Chunxiao Han, *Tianjin Univ. of Tech. and Education*
- MonBIS-65** **A Computational Model for the Formation of Grid Field Based on Path Integration** 5581
 Naigong Yu, *Beijing Univ. of Tech.*
 Lue Fang, *Beijing Univ. of Tech.*
- MonBIS-67** **Vibration EnergyGatheringPower Management System Based on DC/DC Boost Converter Circuit** 5587
 Qingxin Zhang, *Shenyang Aerospace Univ. Automation Inst.*
 Li Yu, *Shenyang Aerospace Univ. Automation Inst.*
 Yunhong Gao, *Shenyang Aerospace Univ. Automation Inst.*

Session	MonC01: Optimal Control and Optimization (IV) (Chinese)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 01
Chair	Cunwu Han, North China University of Tech.
Co-Chair	Baoqing Yang, Harbin Institute of Tech.

13:30-13:50	MonC01-1	Optimal Power and Rate Control for Wireless Communication Networks with External Disturbance 5592 Cunwu Han, <i>North China University of Tech.</i> Shurui Chang, <i>North China University of Tech.</i> Qi Diao, <i>North China University of Tech.</i> Lei Liu, <i>North China University of Tech.</i> Song Bi, <i>North China University of Tech.</i> Dehui Sun, <i>North China University of Tech.</i>
13:50-14:10	MonC01-2	Firing logic design for ACS of missile with pulse jets 5596 Yaxing Zhang, <i>Harbin Institute of Tech.</i> Baoqing Yang, <i>Harbin Institute of Tech.</i> Xin Huo, <i>Harbin Institute of Tech.</i> Songlin Chen, <i>Harbin Institute of Tech.</i>
14:10-14:30	MonC01-3	Inventory optimization for repairable spares with scrap during the mission 5602 Renyang Liu, <i>Naval University of Engineering</i> Qingmin Li, <i>Naval University of Engineering</i> Liang Zhou, <i>Naval University of Engineering</i>
14:50-15:10	MonC01-5	Application of PSO-BP Neural Network in Main Steam Temperature Control 5607 Yong Zhang, <i>University of Scie. and Tech.</i> Jingeng Dang, <i>University of Scie. and Tech.</i>
15:10-15:30	MonC01-6	Aeroengine Controller Design Based On Improved Particle Swarm Optimization 5612 Jiyang Dai, <i>Nanchang Hangkong Univ.</i> Fangting Huang, <i>Nanchang Hangkong Univ.</i> Jin Ying, <i>Nanchang Hangkong Univ.</i> Huazhu Luo, <i>Nanchang Hangkong Univ.</i> Li Ying, <i>Nanchang Hangkong Univ.</i>

Session	MonC02: Variable Structure Control (I)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 02
Chair	Qinglei Hu, Beihang Univ.
Co-Chair	Jianguo Guo, Northwestern Polytechnical Univ.

13:30-13:50	MonC02-1	Inertia-free Finite-time Attitude Control of Rigid Spacecraft with Reaction Wheels 5617 Xiao Tan, <i>Beihang Univ.</i> Qinglei Hu, <i>Beihang Univ.</i>
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- 13:50-14:10 **MonC02-2** **Sensorless control of the fault-tolerant permanent magnet motor based on sliding mode observer** 5623
Hongfen Bai, *Dalian Maritime Univ.*
Jingwei Zhu, *Dalian Maritime Univ.*
Junfeng Qin, *Qinzhou Univ.*
- 14:10-14:30 **MonC02-3** **Anticipating Synchronization of Chaotic Lur'e Systems via Output Feedback and Active Sliding Mode Control Schemes** 5627
Liang Yang, *Beijing Institute of Aerospace Systems Engineering*
Zhenhai Wanyan, *Beijing Institute of Aerospace Systems Engineering*
Rongmei Nie, *Beijing Institute of Aerospace Systems Engineering*
Jin Xiao, *Beijing Institute of Aerospace Systems Engineering*
- 14:30-14:50 **MonC02-4** **Attitude Control for Reentry Reusable Launch Vehicle** 5633
Jianguo Guo, *Northwestern Polytechnical Univ.*
Guoqing Wang, *Northwestern Polytechnical Univ.*
Jun Zhou, *Northwestern Polytechnical Univ.*
- 14:50-15:10 **MonC02-5** **Control System of Permanent Magnet Synchronous Motor Based on Extended Sliding Mode State Observer** 5637
Fenglong Shen, *Northeastern Univ.*
Eastern Liaoning Univ.
Jianhui Wang, *Northeastern Univ.*
Lang Liang, *Northeastern Univ.*
- 15:10-15:30 **MonC02-6** **System Identification and Sliding Mode Control Design for Electromechanical Actuator with Harmonic Gear Drive** 5641
Jinpeng Yang, *China Academy of Aerospace Aerodynamics*
Dong Liang, *China Academy of Aerospace Aerodynamics*
Deyang Yu, *China Academy of Aerospace Aerodynamics*
Tao Yang, *China Academy of Aerospace Aerodynamics*
Fengqi Lang, *China Academy of Aerospace Aerodynamics*

Session	MonC03: Identification and Estimation (II) (Chinese)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 03
Chair	Hongyan Guo, <i>Jilin Univ.</i>
Co-Chair	Xinwei Guo, <i>Shandong Univ., Weihai</i>

- 13:30-13:50 **MonC03-1** **Identification of Stochastic Systems with Colored Noise by the Model Equivalence Theory** 5646
Dandan Meng, *Jiangnan Univ.*
Feng Ding, *Jiangnan Univ.*
- 13:50-14:10 **MonC03-2** **A Decomposition Based Recursive Least Squares Identificaiton Algorithm for Input Nonlinear Systems** 5652
HuiBo Chen, *Sanmenxia Polytechnic*
Jiangnan Univ.
Yongsong Xiao, *Jiangnan Univ.*
- 14:10-14:30 **MonC03-3** **CBR-Based Grey Relational Identification Method for Technical Risks in Equipment Tests** 5657
Hongfa Ke, *Equipment Academy*
Jilu Zhu, *Equipment Academy*
Hongmei Du, *Equipment Academy*

- 14:30-14:50** **MonC03-4** **Modular Scheme for Vehicle Tire Forces and Velocities Estimation Based on Sliding Mode Observer** 5661
 Hongyan Guo, *Jilin Univ.*
 Biao Ma, *Jilin Univ.*
 Yingjun Ma, *Jilin Univ.*
 Hong Chen, *Jilin Univ.*
- 14:50:15:10** **MonC03-5** **Subspace-Based System Identification for a Hovering Tiltrotor UAV Attitude Dynamics** 5667
 Chao Chen, *NUDT*
 Lincheng Shen, *NUDT*
 Daibing Zhang, *NUDT*
 Jiyang Zhang, *NUDT*
- 15:10-15:30** **MonC03-6** **Identification of Julia sets of complex standard family** 5672
 Yongping Zhang, *Shandong Univ.*
 Xinwei Guo, *Shandong Univ., Weihai*

Session	MonC04: Decision-Making Theory and Method (II)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 04
Chair	Quande, <i>Qin Shenzhen Univ.</i>
Co-Chair	Chunyu Gao, <i>Beihang Univ.</i>

- 13:30-13:50** **MonC04-1** **Discrete Choice Model of Customer Behavior and Empirical Study** 5677
 Wei Qi, *Northeastern Univ. Henan Univ.*
 Xinggang Luo, *Northeastern Univ.*
 Xuwang Liu, *Henan Univ.*
- 13:50-14:10** **MonC04-2** **Mining Approximate Dependencies from Diesel Engine Assembling Data Using Clustering-based Rough Sets Theory** 5683
 Wenbing Chang, *Beihang Univ.*
 Chunyu Gao, *Beihang Univ.*
 Yiyong Xiao, *Beihang Univ.*
 Shenghan Zhou, *Beihang Univ.*
- 14:10-14:30** **MonC04-3** **Behavioral Multi-Criteria Decision Making with Multi-Granularity 2-Dimension Fuzzy Linguistic Variables** 5688
 Li Li, *Shenzhen Univ.*
 Fuqi Liang, *Shenzhen Univ.*
 Quande Qin, *Shenzhen Univ.*
 Xin Li, *Shenzhen Univ.*
- 14:30-14:50** **MonC04-4** **Line Differentiation Planning of Distribution Network Considering Weaknesses Assessment of Resilience** 5695
 Peng Jin, *Liaoning Provincial Power Grid Corp*
 Shuang Liu, *Northeastern Univ.*
 Kunya Guo, *Liaoning Provincial Power Grid Corp*
- 14:50:15:10** **MonC04-5** **The method to evaluate the Command and Control Effectiveness of Operational System under Uncertain Threat Situation** 5701
 Danling Zhao, *National Univ. of Defense Tech.*
 Yajie Dou, *National Univ. of Defense Tech.*
 Qingsong Zhao, *National Univ. of Defense Tech.*
 Wanchan Zhan, *The 75711 troops in Chinese People's Liberation Army*

15:10-15:30 **MonC04-6** **Rule induction of breast cancer medical diagnose based on combination of rough sets, artificial neural network and genetic algorithm** 5707
 Ziqi Wang, *Northeastern Univ.*
 Xuefeng Zhang, *Northeastern Univ.*
 Wanyu Yang, *Northeastern Univ.*

Session	MonC05: Networked Control Systems (III) (Chinese)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 05
Chair	Xiaoming Tang, Key Laboratory of Industrial Internet of Things and Networked Control Chongqing Unive. of Posts and Telecommunications
Co-Chair	Yi Yang, Nantong Univ.

13:30-13:50 **MonC05-1** **H8 fuzzy predictive control of non-linear NCS with packet loss** 5712
 Jimin Yu, *Key Laboratory of Industrial Internet of Things and Networked Control Chongqing Univ. of Posts and Telecommunications*
 Xiaofei Huang, *Key Laboratory of Industrial Internet of Things and Networked Control Chongqing Univ. of Posts and Telecommunications*
 Xiaogang Gong, *Key Laboratory of Industrial Internet of Things and Networked Control Chongqing Univ. of Posts and Telecommunications*
 Xiaoming Tang, *Key Laboratory of Industrial Internet of Things and Networked Control Chongqing Univ. of Posts and Telecommunications*

13:50-14:10 **MonC05-2** **Stability Analysis of NCS under PID Control** 5718
 Ye Zhang, *Nantong Univ.*
 Yi Yang, *Nantong Univ.*
 Haiqin Gu, *Nantong Univ.*
 Yanjuan Lu, *Nantong Univ.*

14:10-14:30 **MonC05-3** **Stability of Model-Based Networked Control Singularly Perturbed Systems with Time-varying Transmission Times** 5722
 Hongwang Yu, *Nanjing Audit Univ.*
 Baoshan Zhang, *Nanjing Audit Univ.*

14:30-14:50 **MonC05-4** **Model-Based Event-Triggered Disturbance Rejection with Integral-Based Event Conditions** 5726
 Xiaoke Wang, *Beihang Univ.*
 Hao Yu, *Beihang Univ.*
 Fei Hao, *Beihang Univ.*

14:50:15:10 **MonC05-5** **A New Approach to Sampling-Dependent Stability for Sampled-Data Systems under Aperiodic Samplings** 5732
 Jianrong Zhao, *Qufu Normal Univ.*
 Hanyong Shao, *Qufu Normal Univ.*
 Dan Zhang, *Qufu Normal Univ.*

15:10-15:30 **MonC05-6** **PD-type Open-Closed-Loop Iterative Learning Control in the Networked Control System** 5738
 Shanhai Xiong, *Beijing Univ. of Chemical Tech.*
 Zhong Zhao, *Beijing Univ. of Chemical Tech.*
 Xin Zhou, *Beijing Univ. of Chemical Tech.*

Session	MonC06: DDCLS-Model-free Adaptive Control	
Date/Time	Monday, 30 May 2016 / 13:30-15:30	
Venue	Room 06	
Chair	Shangtai Jin, <i>Beijing Jiaotong Univ.</i>	
Co-Chair	Ronghu Chi, <i>Qingdao Univ. of Science & Tech.</i>	
13:30-13:45	MonC06-1	A Novel Quadratic Programming Based Model-free Adaptive Control for I/O Constrained Nonlinear Systems 5745 Ronghu Chi, <i>Qingdao Univ. of Science & Tech.</i> Xiaohu Liu, <i>Qingdao Univ. of Science & Tech.</i> Ruikun Zhang, <i>Qingdao Univ. of Science & Tech.</i>
13:45-14:00	MonC06-2	Model Free Adaptive Predictive Control Approach for Phase Splits of Urban Traffic Network 5750 Shangtai Jin, <i>Beijing Jiaotong Univ.</i> Zhongsheng Hou, <i>Beijing Jiaotong Univ.</i> Ronghu Chi, <i>Qingdao Univ. of Science and Tech.</i> Xuhui Bu, <i>Henan Polytechnic Univ.</i>
14:00-14:15	MonC06-3	Stability Analysis of Full Form Dynamic Linearization Controller Based Data-driven Model Free Adaptive Control 5755 Yuanming Zhu, <i>East China Univ. of Science and Tech.</i> Shangtai Jin, <i>Beijing Jiaotong Univ.</i>
14:15-14:30	MonC06-4	A Novel Design of Iterative Learning Control with Pure Feedforward Structure 5761 Ronghu Chi, <i>Qingdao Univ. of Science & Tech.</i> Na Lin, <i>Qingdao Univ. of Science & Tech.</i> Zhongsheng Hou, <i>Beijing Jiaotong Univ.</i> Ruikun Zhang, <i>Qingdao Univ. of Science & Tech.</i>
14:30-14:45	MonC06-5	Initial Research on Stability Margin of Nonlinear Systems under Additive-State-Decomposition-Based Control Framework 5766 Jin-Rui Ren, <i>Beihang Univ.</i> Quan Quan, <i>Beihang Univ.</i>
14:45-15:00	MonC06-6	Model-Free adaptive Predictive Control for Non-circular Cutting Derived CNC System 5772 Junwei Dai, <i>Beijing Information Science & Tech. Univ.</i> Rongmin Cao, <i>Beijing Information Science & Tech. Univ.</i> Zhongsheng Hou, <i>Beijing Jiaotong Univ.</i> Yunjie Zhao, <i>Beijing Information Science & Tech. Univ.</i>
15:00-15:15	MonC06-7	Boost Converter Optimal Control Based on MFAC and FPSOA under Model Mismatch 5778 Zhanjun Huang, <i>Northeastern Univ.</i> Zhanshan Wang, <i>Northeastern Univ.</i> Cui Lei, <i>Nanjing Research Inst. on Simulation Tech.</i> Shijie Yan, <i>Northeastern Univ.</i> Huaguang Zhang, <i>Northeastern Univ.</i>
15:15-15:30	MonC06-8	A New Design Method of a Cascade Iterative Learning Control (ILC) for the Batch/Repetitive Processes 5784 Jia Shi, <i>Xiamen Univ.</i> Yi Yang, <i>Kunda Mould (Shen Zhen) Co.Ltd.</i>

Session	MonC07: DDCLS-Process Control
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 07
Chair	
Co-Chair	

- 13:45-14:00 MonC07-2 Robust output feedback based iterative learning control for batch processes with input delay subject to time-varying uncertainties** 5790
Shoulin Hao, *Dalian University of Tech.*
Tao Liu, *Dalian University of Tech.*
Wei Wang, *Dalian University of Tech.*
- 14:00-14:15 MonC07-3 Distributed Cooperative Learning Over Networks via Fuzzy Logic Systems** 5796
Pengfei Ren, *Xidian Univ.*
Weisheng Chen, *Xidian Univ.*
- 14:30-14:45 MonC07-5 An integrated Model Predictive Control Strategy for Batch Processes** 5802
Li Jia, *Shanghai Univ.*
Chao Han, *Shanghai Univ.*
Min-Sen Chiu, *National Univ. of Singapore*
- 14:45-15:00 MonC07-6 Output Tracking Combing Output Redefinition and Non-causal Stable Inversion for Non-minimum Systems** 5808
Xuehua Zhang, *Zhejiang Univ.*
Shan Liu, *Zhejiang Univ.*
- 15:00-15:15 MonC07-7 Gradient-based step response identification of low-order model for time delay systems** 5814
Rui Yan, *Dalian Univ. of Tech.*
Fengwei Chen, *Dalian Univ. of Tech.*
Shijian Dong, *Dalian Univ. of Tech.*
Tao Liu, *Dalian Univ. of Tech.*
- 15:15-15:30 MonC07-8 All Parameters Adaptive Fractional Order PI/PD Type Iterative Learning Control** 5820
Di Pan, *Shandong Univ.*
Yan Li, *Shandong Univ.*

Session	MonC08: DDCLS-Process Monitoring
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 08
Chair	
Co-Chair	

- 13:30-13:45 MonC08-1 Distributed Gaussian Mixture Model for Monitoring Multimode Plant-wide Process** 5826
Jinlin Zhu, *Zhejiang Univ.*
Zhiqiang Ge, *Zhejiang Univ.*
Zhihuan Song, *Zhejiang Univ.*

- 13:45-14:00** **MonC08-2** **Adaptive monitoring for transition process using dynamic mutual information similarity analysis** 5832
Yuchen He, *Zhejiang Univ.*
Zhiqiang Ge, *Zhejiang Univ.*
Zihuan Song, *Zhejiang Univ.*
- 14:00-14:15** **MonC08-3** **Nonlinear Process Monitoring Using Improved Kernel Principal Component Analysis** 5838
Chihang Wei, *Zhejiang Univ.*
Junhui Chen, *Chung-Yuan Christian Univ.*
Zihuan Song, *Zhejiang Univ.*
- 14:15-14:30** **MonC08-4** **SOM-based Visualization Monitoring and Fault Diagnosis for Chemical Process** 5844
Bin Zhong, *Beijing Univ. of Chemical Tech.*
Jing Wang, *Beijing Univ. of Chemical Tech.*
Haiyan Wu, *Beijing Univ. of Chemical Tech.*
Jinglin Zhou, *Beijing Univ. of Chemical Tech.*
Qibing Jin, *Beijing Univ. of Chemical Tech.*
- 14:45-15:00** **MonC08-6** **Adaptive HJI Sliding Mode Control of Three Dimensional Overhead Cranes** 5850
Shengzeng Zhang, *Zhejiang Univ. of Tech.*
Xiongxiang He, *Zhejiang Univ. of Tech.*
- 15:00-15:15** **MonC08-7** **Design and Analysis of Data-driven Intelligent Control Systems for Deicing and Snow-Melting of Extremely Cold Areas** 5856
Darong Huang, *Chongqing Jiaotong Univ.*
Dong Zhao, *Chongqing Jiaotong Univ.*
Xiaoyan Chu, *Central South Univ.*
Huadong Wu, *Chongqing Wisdom. Q Heating Energy Equipment Company*
Changsha Chen, *Chongqing Jiaotong Univ.*
- 15:15-15:30** **MonC08-8** **Design of PID and ADRC Based Quadrotor Helicopter Control System** 5860
Chenlu Wang, *Nankai Univ.*
Zengqiang Chen, *Nankai Univ. Civil Aviation Univ.*
Qinglin Sun, *Nankai Univ.*
Qing Zhang, *Civil Aviation Univ.*

Session	MonC09: Fuzzy Systems (I)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 09
Chair	Chuntao Shao, Harbin Inst. of Tech.
Co-Chair	Guolian Hou, North China electric power Univ.

- 13:30-13:50** **MonC09-1** **H8 Fuzzy Output Tracking Control of an Autopilot With Actuator Dynamics** 5866
Ruoming Li, *Harbin Inst. of Tech.*
Chuntao Shao, *Harbin Inst. of Tech.*
Naizhang Feng, *Harbin Inst. of Tech.*

- 13:50-14:10 **MonC09-2** **Variable universe fuzzy controller used in MPPT based on DFIG wind energy conversion system** 5871
Guolian Hou, *North China electric power Univ.*
Zhuo Jiang, *North China electric power Univ.*
Yu Yang, *North China electric power Univ.*
Jianhua Zhang, *North China electric power Univ.*
- 14:10-14:30 **MonC09-3** **Reliable passive control for a class of T-S fuzzy systems with time-delay** 5876
Hao Yan, *Shenyang Jianzhu Univ.*
Fuzhong Wang, *Shenyang Jianzhu Univ.*
- 14:30-14:50 **MonC09-4** **H-infinity Filtering for Gene Regulatory Networks With Time-Varying Delay Based on the T-S Fuzzy Model** 5882
Liangliang Zhang, *Univ. of Electronic Science and Tech. of China*
Hongbin Zhang, *Univ. of Electronic Science and Tech. of China*
- 14:50-15:10 **MonC09-5** **Finite-time Dissipative Control for a Kind of Nonlinear System Based on T-S Fuzzy Model** 5888
Enliang Zhao, *Shenyang Jianzhu Univ.*
Baoyan Zhu, *Shenyang Jianzhu Univ.*
Liha Sun, *Shenyang Jianzhu Univ.*
Changchun Sun, *Shenyang Jianzhu Univ.*
Chunling Chang, *Shenyang Jianzhu Univ.*
- 15:10-15:30 **MonC09-6** **Optimization Control Strategy of Boiler Water Level Based on Fuzzy PID** 5893
Lian Li Tianjin, *Univ. of Tech.*
Wenkuan Ding, *Tianjin Univ. of Tech.*

Session	MonC10: Neural Networks (IV) (Chinese)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 10
Chair	He Huang, <i>Soochow Univ.</i>
Co-Chair	Haoguang Chen, <i>Guangdong Univ. of Tech</i>

- 13:30-13:50 **MonC10-1** **Robust Finite-Time Stability of Uncertain Static Neural Networks With Markovian Jumping Parameters and Mixed Delays** 5897
He Huang, *Soochow Univ.*
- 13:50-14:10 **MonC10-2** **Extended dissipative analysis of delayed stochastic Markovian jump neural networks** 5903
Guoliang Chen, *Liaocheng Univ.*
Jianwei Xia, *Liaocheng Univ.*
Hui Gao, *Liaocheng Univ.*
- 14:10-14:30 **MonC10-3** **Modeling and Detection of Spike-type Stall in Axial Compressors via Deterministic Learning Theory** 5909
Wenjie Si, *South China Univ. of Tech.*
Feifei Yang, *South China Univ. of Tech.*
Wei Zeng, *Longyan Univ.*
Qian Wang, *South China Univ. of Tech.*
- 14:30-14:50 **MonC10-4** **Adaptive Control Design for a Class of Nonlinear Systems Based on BP Neural Networks with Scalers and Saturators** 5915
Haoguang Chen, *Guangdong Univ. of Tech.*
Yinhe Wang, *Guangdong Univ. of Tech.*
Pin Zhao, *Xi'an Univ. of Architecture and Tech.*

- 14:50-15:10 **MonC10-5** **Hopf Bifurcation in Fractional-Order Recurrent Neural Networks** 5921
Lingzhi Zhao, *Southeast Univ.*
Nanjing Xiaozhuang Univ.
Jinde Cao, *Southeast Univ.*
Min Xiao, *Nanjing Univ. of Posts and Telecommunications*
- 17:10-17:30 **MonC10-6** **Synchronization of Coupled Neural Networks With Reaction-Diffusion Terms and Switching Topology** 5927
Beibei Xu, *Tianjin Polytechnic Univ.*
Yanli Huang, *Tianjin Polytechnic Univ.*
Jinliang Wang, *Tianjin Polytechnic Univ.*
Puchong Wei, *Tianjin Polytechnic Univ.*
Shunyan Ren, *Tianjin Polytechnic Univ.*

Session	MonC11: Fault Diagnosis and Fault-Tolerant Control (IV) (Chinese)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 11
Chair	<i>Xueqian Wang, Tsinghua Univ.</i>
Co-Chair	<i>Zhifeng Gao, Nanjing Univ. of Posts and Telecommunications</i>

- 13:30-13:50 **MonC11-1** **Hybrid Model based Fault Tolerant Control for Quadrotor Helicopter with Structural Damage** 5933
Yue Wang, *The 28th Research Inst. of China Electronics Technology Group Corporation*
Jun Pan, *The 28th Research Inst. of China Electronics Technology Group Corporation*
Bin Jiang, *Nanjing Univ. of Aeronautics and Astronautics*
Ningyun Lu, *Nanjing Univ. of Aeronautics and Astronautics*
- 13:50-14:10 **MonC11-2** **Fault Tolerant Control Design for The Attitude Control Systems of Flexible Spacecraft with Sensor Faults** 5939
Bing Han, *Nanjing Univ. of Posts and Telecommunications*
Zhifeng Gao, *Nanjing Univ. of Posts and Telecommunications*
Yufei Xu, *Shanghai Inst. of Satellite Engineering*
Jing Zhao, *Nanjing Univ. of Posts and Telecommunications*
Teng Cao, *Nanjing Univ. of Posts and Telecommunications*
- 14:10-14:30 **MonC11-3** **Decentralized fault diagnosis and fault tolerant control for a class of interconnected nonlinear systems** 5945
Shuai Shao, *Nanjing Univ. of Aeronautics and Astronautics*
Hao Yang, *Nanjing Univ. of Aeronautics and Astronautics*
Bin Jiang, *Nanjing Univ. of Aeronautics and Astronautics*
Wenjing Ren, *Nanjing Univ. of Aeronautics and Astronautics*
- 14:30-14:50 **MonC11-4** **Passive Fault Tolerant Control Approach for Hypersonic Vehicle with Actuator Loss of Effectiveness Faults** 5951
Teng Cao, *Nanjing Univ. of Posts and Telecommunications*
Zhifeng Gao, *Nanjing Univ. of Posts and Telecommunications*
Moshu Qian, *Nanjing Univ. of Aeronautics and Astronautics*
Jing Zhao, *Nanjing Univ. of Posts and Telecommunications*
- 14:50-15:10 **MonC11-5** **A Frequency Domain Feature Based Cascade Classifier and Its Application to Fault Diagnosis** 5957
Liangmin Li, *Tsinghua Univ.*
Weining Lu, *Tsinghua Univ.*
Xueqian Wang, *Tsinghua Univ.*
Zhiheng Li, *Tsinghua Univ.*

Session	MonC12: Robot Control (III)		
Date/Time	Monday, 30 May 2016 / 13:30-15:30		
Venue	Room 12		
Chair	Tengfei Liu, <i>Northeastern Univ.</i>		
Co-Chair	Xiuxia Zhang, <i>Beifang Univ. of Nationalities</i> <i>HeFei Univ. of Tech.</i>		
13:30-13:50	MonC12-1	<i>Robust Adaptive Attitude Control of Quadrotors with Load Uncertainties</i>	5962
		Zhanxiu Wang, <i>Northeastern Univ.</i> Shusen Liang, <i>Northeastern Univ.</i> Tengfei Liu, <i>Northeastern Univ.</i> Lei Zhang, <i>Northeastern Univ.</i>	
13:50-14:10	MonC12-2	<i>The Robot Motion Trajectory Algorithm Research Based On B-Spline and new Velocity Planning</i>	5968
		Buhai Shi, <i>South China Univ. of Tech.</i> Jingpeng He, <i>South China Univ. of Tech.</i>	
14:10-14:30	MonC12-3	<i>Research on Q-ELM Algorithm in Robot Path Planning</i>	5975
		Hongge Ren, <i>North China Univ. of Science and Tech.</i> Rui Yin, <i>North China Univ. of Science and Tech.</i> Fujin Li, <i>North China Univ. of Science and Tech.</i> Wei Wang, <i>North China Univ. of Science and Tech.</i> Meijie Huo, <i>North China Univ. of Science and Tech.</i>	
14:30-14:50	MonC12-4	<i>The Design of Underground Crop digging Robot and Its Control Method</i>	5980
		Xiuxia Zhang, <i>Beifang Univ. of Nationalities</i> <i>HeFei Univ. of Tech.</i> Qianyu Ji, <i>Beifang Univ. of Nationalities</i> Shuyi Wei, <i>Beifang Univ. of Nationalities</i> Lingchun Zhang, <i>Beifang Univ. of Nationalities</i> Ziwei Zhao, <i>HeFei Univ. of Tech.</i>	
14:50:15:10	MonC12-5	<i>Solar photovoltaic array surface cleaning device and control means</i>	5982
		Xiuxia Zhang, <i>HeFei Univ. of Tech.</i> <i>Beifang Univ. of Nationalities</i> Rong Fan, <i>HeFei Univ. of Tech.</i> <i>Beifang Univ. of Nationalities</i> Wei Li, <i>Beifang Univ. of Nationalities</i> Shuyi Wei, <i>Beifang Univ. of Nationalities</i> Guannan Du, <i>Beifang Univ. of Nationalities</i> Lingchun Zhang, <i>Beifang Univ. of Nationalities</i> Haicheng Wei, <i>Beifang Univ. of Nationalities</i>	

15:10-15:30 **MonC12-6 Study on the Design and Control System for Wolfberry Harvesting Robot** 5984
 Xiuxia Zhang, *Beifang Univ. of Nationalities*
HeFei Univ. of Tech.
 Ziwei Zhao, *Beifang Univ. of Nationalities*
HeFei Univ. of Tech.
 ShuyiWei, *Beifang Univ. of Nationalities*
 Guannan Du, *Beifang Univ. of Nationalities*
 Qianyu Ji, *Beifang Univ. of Nationalities*
 Lingchun Zhang, *Beifang Univ. of Nationalities*
 Haicheng Wei, *Beifang Univ. of Nationalities*

Session	MonC13: Supply Chain and Logistics Management (Chinese)
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 13
Chair	Yiming Chen, <i>Tsinghua Univ.</i>
Co-Chair	Guohua Sun, <i>Shandong Univ. of Finance and Economics</i>

13:30-13:50 **MonC13-1 The Newsvendor Model with Futures Trading** 5986
 Yiming Chen, *Tsinghua Univ.*
 Shiji Song, *Tsinghua Univ.*
 Yuli Zhang, *Tsinghua Univ.*

13:50-14:10 **MonC13-2 Research on the Profit Model of the Community Service Center Respecting for Sales and Recycling** 5991
 Heng Liu, *Univ. of Chinese Acad. of Sciences*
 Minhong Zhang, *Univ. of Chinese Acad. of Sciences*

14:10-14:30 **MonC13-3 Research on Decision-making of Low-carbon Technology in Agricultural Product Supply Chain** 5997
 Guohua Sun, *Shandong Univ. of Finance and Economics*

14:30-14:50 **MonC13-4 Spot Market Coping with Supply Disruption under Supply Chains Competition** 6003
 Fengmin Yao, *Harbin Univ. of Science and Tech.*
 Shan Liu, *Harbin Univ. of Science and Tech.*
 Wenhao Ni, *Harbin Univ. of Science and Tech.*

14:50:15:10 **MonC13-5 A Prediction Model of Emergency Material Demand based on Case-Based Reasoning** 6009
 Xiaobo Wang, *Heilongjiang Univ.*
 Ping Sun, *Heilongjiang Univ.*
 Yan Yang, *Heilongjiang Univ.*
 Xiaochun Yang, *Heilongjiang Univ.*

15:10-15:30 **MonC13-6 Research of E-commerce Logistics Based on the Network Information Era** 6014
 Song Zhang, *Northeastern Univ.*
 Hongfeng Wang, *Northeastern Univ.*
 Min Huang, *Northeastern Univ.*

Session	MonC14: Renewable Energies	
Date/Time	Monday, 30 May 2016 / 13:30-15:30	
Venue	Room 14	
Chair	Aimin An, Lanzhou Univ. of Tech.	
Co-Chair	Rui Zhao, Univ. of Science and Tech. Beijing	
13:30-13:50	MonC14-1	Generalized Wake Interaction Models and Optimal Control in Wind Farms 6020 Lin Pan, <i>Univ. of Luxembourg</i> <i>Wuhan Polytechnic Univ.</i> Holger Voos, <i>Univ. of Luxembourg</i> Yongping Pan, <i>National Univ. of Singapore</i> Mohamed Darouach, <i>Univ. of Lorraine</i>
13:50-14:10	MonC14-2	The Study of Wind Power Predict Model Based on Wavelet Transform and Elman Neural Network 6026 Rui Zhao, <i>Univ. of Science and Tech. Beijing</i>
14:10-14:30	MonC14-3	Benefit Analysis and Evaluation of Distributed Generation in Distribution Network under Active Management 6031 Aimin An, <i>Lanzhou Univ. of Tech.</i> Borui Zheng, <i>Lanzhou Univ. of Tech.</i> Haochen Zheng, <i>Lanzhou Univ. of Tech.</i> Chendong Zheng, <i>Lanzhou Univ. of Tech.</i> Peidong Du, <i>Inst. of Electric Power Scientific Research, State Grid of Gansu Province</i>
14:30-14:50	MonC14-4	Research and simulation of circulation current control for grid tied inverters connected in parallel 6036 Li Liu, <i>Wuhan Univ. of Tech.</i> Zhiqiang Liu, <i>Wuhan Univ. of Tech.</i> Qihong Chen, <i>Wuhan Univ. of Tech.</i>
14:50-15:10	MonC14-5	A New Method to Judge Clouds Covering Based on Particle Filter Shuiliang Zhou Nanjing Normal Univ. 6042 Weijie Ding, <i>Nanjing Normal Univ.</i> Xuemei Zhu, <i>Nanjing Normal Univ.</i> Jun Tian, <i>Zhejiang Supcon Solar Tech. Co., Ltd.</i>
15:10-15:30	MonC14-6	Research on Industrial Park of Low Carbon Energy Innovation in China 6048 Xuguang Zhao, <i>Tianjin Univ. of Tech.</i> Conggong An, <i>Tianjin Univ. of Tech.</i> Xuechan Li, <i>Tianjin Univ. of Tech.</i>

Session	MonCIS: Interactive Session
Date/Time	Monday, 30 May 2016 / 13:30-15:30
Venue	Room 15

- MonCIS-01** **Analysis of Recent Secure Scan Test Techniques** 6051
Xing Cheng, *Univ. of Science and Tech. Liaoning*
Sungju Park, *Hanyang Univ.*
- MonCIS-02** **A Pedestrian Detection Method based on PSO and Multimodal Function** 6054
Weixing Li, *Beijing Inst. of Tech.*
Weliang Ma, *Beijing Inst. of Tech.*
Bing Quan, *Beijing Inst. of Tech.*
Mengxin Pei, *Beijing Inst. of Tech.*
Xiaoxue Feng, *Beijing Inst. of Tech.*
- MonCIS-03** **Research on Moving Object Extraction Method in Intelligent Traffic Video** 6059
Yue Li, *Kunming Univ. of Science and Tech.*
Jiande Wu, *Kunming Univ. of Science and Tech.*
Engineering Research Center for Mineral Pipeline Transportation of Yunnan Province
Xiaodong Wang, *Engineering Research Center for Mineral Pipeline Transportation of Yunnan Province*
- MonCIS-04** **Research on Subway Passenger Flow Combination Prediction Model Based on RBF Neural Networks and LSSVM** 6064
Pu Wang, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community, Ministry of Education
Beijing Laboratory for Urban Mass Transit
Beijing Key Lab. of Computational Intelligence and Intelligent System
Cuixia Wu, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community, Ministry of Education
Beijing Laboratory for Urban Mass Transit
Beijing Key Lab. of Computational Intelligence and Intelligent System
Xuejin Gao, *Beijing Univ. of Tech.*
Engineering Research Center of Digital Community, Ministry of Education
Beijing Laboratory for Urban Mass Transit
Beijing Key Lab. of Computational Intelligence and Intelligent System
- MonCIS-05** **Design and Simulation of hierarchical control algorithm for Electric Active Stabilizer Bar System** 6069
Zhenxing Kong, *Nanjing Univ. of Science and Tech.*
Dawei Pi, *Nanjing Univ. of Science and Tech.*
Shan Chen, *Nanjing Univ. of Science and Tech.*
Hongliang Wang, *Nanjing Univ. of Science and Tech.*
Xianhui Wang, *Nanjing Univ. of Science and Tech.*
- MonCIS-06** **A Technical Solution to Improve the Red Cab for Touring in Chiang Mai: Chinese Tourists' Perspective** 6075
Miao Liu, *Beifang Univ. of Nationalities*
Noppon Choosri, *Chiang Mai Univ.*
- MonCIS-07** **A Novel Robust Method for Camera Auto-Calibration in Transportation Surveillance** 6081
Xiaohan Li, *Tsinghua Univ.*
Yu Cheng, *IBM T.J. Watson Research Center*
Tao Zhang, *Tsinghua Univ.*

- MonCIS-08** **Research of Optimal Parameters in MOSFET Structure based on Wide Band Gap Semiconductor Material GaN** 6086
Hongyuan Shen, *Northeastern Univ*
Jie Yang, *Northeastern Univ*
Zhenyu Yuan, *Northeastern Univ*
Ning Ye, *Northeastern Univ*
Jia Di, *Univ. of Arkansas*
Jingyan Mo, *Shanghai Univ.*
- MonCIS-09** **Key Technology of Affecting the Quality and Cost of Solid Sealed Pole** 6090
Hongkui Zhang, *CCTEG Shenyang Research Inst.*
Fucheng Lang, *Electric Power Research Inst. of State Grid Liaoning Electric Power Co., Ltd. High Voltage and Large Current Lab. of State Grid Corporation*
- MonCIS-10** **Optimal Dispatching Strategies of Active Power for DFIG Wind Farm Based On GA Algorithm** 6094
Xiaojie Zhang, *Beijing Jiaotong Univ.*
Wenchuan Cai, *Beijing Jiaotong Univ.*
Zhongxue Gan, *ENN Group Company, Ltd.*
- MonCIS-11** **The Fuzzy Droop Control Design for Storage System of DC Microgrid** 6100
Yang Mi, *Tianjin Univ.*
Shanghai Univ. of Electric Power
Yanwei Wu, *Shanghai Univ. of Electric Power*
Chunyan Bi, *Rizhao xingye real estate development Co Ltd*
Yinzhu Zhu, *Shanghai Univ. of Electric Power*
Shengyi Wang, *Shanghai Univ. of Electric Power*
Han Zhang, *State Grid Shanghai Shinan Electric Power Supply Company*
Yuanwei Jing, *Northeastern Univ.*
- MonCIS-12** **Study on Smooth Switching of Microgrid Operation States Using Sliding Mode Control** 6105
Yang Mi, *Tianjin Univ.*
Shanghai Univ. of Electric Power
Hongliang Xia, *Shanghai Univ. of Electric Power*
Chunyan Bi, *Rizhao xingye real estate development Co Ltd*
Shengyi Wang, *Shanghai Univ. of Electric Power*
Han Zhang, *State Grid Shanghai Shinan Electric Power Supply Company*
Yuanwei Jing, *Northeastern Univ.*
- MonCIS-13** **Modeling of Security and Stability Control for Power Systems Using Causal Analysis** 6109
Youping Fan, *Wuhan Univ.*
Lihui Wu, *Wuhan Univ.*
Zhicheng Nie, *Sanxia Univ.*
Songkai Liu, *Wuhan Univ.*
- MonCIS-14** **Optimal Power Distribution Method for Microgrids Integrated System** 6115
Xiaobo Zhang *Xi'an Jiaotong Univ.*
Baohui Zhang, *Xi'an Jiaotong Univ.*
- MonCIS-15** **Research on Control Technology for Grid-side Converter of Direct-drive Wind Power Generation System** 6122
Yiping Huang, *Beijing Univ. of Civil Engineering and Architecture*
Xiaoxuan Ma, *Beijing Univ. of Civil Engineering and Architecture*
Xiaohui Wang, *Beijing Univ. of Civil Engineering and Architecture*
- MonCIS-16** **Smart Grid Supports the Future Intelligent City Development** 6128
Miao Li, *Training Center of Jilin Province, State Grid Corporation of China*
Hongguang Xiao, *Training Center of Jilin Province, State Grid Corporation of China*
Wei Gao, *Training Center of Jilin Province, State Grid Corporation of China*
Lijuan Li, *Training Center of Jilin Province, State Grid Corporation of China*

- MonCIS-17** **Research on self healing technology of smart distribution network based on multi Agent system** 6132
Xiu Ji, *Jilin power distribution automation equipment industry public Tech. Research and Development Center*
Jian Liu, *Jilin Province Economic Management Cadre Inst.*
Xuting Yan, *Jilin power distribution automation equipment industry public Tech. Research and Development Center*
Hui Wang, *Jilin power distribution automation equipment industry public Tech. Research and Development Center*
- MonCIS-18** **Flow Analysis and Calculation of AC/DC Power System Based on MATLAB and PSASP** 6138
Linlin Li, *Changchun Inst. of Tech. Distribution Automation Engineering Research Center*
Shuntao Xing, *Changchun Inst. of Tech.*
Hang Li, *Huaneng Changchun Thermal Power Plant*
Xiu Ji, *Changchun Inst. of Tech. Distribution Automation Engineering Research Center*
- MonCIS-19** **Simulation of Equal Incremental Rate Continuous Time-varying Optimal Microgrid Power Distribution Method** 6144
Xiaobo Zhang, *Xi'an Jiaotong Univ.*
Baohui Zhang, *Xi'an Jiaotong Univ.*
- MonCIS-20** **The Innovation Research of Low Carbon Building Energy** 6150
Xuechan Li, *Tianjin Univ. of Tech.*
Xuguang Zhao, *Tianjin Univ. of Tech.*
Jing Wang, *Tianjin Univ. of Tech.*
- MonCIS-21** **Effect of various Nano-SiC films onthe photoelectric conversion efficiency of solar cells** 6153
Xiuxia Zhang, *Beifang Univ. of nationalities HeFei Univ.*
Guannan Du, *Beifang Univ. of nationalities*
Shuyi Wei, *Beifang Univ. of nationalities*
Qianyu Ji, *Beifang Univ. of nationalities*
Rong Fan, *Beifang Univ. of nationalities*
Haicheng Wei, *Beifang Univ. of nationalities*
- MonCIS-22** **Performance Test and Analysis of a PV Power Plant in Hami** 6155
Feifei Jiang, *Inst. of Electrical Engineering, Chinese Acad. of Sciences*
Xinjing Zou, *Inst. of Electrical Engineering, Chinese Acad. of Sciences*
Haitao Liu, *Inst. of Electrical Engineering, Chinese Acad. of Sciences*
- MonCIS-23** **The Research of Control Strategy for Household Micro Power Grid Inverter** 6159
Siping Tang, *Enshi Power Supply Bureau in Hubei Electric Power Company of China State Grid Corporation*
Jun Zhang, *Enshi Power Supply Bureau in Hubei Electric Power Company of China State Grid Corporation*
Qing Ai, *Hubei Univ. for nationalities*
Shaowu Li, *Northeastern Univ.*
Kunyi Chen, *Hubei Univ. for nationalities*
Jianwei Zhong, *Hubei Univ. for nationalities*
- MonCIS-24** **Active Disturbance Rejection Control for Stand-Alone Doubly Fed Induction Generator** 6164
Lei Guo, *Dalian Maritime Univ.*
Dan Wang, *Dalian Maritime Univ.*
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Feifei Jiang, *Inst. of Electrical Engineering, Chinese Acad. of Sciences*
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Xuyan Wang, *Tianjin Univ. of Tech.*
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Yanjuan Wu, *Tianjin Univ. of Tech.*
Jinliang Yin, *Tianjin Univ. of Tech.*
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Aimin Zhang, *Xi'an Jiaotong Univ.*
Shidong Song, *Xi'an City Planning & Design Inst.*
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Jianhua Wang, *Xi'an Jiaotong Univ.*
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Na Yan, *State Grid Shaanxi Economic Research Inst.*
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- MonCIS-40** **Dynamic Programming Approach for Multi-Bandwidth Offset Optimization** 6244
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- MonCIS-42** **Road Network Generation From Low Frequency GPS Trajectory data** 6254
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- MonCIS-43** **Moving Object Detection for Video Surveillance Based on Improved ViBe** 6259
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Daqing Zhang, *Univ. of Science and Tech. Liaoning*
Baoyan Zhu, *Shenyang Jianzhu Univ.*
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- MonCIS-50** **VAV Air-conditioning System Control of Underground Defensive Project Based on Fuzzy Predictive PID Algorithm** 6286
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- MonCIS-53** **Ancient Building Electrical Fire Early Warning System Based on JenNet Wireless Technology** 6301
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- MonCIS-54** **A Routing Decision Algorithm Based on the Trunk Link for Smart City** 6305
Hong Huo, *Shenyang Inst. of Computing Tech., Chinese Acad. of Sciences*
Baoming Pu, *Shenyang Inst. of Computing Tech., Chinese Acad. of Sciences*
Northeastern Univ.
Dongsheng Yang, *Shenyang Inst. of Computing Tech., Chinese Acad. of Sciences*
Xiangze Li, *Northeastern Univ.*
- MonCIS-55** **The High Pressure Water Mist Fire Extinguishing System Based on Anylogic Modeling** 6311
Fei Bao, *Beijing Univ. of Civil Engineering and Architecture*
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Sumin Lei, *Beijing Gas Group Ltd.*
- MonCIS-58** **Designation of Laser Rapid Prototyping Machine Based on ACS Motion Controller** 6328
Eryu Zhang, *Beijing Univ. of Civil Engineering and Architecture*
Beijing Key Laboratory of Robot Bionics and Function Research
Xingang Miao, *Beijing Univ. of Civil Engineering and Architecture*
Beijing Key Laboratory of Robot Bionics and Function Research
- MonCIS-59** **On Model Parameters Identification and Fuzzy Self-adaptive Course Control for USV** 6332
Yunsheng Fan, *Dalian Maritime Univ.*
Xiaojie Sun, *Dalian Maritime Univ.*
Guofeng Wang, *Dalian Maritime Univ.*
- MonCIS-60** **An Intelligent Visual Line Tracking System Via Quadrotor Platform** 6339
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Jian Wang, *Hangzhou Dianzi Univ.*
Zhixun Li, *Australian National Univ.*
Gao Li, *Hangzhou Dianzi Univ.*
Fengmin Yu, *Hangzhou Dianzi Univ.*
- MonCIS-61** **Disturbance Observer Based Backstepping Sliding Mode Dynamic Positioning Control for UUV under Wave Disturbance** 6345
Jian Xu, *Harbin Engineering Univ.*
Xiaofeng Kang, *Harbin Engineering Univ.*
Xiaoyuan Chen, *Harbin Engineering Univ.*
- MonCIS-62** **Research on the Algorithm of Cooperative Localization of Multiple Unmanned Vehicles** 6350
Shiyan Sun, *Naval Univ. of Engineering*
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Wenkai Xiao, *Naval Univ. of Engineering*

- MonCIS-63** **Autonomous Optical Navigation Approach Aided by Radio Beacon for Deep Space Spacecraft** 6354
 Yan Jing, *Beijing Inst. of Tech.*
Key Laboratory of Autonomous Navigation and Control for Deep Space Exploration, Ministry of Industry and Information Tech.
Key Laboratory of Dynamics and Control of Flight Vehicle, Ministry of Education
 Shengying Zhu, *Beijing Inst. of Tech.*
Key Laboratory of Autonomous Navigation and Control for Deep Space Exploration, Ministry of Industry and Information Tech.
Key Laboratory of Dynamics and Control of Flight Vehicle, Ministry of Education
 Lina Wang, *National Key Laboratory of Science and Tech. on Aerospace Intelligence Control*
- MonCIS-64** **A Quadrotor-like Unmanned Underwater Vehicle** 6360
 Jingwei Bian, *Zhejiang Univ.*
 Ji Xiang, *Zhejiang Univ.*
 Huilin Liang, *Zhejiang Univ.*
- MonCIS-65** **A 6D-ICP approach for 3D reconstruction and motion estimate of unknown and non-cooperative target** 6366
 Ke Wang, *Harbin Inst. of Tech.*
 Hong Liu, *Harbin Inst. of Tech.*
 Bensheng Guo, *Harbin Inst. of Tech.*
 Yunfeng Gao, *Harbin Inst. of Tech.*
- MonCIS-66** **Non-Cooperative Target Tracking Methods Research for Close-range Operation of Intelligent Space Robots** 6371
 Ke Wang, *Harbin Inst. of Tech.*
 Hong Liu, *Harbin Inst. of Tech.*
 Bensheng Guo, *Harbin Inst. of Tech.*
 Yunfeng Gao, *Harbin Inst. of Tech.*
 Ruifeng Li, *Harbin Inst. of Tech.*
- MonCIS-67** **Three-Dimensional Path Planning of Unmanned Aerial Vehicle under Complicated Environment** 6377
 Jihua Tao, *HangZhou DianZi Univ.*
 Yinqiu Wang, *HangZhou DianZi Univ.*
 Huanhuan Yang, *HangZhou DianZi Univ.*
 Li Gao, *HangZhou DianZi Univ.*

Session	MonD01: Optimal Control and Optimization (V) (Chinese)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 01
Chair	Yuanli Cai, Xi'an Jiao Tong Univ.
Co-Chair	Liuyu Huang, Xidian Univ.

15:50-16:10	MonD01-1	PID control parameters optimize based on an immune fruit fly optimization algorithm 6383 Juan Song, <i>Ningxia Univ.</i> Huan Pan, <i>Ningxia Univ.</i>
16:10-16:30	MonD01-2	Optimal Control of UAV Elastic Formation based on Legendre Pseudospectral Method 6389 Guangyan Xu, <i>Shenyang Aerospace Univ.</i> Dan Zhao, <i>Shenyang Aerospace Univ.</i> Peichong Liao, <i>Shenyang Aerospace Univ.</i> Guangpu Shi, <i>Shenyang Aerospace Univ.</i>
16:30-16:50	MonD01-3	A Genetic Algorithm for Solving Multistage Graph Problem 6395 Jinqing Tian, <i>North University for Nationalities</i> Xiaofeng Wang, <i>North University for Nationalities</i> Hongsheng Ding, <i>North University for Nationalities</i>
16:50-17:10	MonD01-4	On the Right Spread of Quaternion Circulatory Linear Systems and Its Calculation Method 6399 Liuyu Huang, <i>Xidian Univ.</i>
17:10-17:30	MonD01-5	State Space Description Based Predictive Control for Normal Temperature Continuous Transonic Wind Tunnel 6404 Yaohua Tang, <i>State Grid Henan Electric Power Research Inst.</i> Hongxia Li, <i>Xi'an Jiao Tong Univ.</i> Yuanli Cai, <i>Xi'an Jiao Tong Univ.</i>
17:30-17:50	MonD01-6	Optimal Inventory Control of Spare Parts Based on Storage Availability 6409 Liang Zhou, <i>Naval University of Engineering</i> Qingmin Li, <i>Naval University of Engineering</i> Renyang Liu, <i>Naval University of Engineering</i>

Session	MonD02: Motion Control (I)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 02
Chair	Zhenghao Jin, Beihang Univ.
Co-Chair	Jianqin Wang, Shanghai Jiao Tong Univ.

15:50-16:10	MonD02-1	Relative Motion Modeling and Control for Autonomus UAV Carrier Landing 6415 Ming Zhu, <i>Beihang Univ.</i> Zhenghao Jin, <i>Beihang Univ.</i> Zewei Zheng, <i>Beihang Univ.</i> Liang Sun, <i>Beihang Univ.</i>
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- 16:10-16:30 **MonD02-2** **Research on Rotor Field-Oriented Vector Control of PMSM for Aircraft Electro-Mechanical Actuator** 6422
 Qi Liu, *Northwestern Polytechnical Univ.*
 Yong Zhou, *Northwestern Polytechnical Univ.*
 Chao Zhang, *Northwestern Polytechnical Univ.*
 Man Wang, *Northwestern Polytechnical Univ.*
- 16:30-16:50 **MonD02-3** **The design of BLDCM controller for EMA based on fuzzy PID control** 6428
 Yong Zhou, *Northwestern Polytechnical Univ.*
 Man Wang, *Northwestern Polytechnical Univ.*
 Qi Liu, *Northwestern Polytechnical Univ.*
 Chao Zhang, *Northwestern Polytechnical Univ.*
- 16:50-17:10 **MonD02-4** **Course Control of USV Based on Fuzzy Adaptive Guide Control** 6433
 Dongdong Mu, *Dalian Maritime Univ.*
 Yongsheng Zhao, *Dalian Maritime Univ.*
 Guofeng Wang, *Dalian Maritime Univ.*
 Yunsheng Fan, *Dalian Maritime Univ.*
 Yiming Bai, *Dalian Maritime Univ.*
- 17:10-17:30 **MonD02-5** **Flux weakening speed control of non-salient pole Permanent Magnet Synchronous Motor based on PCH and L2 gain** 6438
 Haisheng Yu, *Qingdao Univ.*
 Zihan Wang, *Qingdao Univ.*
 Yang Zhao, *Qingdao Univ.*
 Hongchao Xie, *Qingdao Univ.*
 Ying Zhang, *Qingdao Univ.*
- 17:30-17:50 **MonD02-6** **A Nonlinear Heading Controller Based on ESO for a Ship Sailing in Restricted Waters** 6443
 Jianqin Wang, *Shanghai Jiao Tong Univ.*
 Zaojian Zou, *Shanghai Jiao Tong Univ.*

Session	MonD03: Nonlinear Systems (V) (Chinese)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 03
Chair	<i>Xiaohua Li, Univ. of Science and Tech. Liaoning</i>
Co-Chair	<i>Yanxia Hu, North China Electric Power Univ.</i>

- 15:50-16:10 **MonD03-1** **Adaptive Neural Network Decentralized Stabilization for a Class of Uncertain Nonlinear Time-Delay Large-Scale Systems with Expanding Construction** 6449
 Xiaohua Li, *Univ. of Science and Tech. Liaoning*
 Bo Xu, *Univ. of Science and Tech. Liaoning*
- 16:10-16:30 **MonD03-2** **Switched Dynamic Modelling and Energy-based Excitation Control of Multi-machine Power Systems** 6456
 Jianyong Li, *Zhengzhou Univ. of Light Industry*
 Huige Shi, *State Grid Nanyang Electric Power Supply Company*
 Yanhong Liu, *Zhengzhou Univ.*
- 16:30-16:50 **MonD03-3** **Oscillation of Certain Nonlinear Neutral Hyperbolic Partial Functional Differential Equations with Continuous Deviating Arguments** 6462
 Wenxian Lin, *Hanshan Normal Univ.*

- 16:50-17:10** **MonD03-4** **Decentralized Prescribed Performance Adaptive Output Feedback Control for Nonlinear Systems with Unknown Dead-Zone** 6468
 Shi Li, *Yangzhou Univ.*
 Tianping Zhang, *Yangzhou Univ.*
 Jiwei Ge, *Yangzhou Univ.*
 Min Wang, *Yangzhou Univ.*
 Bei Xue, *Yangzhou Univ.*
- 17:10-17:30** **MonD03-5** **Lie symmetry analysis and exact solutions to a class of new KdV-Burgers-Kuramoto type equation** 6474
 Yanxia Hu, *North China Electric Power Univ.*
- 17:30-17:50** **MonD03-6** **Semi-Global Output Feedback Stabilization of Upper-Triangular Systems with Uncertain Output Function** 6479
 Xianglei Jia, *Nanjing Univ. of Science and Tech.*
 Weimin Chen, *Nanjing Univ. of Science and Tech.*
 Zhengfan Liu, *North Information Control Group Limited Company*

Session	MonD04: Decision-Making Theory and Method (III)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 04
Chair	<i>Xuefeng Lu, Beihang Univ.</i>
Co-Chair	<i>Tengteng Qin, North China Electric Power Univ.</i>

- 15:50-16:10** **MonD04-1** **Quality Evaluation on Diesel Engine with Improved TOPSIS Based on Information Entropy** 6485
 Wenbing Chang, *Beihang Univ.*
 Xuefeng Lu, *Beihang Univ.*
 Shenghan Zhou, *Beihang Univ.*
 Yiyong Xiao, *Beihang Univ.*
- 16:10-16:30** **MonD04-2** **Complementary Triangular Hesitant Fuzzy Preference Relations and Their Application in Multiple Attribute Group Decision-Making** 6491
 Junhua Hu, *Central South Univ.*
 Yan Yang, *Central South Univ.*
- 16:30-16:50** **MonD04-3** **Competitive Ability Evaluation for Generation Enterprises Based on Combinational Weight and Improved TOPSIS** 6497
 Le Wei, *North China Electric Power Univ.*
 Tengpeng Qin, *North China Electric Power Univ.*
 Yuanyuan Yan, *North China Electric Power Univ.*
 Junhong Hou, *North China Electric Power Univ.*
 Zhaoxiong Yuan, *North China Electric Power Univ.*
- 16:50-17:10** **MonD04-4** **An improved supplier selection model for equipment R&D project with independent fuzzy cost information** 6502
 Yue Xie, *Beihang Univ.*
 Shenghan Zhou, *Beihang Univ.*
 Wenbing Chang, *Beihang Univ.*
 Jun Zhao, *Beihang Univ.*
- 17:10-17:30** **MonD04-5** **Research on Personalized Recommendation Optimization of E-commerce System Based on Customer Trade Behaviour Data** 6506
 Minghai Jiao, *Northeastern Univ.*
 Xiaofang Chen, *Northeastern Univ.*
 Zhonghai Su, *Northeastern Univ.*
 Xu Chen, *Northeastern Univ.*

17:30-17:50 **MonD04-6 Evaluating on Online Services Based on Social Choice Theory** 6512
 Wei Li, *Kunming Univ. of Science and Tech.*
 Xiaodong Fu, *Kunming Univ. of Science and Tech.*
 Qingsong Huang, *Kunming Univ. of Science and Tech.*
 Li Liu, *Kunming Univ. of Science and Tech.*

Session	MonD05: Sensor Network Systems (III) (Chinese)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 05
Chair	Chengyang Xie, <i>East China Univ. of Science & Tech.</i>
Co-Chair	Yueyang Huang, <i>Northeastern Univ.</i> <i>Liaoning Shihua Univ.</i>

16:10-16:30 **MonD05-2 An Indoor Mobile Localization Strategy Based on Particle Filter in NLOS Environment** 6518
 Yueyang Huang, *Northeastern Univ.*
Liaoning Shihua Univ.
 Siying Zhang, *Northeastern Univ.*
 Yuanwei Jing, *Northeastern Univ.*

16:30-16:50 **MonD05-3 CSI-based Autoencoder Classification for Wi-Fi Indoor Localization** 6523
 Chengcheng Xu, *Northeastern Univ.*
 Zixi Jia, *Northeastern Univ.*
 Pan Chen, *Northeastern Univ.*
 Bo Wang, *Northeastern Univ.*

16:50-17:10 **MonD05-4 Optimal Node Deployment Scheme for WSN-Based Railway Environment Monitoring System** 6529
 Jiaying Duan, *China Academy of Railways Sciences*
 Tianyun Shi, *China Academy of Railways Sciences*
 Xiaojun Lv, *China Academy of Railways Sciences*
 Zhi Li, *China Academy of Railways Sciences*

17:10-17:30 **MonD05-5 Thinking about the Relationship between IT and food safety** 6535
 Jiapei Li, *Dalian Univ. of Tech.*
 Chunjie Li, *Dalian Univ. of Tech.*
Bohai Univ.

17:30-17:50 **MonD05-6 Acoustic Source Localization Based Quantized Information for Wireless Sensor Networks** 6541
 Yunting Liu, *Shenyang Ligong Univ.*
 Hui Guo, *Shenyang Univ. of Tech.*
 Yuanwei Jing, *Shenyang Ligong Univ.*

Session	MonD06: DDCLS-Nonlinear System Control
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 06
Chair	
Co-Chair	

15:50-16:05 **MonD06-1 Observer-Based Fuzzy Tracking Control for Switched Stochastic Nonlinear Systems** 6545
 Ben Niu, *Dalian Univ. of Tech.*
 Yanli Liu, *Dalian Univ. of Tech.*
 Huan Li, *Dalian Univ. of Tech.*

- 16:05-16:20** **MonD06-2** *Twin Pinball Loss Support Vector Hyper-sphere Classifier for Pattern Recognition* 6551
Rongfen Gong, *Northeastern Univ. Univ. of Science and Tech. Liaoning*
Chengdong Wu, *Northeastern Univ.*
Maoxiang Chu, *Univ. of Science and Tech. Liaoning*
Huanqing Wang, *Bohai Univ.*
- 16:20-16:35** **MonD06-3** *Further Results on Additive-State-Decomposition-Based Output Feedback Tracking Control for a Class of Uncertain Nonminimum Phase Nonlinear Systems* 6557
Zi-Bo Wei, *Beihang Univ.*
Jin-Rui Ren, *Beihang Univ.*
Quan Quan, *Beihang Univ.*
- 16:35-16:50** **MonD06-4** *A Self-adaptive Local Feature Extraction Based Magnetic Resonance Imaging* 6563
Jun Zhang, *Zhejiang Univ. of Tech.*
Tiantian Xu, *Zhejiang Univ. of Tech.*
Yuanjing Feng, *Zhejiang Univ. of Tech.*
Ye Wu, *Zhejiang Univ. of Tech.*
Yongqiang Li, *Zhejiang Univ. of Tech.*
Jianzhong He, *Zhejiang Univ. of Tech.*
Siqi Zhou, *Zhejiang Univ. of Tech.*
- 16:50-17:05** **MonD06-5** *Multiple-mode switched observer-based unknown input estimation for a class of switched systems* 6568
Yantao Chen, *Henan Polytechnic Univ.*
Junqi Yang, *Henan Polytechnic Univ.*
Donglei Xie, *Henan Polytechnic Univ.*
Wei Zhang, *Shanghai Univ. of Engineering Science*
- 17:05-17:20** **MonD06-6** *A combined data-driven, robust-estimator and parameter-learning methodology for sensor fault compensation* 6574
Ke-Zhen Han, *Northeastern Univ.*
Jian Feng, *Northeastern Univ.*
- 17:20-17:35** **MonD06-7** *Consensus Tracking of Multi-Agent Systems with Constrained Time-delay by Iterative Learning Control* 6580
Yongil Ri, *Shanghai Univ.*
Yong Fang, *Shanghai Univ.*
Hongwen Yu, *Shanghai Univ.*

Session	MonD07: DDCLS-Iterative Learning Control (III)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 07
Chair	
Co-Chair	

- 15:50-16:05** **MonD07-1** *Brief Review on Sampled-Data Iterative Learning Control* 6586
Dong Shen, *Beijing Univ. of Chemical Tech.*
Yun Xu, *Beijing Univ. of Chemical Tech.*

- 16:05-16:20** **MonD07-2** **Iterative Learning Control for Linear Discrete-Time Systems with Iteration-varying initial state and Packet Loss** 6592
 Qiao Zhu, *Southwest Jiaotong Univ.*
 Jun-Zhou Yue, *Southwest Jiaotong Univ.*
 Guang-Di Hu, *Southwest Jiaotong Univ.*
 Neng Xiong, *Southwest Jiaotong Univ.*
- 16:20-16:35** **MonD07-3** **Convergence Properties of PDD-Type Iterative Learning Control for Discrete-Time Systems in Frequency Domain** 6598
 Xiaohui Li, *Xi'an Jiaotong Univ.*
 Xiaoe Ruan, *Xi'an Jiaotong Univ.*
- 16:35-16:50** **MonD07-4** **Previous best input based first order D-type iterative learning control for nonlinear system with high order relative degree** 6604
 Yi Liu, *Zhejiang Univ.*
 Shan Liu, *Zhejiang Univ.*
- 17:20-17:35** **MonD07-7** **Iterative Learning Consensus Control for Multi-Agent Systems under Independent Position and Velocity Topologies** 6609
 Jiaxian Wang, *Xidian Univ.*
 Lin Zhang, *Xidian Univ.*
 Junmin Li, *Xidian Univ.*
 Jinsha Li, *Xidian Univ.*
- 17:35-17:50** **MonD07-8** **An Iterative Learning Control Approach for Two Dimensional Discrete Fornasini-Mrchesini Model** 6615
 Kai Wan, *Sun Yat-Sen Univ.*
 Xiao-Dong Li, *Sun Yat-Sen Univ.*

Session	MonD08: Best Paper Award
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 08
Chair	
Co-Chair	

- 15:50-16:10** **MonD08-1** **Data Driven Multiagent Systems Consensus Tracking Using Model Free Adaptive Control** 6621
 Xuhui Bu, *Henan Polytechnic Univ.*
 Zhongsheng Hou, *Beijing Jiaotong Univ.*
 Jiaqi Liang, *Henan Polytechnic Univ.*
 Piaopiao Xu, *Henan Polytechnic Univ.*
- 16:10-16:30** **MonD08-2** **Online l2-regularized Reinforcement Learning via RBF Neural Network** 6627
 Tianheng Song, *Beijing Univ. of Chemical Tech.*
 Dazi Li, *Beijing Univ. of Chemical Tech.*
- 16:30-16:50** **MonD08-3** **Data-Based Self-Learning Optimal Control for Continuous-Time Unknown Nonlinear Systems With Disturbance** 6633
 Qinglai Wei, *Inst. of Automation, Chinese Acad. of Sciences*
 Derong Liu, *Univ. of Science and Tech. Beijing*
 Ruizhuo Song, *Univ. of Science and Tech. Beijing*
 Pengfei Yan, *Inst. of Automation, Chinese Acad. of Sciences*

- 16:50-17:10 **MonD08-4** **A Perturbed Gaussian Process Regression with Chunk Sparsification for Tracking Non-stationary Systems** 6639
 Dong Li, *Inst. of Automation Chinese Acad. of Sciences*
 Dongbin Zhao, *Inst. of Automation Chinese Acad. of Sciences*
 Zhongpu Xia, *Inst. of Automation Chinese Acad. of Sciences*
- 17:10-17:30 **MonD08-5** **Active Disturbance Rejection Based Iterative Learning Control** 6645
 Xiangyang Li, *South China Univ. of Tech.*
 Senping Tian, *South China Univ. of Tech.*
 Wei Ai, *South China Univ. of Tech.*

Session	MonD09: Fuzzy Systems (II) (Chinese)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 09
Chair	Daijun Wei, Hubei Univ. for Nationalities
Co-Chair	Ying Liu, Northeastern Univ.

- 15:50-16:10 **MonD09-1** **Route selection for dangerous goods based on D numbers** 6651
 Ningkui Wang, *Hubei Univ. for Nationalities*
 Xiaozhong Huang, *Hubei Univ. for Nationalities*
 Daijun Wei, *Hubei Univ. for Nationalities*
Key Laboratory of Biologic Resources Protection and Utilization of Hubei Province
- 16:10-16:30 **MonD09-2** **On Multi-granularity Soft Rough Sets** 6657
 Xiaomin Wang, *Northeastern Univ. at Qinhuangdao*
 Ying Liu, *Northeastern Univ.*
 Piyu Li, *Northeastern Univ. at Qinhuangdao*
 Jianbo Liu, *Northeastern Univ. at Qinhuangdao*
- 16:30-16:50 **MonD09-3** **Adaptive Fuzzy Terminal Sliding Mode Control for MIMO Nonlinear Systems** 6663
 Wuxi Shi, *Tianjin Polytechnic Univ.*
 Rui Luo, *Tianjin Polytechnic Univ.*
 Dongwei Wang, *Tianjin Polytechnic Univ.*
- 16:50-17:10 **MonD09-4** **Observer-based Controller Synthesis for T-S Fuzzy Systems under Imperfect Premise Matching** 6669
 Jie Zhou, *Science and Tech. on Communication Security Laboratory*
 Tao Zhao, *Sichuan Univ.*
- 17:10-17:30 **MonD09-5** **On Local Non-quadratic H8 Filtering of Continuous-time T-S Fuzzy Systems** 6675
 Juntao Pan, *Beifang Univ. of Nationalities*
 Fang Liu, *Beifang Univ. of Nationalities*
 Yong Niu, *Beifang Univ. of Nationalities*
 Bai Zhang, *Beifang Univ. of Nationalities*
- 17:30-17:50 **MonD09-6** **A Comprehensive High Order Type 2 Fuzzy Time Series Forecasting Model** 6681
 Encheng Zhang, *Dalian Univ. of Tech.*
 Degang Wang, *Dalian Univ. of Tech.*
 Hongxing Li, *Dalian Univ. of Tech.*

Session	MonD10: Neural Networks (V) (Chinese)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 10
Chair	Yi Yang, <i>Nantong Univ.</i>
Co-Chair	Pei Cheng, <i>Anhui Univ.</i>

- 15:50-16:10** **MonD10-1** **Identification and Self-tuning Control of Heat Pump System Based on Neural Network** 6687
Yanjuan Lu, *Nantong Univ.*
Yi Yang, *Nantong Univ.*
Haiqin Gu, *Nantong Univ.*
Ye Zhang, *Nantong Univ.*
- 16:10-16:30** **MonD10-2** **Almost Sure Exponential Stability of Stochastic Neural Networks** 6692
Lei Shang, *Anhui Univ.*
Dianqiang Li, *Anhui Univ.*
Pei Cheng, *Anhui Univ.*
- 16:30-16:50** **MonD10-3** **Improved Delay-Dependent Stability criterion of Generalized Neural Networked with Interval Time-Varying Delays** 6697
Shenping Xiao, *Hunan Univ. of Tech.*
Honghai Lian, *Hunan Univ. of Tech.*
Hongbing Zeng, *Hunan Univ. of Tech.*
Gang Chen, *Hunan Univ. of Tech.*
Linxing Xu, *Hunan Univ. of Tech.*
- 16:50-17:10** **MonD10-4** **Blind Sequence Detection of QAM System with Short Received Data Based on Echo State Networks** 6704
Shuan Liu, *Wenzhou Univ*
Hengheng Li, *Wenzhou Univ*
Xiejie Jin, *Wenzhou Univ*
Xiukai Ruan, *Wenzhou Univ*
Yanhua Tan, *Wenzhou Univ*
Guijun Zhu, *Wenzhou Univ*
Qibo Cai, *Wenzhou Univ*
Zhili Zhou, *Sun Yat-sen Univ.*
- 17:10-17:30** **MonD10-5** **Research on Soft-Sensor Based on Support Vector Regression for Particle Size of Grinding and Classification Process** 6708
Yong Zhang, *Univ. of Science and Tech. Liaoning*
Yunqi Liang, *Univ. of Science and Tech. Liaoning*

Session	MonD11: Motion Control (II)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 11
Chair	Fan Wu, <i>Harbin Inst. of Tech.</i>
Co-Chair	Jinlong Zhang, <i>Chongqing Univ.</i>

- 15:50-16:10** **MonD11-1** **Nano Satellite Attitude Estimation with Magnetometer and Photodiodes Measurements** 6714
Fan Wu, *Harbin Inst. of Tech.*
Xibin Cao, *Harbin Inst. of Tech.*
Jiyao Zhang, *Harbin Inst. of Tech.*

- 16:10-16:30** **MonD11-2** **Sensorless Speed Control of Permanent Magnet Synchronous Motor System Based on Active Disturbance Rejection Control** 6719
 Qiang Chen, *Zhejiang Univ. of Tech.*
 Fang Dong, *Zhejiang Univ. of Tech.*
 Liang Tao, *Zhejiang Univ. of Tech.*
 Yurong Nan, *Zhejiang Univ. of Tech.*
- 13:30-16:50** **MonD11-3** **Design and Experiment of Magnetorheological Rotary Damper for Solar Array Vibration Control** 6724
 Shaobo Lu, *Chongqing Univ.*
 Jinlong Zhang, *Chongqing Univ.*
 Junwei Shi, *Shanghai Key Laboratory of Spacecraft Mechanism Aerospace System Engineering Shanghai*
 Zongxiang Jin, *Shanghai Key Laboratory of Spacecraft Mechanism Aerospace System Engineering Shanghai*
 Yaobin He, *Chongqing Univ.*
- 16:50-17:10** **MonD11-4** **Trajectory Tracking Control of Wheeled Mobile Robot Based on Fractional Order Backstepping** 6730
 Yuhan Zhao, *Nanjing Forestry Univ.*
 Ning Chen, *Nanjing Forestry Univ.*
 Yongpeng Tai, *Nanjing Forestry Univ.*
- 17:10-17:30** **MonD11-5** **Research on Friction Compensation for PMSM Servo Systems** 6735
 Wei Gu, *Southeast Univ.*
 Yu Zhang, *Southeast Univ.*
 Shihua Li, *Southeast Univ.*
- 17:30-17:50** **MonD11-6** **An On-Board Profile-Planning Entry Guidance** 6741
 Liang Zeng National Univ. of Defense Tech.
 Yongyuan Li China Academy of Launch Vehicle Tech.
 Hongbo Zhang National Univ. of Defense Tech.
 Wei Zheng National Univ. of Defense Tech.

Session	MonD12: Robot Control (IV)
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 12
Chair	Wei Chen, <i>Southeast Univ.</i> <i>Jiangsu Univ. of Science and Tech.</i>
Co-Chair	Fei Lu, <i>Shandong Univ.</i>

- 15:50-16:10** **MonD12-1** **A Novel Trajectory Planning Scheme for Spray Painting Robot with Bézier Curves** 6746
 Wei Chen, *Southeast Univ.*
Jiangsu Univ. of Science and Tech.
 Yang Tang, *Jiangsu Univ.*
 Qiang Zhao, *Jiangsu Univ. of Science and Tech.*
- 16:10-16:30** **MonD12-2** **Simulation and Modelling of 6-Degree of Freedom STEP SD 700 Industrial Robot Follow-up on a Given Trajectory** 6751
 Adil Shahzad, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Yu Mu, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Lijuan Zhang, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Dengqi Cui, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Yubai Liu, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Han Dong, *School of Mechatronical Engineering, Beijing Inst. of Tech.*
 Xueshan Gao, *School of Mechatronical Engineering, Beijing Inst. of Tech.*

- 16:30-16:50** **MonD12-3** **An Improved JSHOP2 Planner Oriented to Service Robot Multi-tasks Planning** 6756
 Fei Lu, *Shandong Univ.*
 Guohui Tian, *Shandong Univ.*
 Qing Li, *Shandong Univ.*
- 16:50-17:10** **MonD12-4** **Active Disturbance Rejection Control Based on Adaptive Differential Evolution for Two-Wheeled Self-Balancing Robot** 6761
 Libiao Jiang, *South China Univ. of Tech.*
 Huachuan Qiu, *South China Univ. of Tech.*
 Zhongwei Wu, *South China Univ. of Tech.*
 Jiashou He, *South China Univ. of Tech.*
- 17:10-17:30** **MonD12-5** **A Behavioral Multi-robot Formation Control Approach in Obstacle Environments** 6767
 Li Yang, *Tianjin Key Laboratory of Information Sensing and Intelligent Control*
Tianjin Univ. of Tech. and Education
 Jigong Li, *Tianjin Key Laboratory of Information Sensing and Intelligent Control*
Tianjin Univ. of Tech. and Education
- 17:30-17:50** **MonD12-6** **RBF Neural Network Adaptive Sliding Mode Control Based on Genetic Algorithm Optimization** 6772
 Jie Zhao, *Heilongjiang Univ. of Scie. and Tech.*
 Long Han, *Heilongjiang Univ. of Scie. and Tech.*
Harbin Inst. of Tech.
 Sijing Ren Heilongjiang Univ. of Scie. and Tech.

Session	MonD13: Management Information Systems and Enterprises Informatization
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 13
Chair	Qi Zhang, Northeastern Univ.
Co-Chair	Jiajia Zheng, Chongqing City Management Coll.

- 15:50-16:10** **MonD13-1** **NSGA-II for slab selecting and reheating furnace scheduling in hot rolling production** 6776
 Duan Xu, *Shanghai Baosight Software Limited Company*
 Qi Zhang, *Northeastern Univ.*
 Chao Lu, *Northeastern Univ.*
 Shixin Liu, *Northeastern Univ.*
- 16:10-16:30** **MonD13-2** **Technological Innovation, Fuzzy Grey Evaluation and Risk Assessment: A Perspective on Chinese Enterprises** 6780
 Degui Zhu, *Harbin Univ. of Commerce*
 Xinyu Wang, *Harbin Univ. of Commerce*
- 16:30-16:50** **MonD13-3** **Design of Energy Monitoring System based on IOT** 6785
 Hao Luan, *Tianjin Univ. of Tech.*
 Jianwei Leng, *Tianjin Univ. of Tech.*

- 16:50-17:10** **MonD13-4** **Handbill Release System Using B/S and C/S Hybrid Framework** 6789
 Shiyuan Hao, *East China Univ. of Science and Tech.*
 Yanhui Qiao, *Suzhou Univ. of Science and Tech.*
 Qingchun Hu, *East China Univ. of Science and Tech.*
 Xinyu Dai, *East China Univ. of Science and Tech.*
 Wanjun Hao, *Suzhou Univ. of Science and Tech.*
 Jinglin Liu, *Suzhou Univ. of Science and Tech.*
- 17:10-17:30** **MonD13-5** **Electronic Commerce, Network Accounting and Its Countermeasures: Practices and Perceptions from China** 6794
 Degui Zhu, *Harbin Univ. of Commerce*
 Guixiang Li, *Harbin Univ. of Commerce*
- 17:30-17:50** **MonD13-6** **An Object Oriented Dynamic Security Reference Model for Virtual Enterprises** 6800
 Jiajia Zheng, *Chongqing City Management Coll.*

Session	MonD14: Energy Management Systems
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 14
Chair	Gang Chen, <i>Chongqing Univ.</i>
Co-Chair	Jing Li, <i>Jiangnan Univ.</i>

- 15:50-16:10** **MonD14-1** **A Distributed Solution of Economic Dispatch Problem in Islanded Microgrid Systems** 6804
 Gang Chen, *Chongqing Univ.*
 Zhiyong Li, *Chongqing Univ.*
 Ziye Liu, *Chongqing Univ.*
- 16:10-16:30** **MonD14-2** **A Control Strategy for Islanded DC Microgrid with Battery/Ultra-capacitor Hybrid Energy Storage System** 6810
 Jing Li, *Jiangnan Univ.*
 Yanxia Shen, *Jiangnan Univ.*
 Dinghui Wu, *Jiangnan Univ.*
 Zhipu Zhao, *Jiangnan Univ.*
- 16:30-16:50** **MonD14-3** **A Sort of CO2 Concentration Monitoring System Based on Energy Efficiency for Terminal** 6814
 Jingjie Chen, *Civil Aviation Univ. of China*
 Peng Du, *Civil Aviation Univ. of China*
 Daoxian Ren, *Civil Aviation Univ. of China*
- 16:50-17:10** **MonD14-4** **On Forecast Method of Thirteenth Five-year ESER Planning Goals for Transport Airlines** 6818
 Jingjie Chen, *Civil Aviation Univ. of China*
 Yujuan Zhu, *Civil Aviation Univ. of China*
- 17:10-17:30** **MonD14-5** **Study on Closed Loop Charging Strategy of Battery Based on Maas's Law** 6823
 Yusen Li, *Univ. of Science and Tech. Liaoning*
 Xiaodong Liu, *Univ. of Science and Tech. Liaoning*

17:30-17:50 **MonD14-6 A High-Efficiency Synchronous Rectifier for Supercapacitor Voltage Equalizer in Urban Rail** 6828
 Honghai Lu, *Central South Univ.*
 Zhiwu Huang, *Central South Univ.*
 Liran Li, *Central South Univ.*
 Xiaohui Gong, *Central South Univ.*
 Sanfeng Liu, *Central South Univ.*
 Cheng Luo, *Central South Univ.*

Session	MonDIS: Interactive Session
Date/Time	Monday, 30 May 2016 / 15:50-17:50
Venue	Room 15

- MonDIS-01 Trajectory Tracking for Underactuated UUV Using Terminal Sliding Mode Control** 6833
 Shikai Wang, *Harbin Engineering Univ.*
 Hongzhang Jin, *Harbin Engineering Univ.*
 Lingwei Meng, *Harbin Engineering Univ.*
- MonDIS-02 Adaptive Sliding Mode Control of AUV to Optimize the Voyage** 6838
 Shikai Wang, *Harbin Engineering Univ.*
 Hongzhang Jin, *Harbin Engineering Univ.*
 Lingwei Meng, *Harbin Engineering Univ.*
- MonDIS-03 VR-Based Construction Tele-robot System Displayed by HMD with Active Viewpoint Movement Mode** 6844
 Xingxing Tang, *Changchun Univ. of Tech.*
 Pengfei Zhou, *Changchun Univ. of Tech.*
 Hironao Yamada, *Gifu Univ.*
- MonDIS-04 A Combined COG Adjustment Approach of the Crawl Gait for Quadruped Robot** 6851
 Yaxian Xin, *Qilu Univ. of Tech.*
 Bin Li, *Qilu Univ. of Tech. Shandong Univ.*
 Zhen Hong, *Qilu Univ. of Tech.*
 Yibin Li, *Shandong Univ.*
- MonDIS-05 An Attitude Determination System for PhoneSat Using Smartphone Sensors** 6857
 Jingjing Zhao, *Univ. of Chinese Acad. of Sciences*
 Junsuo Zhao, *Inst. of Software Chinese Acad. of Sciences*
 Fengge Wu, *Inst. of Software Chinese Acad. of Sciences*
- MonDIS-06 Research of a Construction Method of Space-based Cyber-Physical System** 6862
 Zhongcheng Yuan, *Inst. of Software, Chinese Acad. of Sciences*
 Fengge Wu, *Inst. of Software, Chinese Acad. of Sciences*
 Junsuo Zhao, *Inst. of Software, Chinese Acad. of Sciences*
- MonDIS-07 Research on Optimal ELSF Real-Time Scheduling Algorithm for CPS** 6867
 Benhai Zhou, *Shenyang Inst. of Engineering*
 Yuan Yao, *Shenyang Inst. of Engineering*
 Hongyan Mao, *Shenyang Inst. of Engineering*
 Dapeng Yao, *Shenyang Inst. of Engineering*
 Libo Xu, *Shenyang Inst. of Engineering*

- MonDIS-08 Fuzzy Neuro Observer-based Control for Nonlinear Descriptor Systems in the Sense of Practical and Finite-time stability** 6872
Zhan Su, *Univ. of Shanghai for Science and Tech.*
Jun Ai, *Univ. of Shanghai for Science and Tech.*
Yuming Shen, *Univ. of Shanghai for Science and Tech.*
Qingling Zhang, *Northeastern Univ.*
Haiqing Wu, *Univ. of Shanghai for Science and Tech.*
- MonDIS-09 Design and Application of Computer Games Online System in Connect5** 6879
Jun Tao, *Jiangnan Univ.*
Rowan Univ.
Gui Wu, *Jiangnan Univ.*
- MonDIS-10 Design and Improvement of the Parallel Algorithm in the Computer Games System** 6884
Gui Wu, *Jiangnan Univ.*
Jun Tao, *Jiangnan Univ.*
Rowan Univ.
- MonDIS-11 Profit Analysis Theory and Application in Searching Algorithms Optimization at Transition Stage of Dot and Box Game** 6888
Zhicheng Guo, *Shenyang Aerospace Univ.*
Hang Yin, *Shenyang Aerospace Univ.*
Xiaodong Bai, *Shenyang Aerospace Univ.*
Huiwen Hu, *Shenyang Aerospace Univ.*
Junkai Lu, *Shenyang Aerospace Univ.*
- MonDIS-12 Research on Estimate System of Computer Game Decision Algorithm** 6892
Fanfu Zeng, *Harbin Univ. of Science and Tech.*
Xian Mei, *Harbin Univ. of Science and Tech.*
Jun Liu, *Harbin Univ. of Science and Tech.*
Wen Xie, *Harbin Univ. of Science and Tech.*
Xiaobo Liu, *Harbin Univ. of Science and Tech.*
- MonDIS-13 Application of UCT Technologies for Computer Games of Amazon** 6896
Jianning Quan, *Shenyang Aerospace Univ.*
Hongkun Qiu, *Shenyang Aerospace Univ.*
Yajie Wang, *Shenyang Aerospace Univ.*
Fei Li, *Shenyang Aerospace Univ.*
Shengran Qiu, *Shenyang Aerospace Univ.*
- MonDIS-15 Research on the mining of opinion community for social media based on sentiment analysis and regional distribution** 6900
Baocheng Huang, *Harbin Inst. of Tech.*
Guang Yu, *Harbin Inst. of Tech.*
- MonDIS-16 Ultrasound Images of Gray Contrast Tissue-mimicking Phantom** 6906
Haijiang Zhu, *Beijing Univ. of Chemical Tech.*
Wenjuan Li, *Beijing Univ. of Chemical Tech.*
Xin Wen, *Beijing Univ. of Chemical Tech.*
Ping Yang, *National Inst. of Metrology*
Jinglin Zhou, *Beijing Univ. of Chemical Tech.*
Jing Wang, *Beijing Univ. of Chemical Tech.*

- MonDIS-17 Local Stabilization of Multi-valued Logical Control Networks via State Feedback** 6912
 Hui Tian, *Northeastern Univ.*
Henan Polytechnic Univ.
 Huaguang Zhang, *Northeastern Univ.*
 Zhanshan Wang, *Northeastern Univ.*
 Yanfang Hou, *Henan Polytechnic Univ.*
- MonDIS-18 Detection and Location for Slow Leakage of Oil Pipeline Based on Weighted Logical Inference and Data Fitting** 6918
 Xuguang Hu, *Northeastern Univ.*
 Dazhong Ma, *Northeastern Univ.*
 Qiuye Sun, *Northeastern Univ.*
- MonDIS-19 Agglomeration detection in Gas-Phase Ethylene polymerization based on the Gaussian of acoustic signal** 6924
 Haiyan Wu, *Beijing Univ. of Chemical Tech.*
 Zhe Wang, *Beijing Univ. of Chemical Tech.*
 Weiguo Lin, *Beijing Univ. of Chemical Tech.*
 Jing Wang, *Beijing Univ. of Chemical Tech.*
 Dongdong Li, *Beijing Univ. of Chemical Tech.*
- MonDIS-20 Analysis of Electromagnetic Force and Vibration Characteristics for Transverse Flux Permanent Magnet Motor** 6929
 Wei Wang, *Bohai Univ.*
 Hang Wang, *Bohai Univ.*
 Houhua Shen, *Bohai Univ.*
- MonDIS-21 Integrated fault diagnosis method for down-hole working conditions of the beam pumping unit** 6935
 Han Ying, *Bohai Univ.*
 Li Kun, *Bohai Univ.*
- MonDIS-22 Channel estimation in OFDM power line communication based on pilots and particle filtering** 6941
 Peiling Zhang, *Henan Polytechnic Univ.*
 Hongxin Zhang, *Beijing Univ. of Posts and Telecommunications*
- MonDIS-23 The Design Research of the Indigenous Steering Gear** 6947
 Xiaoyu Tian, *Northeastern Univ.*
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- MonDIS-24 Design of Wireless Group Control System Embedded Linux** 6953
 Huaibin Li, *Beijing Inst. of Fashion Tech.*
 Xiaotie Ma, *Beijing Inst. of Fashion Tech.*
- MonDIS-25 Interval Kalman Filter Based RFID Indoor Positioning** 6958
 Ning Li, *Beijing Inst. of Tech.*
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- MonDIS-26 H8 Robust Control with Improved Prescribed Performance for a Class of Strict Feedback Nonlinear Systems** 6964
 Chuang Gao, *Univ. of Science and Tech. Liaoning*
 Huanqing Wang, *Bohai Univ.*
 Xiaoping Liu, *Lakehead Univ.*
 Hongxing Sun, *Univ. of Science and Tech. Liaoning*
 Ming Chen, *Univ. of Science and Tech. Liaoning*

- MonDIS-27 Unfalsified Adaptive Control for the Infrequently Switching Plant Based on Fading Memory Data** 6970
Huiyu Jin, *Xiamen Univ.*
Michael G. Safonov, *Univ. of Southern California*
- MonDIS-28 Least-Squares Temporal Difference Learning with Eligibility Traces based on Regularized Extreme Learning Machine** 6976
Dazi Li, *Beijing Univ. of Chemical Tech.*
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Qibing Jin, *Beijing Univ. of Chemical Tech.*
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Pan Wen, *Beijing Univ. of Chemical Tech.*
Jing Wang, *Beijing Univ. of Chemical Tech.*
Jinglin Zhou, *Beijing Univ. of Chemical Tech.*
Haiyan Wu, *Beijing Univ. of Chemical Tech.*
Qibing Jin, *Beijing Univ. of Chemical Tech.*
- MonDIS-30 Research on A Novel two-step Commutation Strategy for Matrix Converter Based on the Value of Input Voltage** 6988
Xinghe Ma, *Henan Polytechnic Univ.*
Hongling Dong, *Henan Polytechnic Univ.*
Junying Zhao, *Henan Polytechnic Univ.*
- MonDIS-31 Adaptive Abnormal Signal Extraction Based on Iterative Computations** 6994
Fang Wang, *Beijing Univ. of Chemical Tech.*
Weiguo Lin, *Beijing Univ. of Chemical Tech.*
Zhaoyan He, *Beijing Univ. of Chemical Tech.*
Haiyan Wu, *Beijing Univ. of Chemical Tech.*
- MonDIS-32 The EMD Based on Adaptive Stochastic Resonance for Weak Signal Detection** 7000
Kang Xiao, *Beijing Univ. of Chemical Tech.*
Zimu Zhou, *Beijing Univ. of Chemical Tech.*
- MonDIS-33 Anti-windup design for internal model control based on the optimal compensator** 7005
Zhongwei Liu, *Beijing Univ. of Chemical*
Jing Wang, *Beijing Univ. of Chemical*
Xuyang Jing, *Beijing Univ. of Chemical*
Qibing Jin, *Beijing Univ. of Chemical*
- MonDIS-34 Suppress the accumulated effect of channel noise on ILC systems over wireless channels** 7013
Lixun Huang, *Zhengzhou Univ. of Light Industry*
Hanqing Ding, *Zhengzhou Univ. of Light Industry*
Yong Fang, *Shanghai Univ.*
- MonDIS-35 Robust stability of fractional-order nonlinear systems under sliding mode controller with fractional-order reaching law** 7019
Chun Yin, *Univ. of Electronic Science and Tech. of China*
Yuhua Cheng, *Univ. of Electronic Science and Tech. of China*
Xuegang Huang, *China Aerodynamics Research & Development Center*
Shouming Zhong, *Univ. of Electronic Science and Tech. of China*
- MonDIS-36 A Novel Modified PID Controller Applied to Temperature Control with Self-Tuning Ability** 7025
Enxiang Yu, *Bohai Univ.*
Yundou Hu, *Binzhou Vocational Coll.*

- MonDIS-37 A Short-term Traffic Flow Prediction Method Based on Wavelet Analysis and Neural Network** 7030
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 Darong Huang, *Chongqing Jiaotong Univ.*
 Ling Zhao, *Chongqing Jiaotong Univ.*
- MonDIS-38 Structure Design for RBF Neural Network Based on Improved K-means Algorithm** 7035
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 Junfei Qiao, *Beijing Univ. of Tech.*
 Honggui Han, *Beijing Univ. of Tech.*
- MonDIS-39 A security analysis model based on Time Bayes Petri nets for the low temperature filling hybrid process system** 7041
 Yi Chai, *Chongqing Univ.*
 Hao Ren, *Chongqing Univ.*
 Jianfeng Qu, *Chongqing Univ.*
 Yongfang Mao, *Chongqing Univ.*
 Ke Zhang, *Chongqing Univ.*
- MonDIS-40 The Node Selection of Satellite Attitude Control System Based on Sensitivity Function in Bayesian Network** 7047
 Yanning Guo, *Harbin Inst. of Tech.*
 Youmin Gong, *Harbin Inst. of Tech.*
 Sheng Gao, *Harbin Inst. of Tech.*
 Guangfu Ma, *Harbin Inst. of Tech.*
- MonDIS-41 Adaptive fault detection for uncertain linear discrete-time system based on zonotope** 7052
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 Hualu Zhang, *Northeastern Univ.*
- MonDIS-42 Multi Fault Diagnosis of Traction Motor Current Sensor Based on State Observer** 7058
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 Lu Shi, *Central South Univ.*
 Zezhou He, *Central South Univ.*
 Chao Yang, *Central South Univ.*
- MonDIS-43 Rotating machinery diagnostics based on adaptive Stochastic Resonance** 7064
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 Xiaoyun Liu, *Shijiazhuang Tiedao Univ.*
 Chaojian Gu, *Shijiazhuang Tiedao Univ.*
 Yanzhong Li, *Shijiazhuang Tiedao Univ.*
- MonDIS-44 Fault Isolation for Multimode Process** 7070
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- MonDIS-45 Analyses for Optimal Control of Discrete Time-Delay Systems Based on ADP Algorithm with Finite-Horizon Performance Index** 7076
 Ruizhuo Song, *Univ. of Science and Tech. Beijing*
 Shi Xing, *Univ. of Science and Tech. Beijing*

**MonDIS-46 A Novel Motion Detection Approach Based on the Improved ViBe
Algorithm 7081**

PAK Chun-Hyok, *Northeastern Univ*

Kim Chaek, *University of Tech.*

Zhao Hai, *Northeastern Univ.*

Zhu Hongbo, *Northeastern Univ.*

Pan Yilin, *Harbin Institute of Tech.*