

2017 11th Asian Control Conference (ASCC 2017)

**Gold Coast, Australia
17-20 December 2017**

Pages 711-1448



**IEEE Catalog Number: CFP17832-POD
ISBN: 978-1-5090-1574-0**

**Copyright © 2017 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP17832-POD
ISBN (Print-On-Demand):	978-1-5090-1574-0
ISBN (Online):	978-1-5090-1573-3

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Technical Program of the 2017 Asian Control Conference

Technical Program for Monday December 18, 2017

MoAPI	Arena B
Plenary Session (1) (Plenary Session)	
Chair: Oetomo, Denny	Univ. of Melbourne
08:30-09:30	MoAPI.1
<i>Rehabilitation Robots That Cooperate and Motivate*</i> .	
Riener, Robert	ETH Zurich
MoA1	Room 1
Optimal Control and Optimization (1) (Regular Session)	
Chair: Ohtsuka, Toshiyuki	Kyoto Univ
10:00-10:15	MoA1.1
<i>Algebraic Approach to Nonlinear Finite-Horizon Optimal Control Problems with Terminal Constraints</i> , pp. 1-6.	
Iori, Tomoyuki	Kyoto Univ
Kawano, Yu	Univ. of Groningen
Ohtsuka, Toshiyuki	Kyoto Univ
10:15-10:30	MoA1.2
<i>Optimal Tracking Control for Discrete-Time Systems by Model-Free Off-Policy Q-Learning Approach</i> , pp. 7-12.	
Li, Jinna	Shenyang Univ. of Chemical Tech
Decheng, YUAN	SHENYANG Univ. OF CHEMICAL Tech
Ding, Zhengtao	The Univ. of Manchester
10:30-10:45	MoA1.3
<i>A Scheduling and Control System for Electric Vehicle Charging at Parking Lot</i> , pp. 13-18.	
Wu, Hao	The Univ. of Hong Kong
Pang, Grantham	The Univ. of Hong Kong
Choy, King Lun	The Hong Kong Pol. Univ
Lam, Hoi Yan	The Hong Kong Pol. Univ
10:45-11:00	MoA1.4
<i>Modeling and Optimization of Item Changes in Vending Machines</i> , pp. 19-24.	
Nemoto, Gaku	Japan Advanced Inst. of Science and Tech
Hiraishi, Kunihiro	JAIST
MoA2	Room 2
Robotics and Motion Control (1) (Regular Session)	
Chair: Ishikawa, Masato	Osaka Univ
10:00-10:15	MoA2.1
<i>Impedance Control of a Mobile Robot with Dual Arms for a Tumbling Operation</i> , pp. 25-30.	
Kitazawa, Takahiro	Tokyo Denki Univ

Kurusu, Masamitsu	Tokyo Denki Univ
Takemasa, Shoutarou	Tokyo Denki Univ
10:15-10:30	MoA2.2
<i>Constrained Motion Tracking Control System for Medical Device</i> , pp. 31-36.	
Lau, Jun Yik	NATIONAL Univ. OF SINGAPORE
Liang, Wenyu	National Univ. of Singapore
Tan, Kok Kiong	National Univ. of Singapore
10:30-10:45	MoA2.3
<i>Development of a New Operating System Software for a Hovering-Type Autonomous Underwater Vehicle HOBALIN</i> , pp. 37-42.	
Seta, Takahiro	National Maritime Res. Inst
Okamoto, Akihiro	National Maritime Res. Inst. Japan
Inaba, Shogo	National Maritime Res. Inst. Japan
Sasano, Masahiko	National Maritime Res. Inst. Japan
10:45-11:00	MoA2.4
<i>Actuator Synchronization for Adaptive Motion Generation without Any Sensor or Microprocessor</i> , pp. 43-48.	
Masuda, Yoichi	Osaka Univ
Minami, Yuki	Osaka Univ
Ishikawa, Masato	Osaka Univ
MoA3	Room 3
Autonomous Systems (1) (Regular Session)	
Chair: Tian, Yu-Ping	Southeast Univ
10:00-10:15	MoA3.1
<i>Anti-Jerk Model Predictive Cruise Control for Connected Electric Vehicles with Changing Road Conditions</i> , pp. 49-54.	
Batra, Mohit	Univ. of Waterloo, Ontario
McPhee, John	Univ. of Waterloo
Azad, Nasser L.	Univ. of Waterloo, ON
10:15-10:30	MoA3.2
<i>Similar Formation Algorithm with Biased Measurement Errors</i> , pp. 55-60.	
Zong, Siheng	Southeast Univ
Tian, Yu-Ping	Southeast Univ
10:30-10:45	MoA3.3
<i>Waypoint Tracking Predictive Control with Vehicle Speed Variation</i> , pp. 61-66.	
Choi, Woo Young	Hanyang Univ
Kang, Chang Mook	Hanyang Univ
Lee, Seung Hee	Hanyang Univ
Chung, Chung Choo	Hanyang Univ
10:45-11:00	MoA3.4
<i>Robust Autonomous Flight and Mission Management for MAVs in GPS-Denied Environments</i> , pp. 67-72.	
Bi, Yingcai	National Univ. of Singapore
Lan, Menglu	National Univ. of Singapore
Li, Jiaxin	National Univ. of Singapore
Zhang, Kun	National Univ. of Singapore

Qin, Hailong	National Univ. of Singapore
Lai, Shupeng	National Univ. of Singapore
Chen, Ben M.	National Univ. of Singapore

MoA4	Room 4
Design, Control and Observation of Motion Systems (1) (Invited Session)	

Chair: Wang, Hai	Hefei Univ. of Tech
Organizer: Wang, Hai	Hefei Univ. of Tech
Organizer: Zheng, Jinchuan	Swinburne Univ. of Tech
Organizer: Ping, Zhaowu	Hefei Univ. of Tech

10:00-10:15	MoA4.1
-------------	--------

On Supervised Learning of Sliding Observer (I), pp. 73-77.

Wong, Yew Wee	Swinburne Univ. of Tech
Wang, Pengcheng	Swinburne Univ. of Tech
Man, Zhihong	Faculty of Engineering, Swinburne Univ. of Tech

Han, Qinglong	Swinburne Univ. of Tech
Jin, Jiong	Swinburne Univ. of Tech
Zheng, Jinchuan	Swinburne Univ. of Tech

10:15-10:30	MoA4.2
-------------	--------

Sign Propagation: The Art behind the Methodology of Sliding Observers (I), pp. 78-83.

Wang, Pengcheng	Swinburne Univ. of Tech
Wong, Yew Wee	Swinburne Univ. of Tech
Man, Zhihong	Faculty of Engineering, Swinburne Univ. of Tech

Cao, Zhenwei	Swinburne Univ. of Tech
Zheng, Jinchuan	Swinburne Univ. of Tech

10:30-10:45	MoA4.3
-------------	--------

Robust Control for Vehicle Lane-Keeping with Sliding Mode (I), pp. 84-89.

Du, Hong	Swinburne Univ. of Tech
Man, Zhihong	Faculty of Engineering, Swinburne Univ. of Tech

Zheng, Jinchuan	Swinburne Univ. of Tech
Cricenti, Antonio	Swinburne Univ. of Tech
Zhao, Yong	Lishui CA Steer-By-Wire Tech. Co. Ltd

Xu, Zhangwei	Lishui CA Steer-By-Wire Tech. Co. Ltd
--------------	---------------------------------------

Wang, Hai	Hefei Univ. of Tech
-----------	---------------------

10:45-11:00	MoA4.4
-------------	--------

Motion Control of a Powered Wheelchair Using Eye Gaze in Unknown Environments, pp. 90-95.

Ishizuka, Airi	Keio Univ
Takahashi, Masaki	Keio Univ
yorozu, ayanori	Keio Univ

MoA5	Room 5
Cyber-Physical Systems: Optimal and Secure Control (1) (Invited Session)	

Chair: Liang, Jinling	Southeast Univ
-----------------------	----------------

Organizer: Zou, Yuanyuan	Shanghai Jiao Tong Univ
Organizer: Yuan, Ye	Huazhong Univ. of Science and Tech

10:00-10:15	MoA5.1
-------------	--------

Rotation-Matrix-Based Attitude Synchronization of Multiple Spacecraft without Velocity Measurements (I), pp. 96-101.

Zou, Yao	Tsinghua Univ
Meng, Ziyang	Tsinghua Univ
Zuo, Zongyu	Beihang Univ

10:15-10:30	MoA5.2
-------------	--------

Infinite-Step Opacity of Stochastic Discrete-Event Systems (I), pp. 102-107.

Yin, Xiang	Univ. Michigan
Li, Zhaojian	Univ. of Michigan, Ann Arbor
Wang, Weilin	Monash Univ
Li, Shaoyuan	Shanghai Jiao Tong Univ

10:30-10:45	MoA5.3
-------------	--------

Filtering and L₁-Gain Analysis for 2-D Positive System with Markov Jump Parameters (I), pp. 108-113.

Liang, Jinling	Southeast Univ
Pang, Huan	Southeast Univ
Wang, Jinling	Southeast Univ

10:45-11:00	MoA5.4
-------------	--------

Modeling Driver's Car-Following Behavior Based on Hidden Markov Model and Model Predictive Control: A Cyber-Physical System Approach (I), pp. 114-119.

Qu, Ting	State Key Lab. of Automotive Simulation and Control, Jilin
Shuyou, Yu	Jilin Univ
zhuqing, shi	Jilin Univ
Chen, Hong	Jilin Univ. Campus NanLing

MoA6	Room 6
Nonlinear Control (1) (Regular Session)	

Chair: Hou, Zhongsheng	Beijing Jiaotong Univ
------------------------	-----------------------

10:00-10:15	MoA6.1
-------------	--------

Control Lyapunov Function Based Fixed-Time Controller Design for Double-Integrator System, pp. 120-125.

Hayashi, Takuya	Tokyo Univ. of Science
Nakamura, Hisakazu	Tokyo Univ. of Science

10:15-10:30	MoA6.2
-------------	--------

Data Driven Robust Model Free Adaptive Control for a Class of Nonlinear MIMO Systems with Measurement Noise and Data Dropout, pp. 126-131.

Zhang, Xin	Beijing Jiaotong Univ
Hou, Zhongsheng	Beijing Jiaotong Univ
Liu, Shida	School of Electronics and Information Engineering, Beijing Jiaoto

10:30-10:45	MoA6.3
-------------	--------

A Port-Hamiltonian Approach to Exponential Stabilisation and Disturbance Rejection of a DC-DC Buck Converter with a Nonlinear Load, pp. 132-137.

Tomassini, Juan	Facultad De Ciencias Exactas, Ingeniería Y Agrimensura, Univ
Donaire, Alejandro	Queensland Univ. of Tech
Junco, Sergio	Univ. Nacional De Rosario
Perez, Tristan	Queensland Univ. of Tech
10:45-11:00	MoA6.4
<i>Feedback Stabilization of Nonlinear Systems with Unknown Control Directions and Time-Delay</i> , pp. 138-143.	
Rattanamongkhonkun, Kanya	Chiang Mai Univ
Pongvuthithum, Radom	Chiang Mai Univ
Lin, Wei	Case Western Res. Univ
Tao, Gang	Univ. of Virginia

MoA7	Arena B
Recent Advances in Distributed Control of Multi-Agent Systems (1) (Invited Session)	
Chair: Liu, Lu	City Univ. of Hong Kong
Organizer: Dong, Yi	Nanjing Univ. of Science and Tech
Organizer: Zhang, Hongwei	Southwest Jiaotong Univ
10:00-10:15	MoA7.1
<i>A Distributed Optimization Method with Unknown Cost Function in a Multi-Agent System Via Randomized Gradient-Free Method (I)</i> , pp. 144-149.	
Pang, Yipeng	Nanyang Tech. Univ
Hu, Guoqiang	Nanyang Tech. Univ
10:15-10:30	MoA7.2
<i>Interacting with Multi-Agent Systems through Intention Field Based Shared Control Methods (I)</i> , pp. 150-155.	
Shang, Chengsi	Beijing Inst. of Tech
Fang, Hao	Beijing Inst. of Tech
Chen, Jie	Beijing Inst. of Tech
Zhang, Jia	Beijing Inst. of Tech
10:30-10:45	MoA7.3
<i>Output Synchronization of Heterogeneous Linear Multi-Agent Systems (I)</i> , pp. 156-161.	
Lu, Maobin	City Univ. of Hong Kong
Liu, Lu	City Univ. of Hong Kong
Feng, Gang	City Univ. of Hong Kong
10:45-11:00	MoA7.4
<i>Leader-Following Rendezvous for Single-Integrator Multi-Agent Systems with Uncertain Leader (I)</i> , pp. 162-167.	
Su, Youfeng	Fuzhou Univ
Shi, Pingfen	Fuzhou Univ
Wang, Xinghu	Univ. of Science and Tech. of China
Xu, Dabo	Nanjing Univ. of Science and Tech

MoBPI	Arena B
Semi-Plenary Session (1) (Plenary Session)	
Chair: Tan, Ying	The Univ. of Melbourne
13:00-14:00	MoBPI.1
<i>Navigation and Control of Drones in GPS-Denied Environments*</i> .	

Chen, Ben M.	National Univ. of Singapore
14:00-15:00	MoBPI.2
<i>Development of Atomic Force Microscopy: A Key to Explore the Nanoscale World*</i> .	
Fu, Li-Chen	National Taiwan Univ
MoB1	Room 1
Optimal Control and Optimization (2) (Regular Session)	
Chair: Aksikas, Ilyasse	Qatar Univ
11:00-11:15	MoB1.1
<i>A Branch-And-Bound Approach for Path Planning of Vehicles under Navigation Relayed by Multiple Stations</i> , pp. 168-173.	
Qi, Mingfeng	Beijing Inst. of Tech
Dou, Lihua	Beijing Inst. of Tech
Xin, Bin	Beijing Inst. of Tech
Chen, Jie	Beijing Inst. of Tech
11:15-11:30	MoB1.2
<i>Boundary Linear-Quadratic Control for a System of Coupled Parabolic-Hyperbolic PDEs and ODE</i> , pp. 174-179.	
aksikas, ahmed	Univ. of Alberta
Aksikas, Ilyasse	Qatar Univ
Hayes, R.E.	Univ. of Alberta
Forbes, J Fraser	Univ. of Alberta
11:30-11:45	MoB1.3
<i>Performance Bounds of a SISO H_∞ Control Problem with Non-Minimum Phase Plants</i> , pp. 180-185.	
Peters, Andres	Univ. Técnica Federico Santa María
Vargas, Francisco J.	Univ. Técnica Federico Santa María
11:45-12:00	MoB1.4
<i>Performance Monitoring and Parameter Optimization of Fuzzy Controller in Combustion Process of Coke Oven</i> , pp. 186-191.	
Lei, Qi	Central South Univ
Zhu, Di	Central South Univ
Lai, Xuzhi	China Univ. of Geosciences
Wu, Min	China Univ. of Geosciences

MoB2	Room 2
Robotics and Motion Control (2) (Regular Session)	
Chair: Murao, Toshiyuki	Kanazawa Inst. of Tech
Co-Chair: HIRATA, Kenji	Nagaoka Univ. of Tech
11:00-11:15	MoB2.1
<i>Collocated Virtual Holonomic Constraints in Hamiltonian Formalism and Their Application in the Underactuated Walking</i> , pp. 192-197.	
Celikovsky, Sergej	Acad. of Sciences of the Czech Republic
Anderle, Milan	Inst. of Information Theory and Automation of the CAS
11:15-11:30	MoB2.2
<i>Image-Based Visual Tracking of a Moving Target for a Quadrotor</i> , pp. 198-203.	

zheng, dongliang	Shanghai Jiao Tong Univ
Wang, Hesheng	Shanghai Jiaotong Univ
Chen, weidong	Shanghai Jiao Tong Univ

11:30-11:45	MoB2.3
-------------	--------

Bilateral Control of Nonlinear Teleoperation for 2DOF Robot Manipulators with Antagonistic Bi-Articular Muscles, pp. 204-209.

Murao, Toshiyuki	Kanazawa Inst. of Tech
Kawai, Hiroyuki	Kanazawa Inst. of Tech
HIRATA, Kenji	Nagaoka Univ. of Tech
Fujita, Masayuki	Tokyo Inst. of Tech

11:45-12:00	MoB2.4
-------------	--------

Improved Frequency Domain Iterative Learning Control Applied to Trajectory Tracking, pp. 210-215.

Zhu, Junhan	Beihang Univ
Cai, Zhihao	Beihang Univ
Zhao, Jiang	Beihang Univ
Wang, Yingxun	Beihang Univ

MoB3	Room 3
Autonomous Systems (2) (Regular Session)	

Chair: Huang, Sunan	National Univ. of Singapore
---------------------	-----------------------------

11:00-11:15	MoB3.1
-------------	--------

Attitude Synchronization Control for Multi-Agent Systems on Unit Quaternions, pp. 216-221.

van Goor, Pieter Cornelis Hendrik	Australian National Univ
Sun, Zhiyong	The Australian National Univ
YU, Changbin	Australian National Univ

11:15-11:30	MoB3.2
-------------	--------

Distributed Cooperative Collision Avoidance Control and Implementation for Multi-Unmanned Aerial Vehicles, pp. 222-227.

Huang, Sunan	National Univ. of Singapore
Teo, Rodney	Temasek Lab. National Univ. of Singapore

Liu, Wenqi	National Univ. of Singapore
Dymkou, Siarhei Michailovich	National Univ. of Singapore

11:30-11:45	MoB3.3
-------------	--------

Review of Coverage Control of Multi Unmanned Aerial Vehicles, pp. 228-232.

Huang, Sunan	National Univ. of Singapore
Teo, Rodney	Temasek Lab. National Univ. of Singapore

Wai Lun, Leong	National Univ. of Singapore, Temasek Lab
----------------	--

11:45-12:00	MoB3.4
-------------	--------

Global Convergence of Formation without Global Information in Three-Dimensional Space, pp. 233-238.

Kang, Sung-Mo	Gwangju Inst. of Science and Tech. (GIST)
---------------	---

Ahn, Hyo-Sung	Gwangju Inst. of Sci & Tech
Son, Jin-Hee	GIST

MoB4	Room 4
Design, Control and Observation of Motion Systems (2) (Invited Session)	

Chair: Ping, Zhaowu	Hefei Univ. of Tech
Organizer: Wang, Hai	Hefei Univ. of Tech
Organizer: Zheng, Jinchuan	Swinburne Univ. of Tech
Organizer: Ping, Zhaowu	Hefei Univ. of Tech

11:00-11:15	MoB4.1
-------------	--------

Robust Hierarchical Sliding Mode Control for Steer-By-Wire Equipped Vehicle Yaw Stability Control (I), pp. 239-243.

Wang, Hai	Hefei Univ. of Tech
Shi, Liheng	Hefei Univ. of Tech
Li, Zhenghao	Hefei Univ. of Tech

11:15-11:30	MoB4.2
-------------	--------

A Control Problem of PM Synchronous Motor by Two-Step Internal Model Controller Design (I), pp. 244-249.

Ma, Qingchuan	Hefei Univ. of Tech
Ping, Zhaowu	Hefei Univ. of Tech
Huang, Yunzhi	Hefei Univ. of Tech
Lu, Junguo	Shanghai Jiao Tong Univ

11:30-11:45	MoB4.3
-------------	--------

Collision-Free Path Control in Contest Environment Using Circular Geometric Attributes, pp. 250-255.

Yu, Hongjun	Univ. of Adelaide
Lim, Cheng-Chew	Univ. of Adelaide
Shi, Peng	The Univ. of Adelaide
Damp, Lloyd	Defence Science and Tech. Group
Kim, Jijoong	Defence Science and Tech. Group

11:45-12:00	MoB4.4
-------------	--------

Comparison of Single-Kinect and Dual-Kinect Motion Capture of Upper-Body Joint Tracking, pp. 256-261.

Schlagenhauf, Franziska	Georgia Inst. of Tech
Sahoo, Prachi	Georgia Inst. of Tech
Singhose, William E.	Georgia Inst. of Tech

MoB5	Room 5
Cyber-Physical Systems: Optimal and Secure Control (2) (Invited Session)	

Chair: Li, Shaoyuan	Shanghai Jiao Tong Univ
Organizer: Zou, Yuanyuan	Shanghai Jiao Tong Univ
Organizer: Yuan, Ye	Huazhong Univ. of Science and Tech

11:00-11:15	MoB5.1
-------------	--------

Selective Catalytic Reduction (SCR) Modeling Using Parallel Way of Identification (I), pp. 262-267.

Yang, Zhenli	Shenhua Guohua (Zhoushan) Electricity Generation Co., Ltd
Fu, Haiyuan	Zhejiang Zheneng Changxing Electric Power Generation Co. Ltd
Sun, Dihui	Zhejiang Zheneng Changxing Electric Power Generation Co. Ltd
Zhang, Kangkang	Zhejiang Univ
Feng, Xiaolu	Zhejiang Univ

11:15-11:30	MoB5.2
<i>Cooperative Distributed Model Predictive Control with N-Step Accessible Information (I)</i> , pp. 268-273.	
Gao, Shan	Shanghai Jiao Tong Univ
Zheng, Yi	Shanghai Jiao Tong Univ
Li, Shaoyuan	Shanghai Jiao Tong Univ
11:30-11:45	MoB5.3
<i>Secure and Privacy Preserving Average Consensus (I)</i> , pp. 274-279.	
Liu, Qipeng	Nanyang Tech. Univ
Ren, Xiaoqiang	HKUST
Mo, Yilin	Carnegie Mellon Univ
11:45-12:00	MoB5.4
<i>Self-Triggered Distributed Model Predictive Control of Nonholonomic Systems (I)</i> , pp. 280-285.	
Wang, Wanqing	Norwestern Pol. Univ
Li, Huiping	Northwestern Pol. Univ
Yan, Weisheng	Norwestern Pol. Univ
Shi, Yang	Canada
MoB6	Room 6
Nonlinear Control (2) (Regular Session)	
Chair: Bartosiewicz, Zbigniew	Bialystok Univ. of Tech
11:00-11:15	MoB6.1
<i>On Non-Local Vibrational Stabilization of Nonlinear Systems</i> , pp. 286-291.	
Cheng, Xiaoxiao	The Univ. of Melbourne
Tan, Ying	The Univ. of Melbourne
Mareels, Iven	The Univ. of Melbourne
11:15-11:30	MoB6.2
<i>Controller Design for a Class of Nonlinear Cascaded Systems</i> , pp. 292-297.	
Ye, Hui	Jiangsu Univ. of Science and Tech
Ding, Shihong	Jiangsu Univ
Zheng, Wei Xing	Western Sydney Univ
Li, Zhengming	Jiangsu Univ
11:30-11:45	MoB6.3
<i>On Controllability of Positive Nonlinear Continuous-Time Systems</i> , pp. 298-302.	
Bartosiewicz, Zbigniew	Bialystok Univ. of Tech
11:45-12:00	MoB6.4
<i>Asymptotic Stability of a Class of Inherently Nonlinear Systems under Linear Feedback Control</i> , pp. 303-308.	
Zhu, Jiandong	School of Mathematical Sciences, Nanjing Normal Univ
Qian, Chunjiang	Univ. of Texas at San Antonio
MoB7	Arena B
Recent Advances in Distributed Control of Multi-Agent Systems (2) (Invited Session)	
Chair: Dong, Yi	Nanjing Univ. of Science and Tech
Organizer: Dong, Yi	Nanjing Univ. of Science and Tech

Organizer: Zhang, Hongwei	Southwest Jiaotong Univ
11:00-11:15	MoB7.1
<i>Leader-Following Problem of Rendezvous with Connectivity Preservation of Uncertain Nonlinear Multi-Agent Systems (I)</i> , pp. 309-314.	
Dong, Yi	Nanjing Univ. of Science and Tech
Huang, Jie	Chinese Univ. of Hong Kong
11:15-11:30	MoB7.2
<i>Formation Control of Multi-Agent Systems with Direction Adjustment (I)</i> , pp. 315-320.	
Tang, Yang	East China Univ. of Science and Tech
Li, Zhen	Xi-An Univ. of Posts & Telecommunications
Miao, Qingying	Shanghai Jiao Tong Univ
11:30-11:45	MoB7.3
<i>Bipartite Output Regulation of Multi-Agent Systems with Antagonistic Interactions (I)</i> , pp. 321-325.	
Dehghani Aghbolagh, Hassan	Univ. of Tabriz
Zamani, Mohsen	Univ. of Newcastle
Chen, Zhiyong	The Univ. of Newcastle
11:45-12:00	MoB7.4
<i>Optimal Asymptotical Tracking Via Output Feedback for a Linear System with Multiplicative Noise</i> , pp. 326-331.	
Lu, Jieying	South China Univ. of Tech
Li, Junhui	South China Univ. of Tech
Su, Weizhou	South China Univ. of Tech
Mo1Po	Room T1
Poster Sessions Monday (Interactive Session)	
15:30-17:00	Sub-session Mo1Po-01
Application-Based Practitioner Papers Interactive Session, 7 papers	
15:30-17:00	Sub-session Mo1Po-02
Autonomous Vehicles Interactive Session, 23 papers	
15:30-17:00	Sub-session Mo1Po-03
Adaptive and Robust Control Interactive Session, 21 papers	
15:30-17:00	Sub-session Mo1Po-04
Nonlinear Control and System Theory Interactive Session, 20 papers	
Mo1Po-01	Room T1
Application-Based Practitioner Papers (Interactive Session)	
Chair: Kobayashi, Ryosuke	Yokogawa
Co-Chair: Cheng, Xiaoxiao	The Univ. of Melbourne
15:30-17:00	Mo1Po-01.1
<i>3 Dimensional Laser Scanner Roll Patterning</i> , pp. 332-335.	
Kang, Heeshin	Korea Inst. of Machinery and Materials
15:30-17:00	Mo1Po-01.2

Observability Singularity of Batch Reactor: A Solution Based on High Order Sliding Mode Differentiator Approach, pp. 336-338.

Haidar, Ihab	Supélec-CNRS-Univ. Paris Sud
Barbot, Jean Pierre	ENSEA
Rapaport, Alain	INRA
GHANES, Malek	Centrale Nantes

15:30-17:00	Mo1Po-01.3
-------------	------------

An On-Line Process Dead-Time Estimation Algorithm, pp. 339-344.

Duffy, Gerrad	INNOVATION[X]
Mills, Peter	INNOVATION[X]
Li, Qin	Griffith Univ
Vlacic, Ljubo	Griffith Univ

15:30-17:00	Mo1Po-01.4
-------------	------------

Path Generation of Industrial Robot for Tracking Surface of Workpiece Using CAD-Based Off-Line Programming, pp. 345-346.

Chung, Seong Youb	Korea National Univ. of Transportation
Song, Il Jae	Wintech Automation
Hwang, Myun Joong	Korea National Univ. of Transportation

15:30-17:00	Mo1Po-01.5
-------------	------------

Automatic Assembly Method with the Passive Compliant Device, pp. 347-348.

PARK, DONG IL	Korea Inst. of Machinery & Materials
Kim, Hwisu	Korea Inst. of Machinery & Materials
Park, Chanhun	Korea Inst. of Machinery & Materials
Choi, Taeyong	Korea Inst. of Machinery & Materials
Kim, Byungin	Korea Inst. of Machinery & Materials
Do, Hyunmin	Korea Inst. of Machinery and Materials
Park, Jongwoo	Korea Inst. of Machinery & Materials

15:30-17:00	Mo1Po-01.6
-------------	------------

Predictive Control Using Mirror Plant and Application to LNG Regasification Plants, pp. 349-353.

Kobayashi, Ryosuke	Yokogawa
Kashiwa, Ryosuke	Yokogawa Electric Corp
Ishimaru, shin	Yokogawa Electric Corp
Uemura, Ryota	YOKOGAWA Electric Coporate
Nakaya, Makoto	Yokogawa Electric Corp
MIURA, SHINTARO	Omega Simulation

15:30-17:00	Mo1Po-01.7
-------------	------------

Optimal Control of an Autonomous Underwater Vehicle Equipped with the Collective and Cyclic Pitch Propeller, pp. 354-359.

Tran, Minh Quang	Australian Maritime Coll. Univ. of Tasmania
Nguyen, Hung Duc	National Centre for Maritime

Engineering and Hydrodynamics,
Aust

Mo1Po-02	Room T1
Autonomous Vehicles (Interactive Session)	

Chair: Moriwaki, Katsumi	Daido Univ
Co-Chair: Lau, Darwin	Chinese Univ. of Hong Kong

15:30-17:00	Mo1Po-02.1
-------------	------------

Design of UAV Distributed Aided Navigation Simulation System Based on Scene/Terrain Matching, pp. 360-364.

Cheng, Shanshan	School of Automation Science and Electrical Engineering, Beihang
Wang, Honglun	Beihang Univ
Ji, Hongxia	School of Automation Science and Electrical Engineering, Beihang
Li, Dawei	School of Automation Science and Electrical Engineering, Beihang

15:30-17:00	Mo1Po-02.2
-------------	------------

Development of a Generic Loiter Automation for a Fixed Wing UAV/OPV, pp. 365-370.

Krause, Christoph	Tech. Univ. Munich
Holzappel, Florian	Tech. Univ. München

15:30-17:00	Mo1Po-02.3
-------------	------------

Fault-Tolerant Control of Fixed-Wing UAV Using GA-Optimised Control Allocation Technique, pp. 371-376.

Pedro, Jimoh Olarewaju	Univ. of the Witwatersrand
Tshabalala, Thando Busisiwe	Univ. of the Witwatersrand

15:30-17:00	Mo1Po-02.4
-------------	------------

Flight Control of Gasoline-Engine Driven Hexacopter with Variable-Pitch: Towards Stable and Long-Endurance Flight, pp. 377-382.

Kimoto, Yuki	Tokyo Denki Univ
Iwase, Masami	Tokyo Denki Univ

15:30-17:00	Mo1Po-02.5
-------------	------------

Model Reference Adaptive Guidance for Trajectory Correction Projectile, pp. 383-387.

FAN, Jun-fang	Beijing Information Science & Tech. Univ
Zhao, Guo-ning	Beijing Information Science & Tech. Univ

15:30-17:00	Mo1Po-02.6
-------------	------------

Disturbance-Compensated Intercept Guidance Using Line-Of-Sight Rate Information, pp. 388-393.

Nakagawa, Saori	National Defense Acad
Yamasaki, Takeshi	National Defense Acad. of Japan
Takano, Hiroyuki	National Defense Acad. of Japan
Yamaguchi, Isao	National Defense Acad. of Japan

15:30-17:00	Mo1Po-02.7
-------------	------------

Optimal Path Planning Utilizing Dissipation Function Based on Terrain Elevation Map for Lunar Rovers, pp. 394-399.

Saito, Masafumi	Tokyo City Univ
Nonaka, Kenichiro	Tokyo City Univ
Sekiguchi, Kazuma	Tokyo City Univ

15:30-17:00	Mo1Po-02.8
<i>UAV Path Following Based on BLADRC and Inverse Dynamic Guidance Approach</i> , pp. 400-405.	
Wu, Jianfa	Beihang Univ
Wang, Honglun	Beihang Univ
Li, Na	Unmanned System Res. Inst. Beihang Univ
Su, Zikang	Beihang Univ
15:30-17:00	Mo1Po-02.9
<i>Ride Comfort Quality Improvement for a Quarter Car Semi-Active Suspension System Via State-Feedback Controller</i> , pp. 406-411.	
Yakub, Fitri	Tokyo Metropolitan Univ
Mori, Yasuchika	Tokyo Metropolitan Univ
Muhamad, Pauziah	Univ. Teknologi Malaysia
Che Daud, Zul Hilmi	Univ. Teknologi Malaysia
Abd Fattah, Abdul Yasser	Univ. Teknologi Malaysia
15:30-17:00	Mo1Po-02.10
<i>Investigation of Basis Functions in Boundary Modeling for Automotive Engine</i> , pp. 412-417.	
yamazaki, masahiro	Tokyo Denki Univ
Serizawa, Takuya	Tokyo Denki Univ
Nagaosa, Katsuaki	Tokyo Denki Univ
Iwase, Masami	Tokyo Denki Univ
15:30-17:00	Mo1Po-02.11
<i>Energy Conserving Vehicle Motion Control for Electric Vehicle Equipped with Multiple Drive Motors</i> , pp. 418-423.	
Oda, Takatsugu	Tokyo City Univ
Nonaka, Kenichiro	Tokyo City Univ
Sekiguchi, Kazuma	Tokyo City Univ
15:30-17:00	Mo1Po-02.12
<i>A Study on Detection Method of Vehicle Based on Lane Detection for a Driver Assistance System Using a Camera on Highway</i> , pp. 424-429.	
Nguyen, Van Quang	Inje Univ
Seo, Changjun	Electronic Engineering, Inje Univ
Kim, HeungSeob	Inje Univ
Boo, KwangSuck	Inje Univ
15:30-17:00	Mo1Po-02.13
<i>Sensor Anomaly Detection and Recovery in a Nonlinear Autonomous Ground Vehicle Model</i> , pp. 430-435.	
Lampiri, Evangelia	Univ. of Tech. Sydney (UTS)
15:30-17:00	Mo1Po-02.14
<i>Distributed Group Consensus of Discrete-Time Heterogeneous Multi-Agent Systems with Directed Communication Topology</i> , pp. 436-440.	
Feng, Yuanzhen	Nanjing Univ. of Posts and Telecommunications
Zheng, Wei Xing	Western Sydney Univ
15:30-17:00	Mo1Po-02.15
<i>Dynamic Mission Allocation for Interceptions by Using Multiple Rotary-Wing UAVs</i> , pp. 441-446.	
Zhu, Bing	Beihang Univ

Xie, Lihua	Nanyang Tech. Univ
Yin, Chun	Univ. of Electronic Science and Tech. of China
15:30-17:00	Mo1Po-02.16
<i>Detection of Landslide Disaster by Telemetric Sensing Node Network System</i> , pp. 447-452.	
Vu Van, Khoa	Ritsumeikan Univ
Nakano, Takeyoshi	Ritsumeikan Univ
Homma, Masanori	Ritsumeikan Univ
Takayama, Shigeru	Ritsumeikan Univ
15:30-17:00	Mo1Po-02.17
<i>Identification of Critical Cases of ADAS Safety by FOT Based Parameterization of a Catalogue</i> , pp. 453-458.	
Zhou, Jinwei	Johannes Kepler Univ
Del Re, Luigi	Johannes Kepler Univ. Linz
15:30-17:00	Mo1Po-02.18
<i>A Sensor-Based Exploration Algorithm for Autonomous Map Generation on Mobile Robot Using Kinect</i> , pp. 459-464.	
Kameyama, Naoki	Tokyo Denki Univ
Hidaka, Koichi	Tokyo Denki Univ
15:30-17:00	Mo1Po-02.19
<i>Design of Self-Localization Based Autonomous Driving Platform for an Electric Wheelchair</i> , pp. 465-466.	
Choi, Jung-Hae	Daegu Univ
Choi, Byung-Jae	Daegu Univ
15:30-17:00	Mo1Po-02.20
<i>Simultaneous Dual-Arm Motion Planning Considering Shared Transfer Path for Minimizing Operation Time</i> , pp. 467-472.	
Kurou, Jun	Keio Univ
yorozu, ayanori	Keio Univ
Takahashi, Masaki	Keio Univ
15:30-17:00	Mo1Po-02.21
<i>A Lane-Change Maneuver of Automated Vehicles for Improving Traffic Flow on Highways with Multiple Lanes</i> , pp. 473-478.	
Shiomi, Yuko	Waseda Univ
Wasa, Yasuaki	Waseda Univ
Uchida, Kenko	Waseda Univ
15:30-17:00	Mo1Po-02.22
<i>Modal Analysis for Lateral Dynamics of a High-Speed Train</i> , pp. 479-484.	
Kang, Chul-Goo	Konkuk Univ
Ha, Manh-Tuan	Konkuk Univ
Cho, Yon-Ho	Hyundai-Rotem Co
15:30-17:00	Mo1Po-02.23
<i>On Sustainable Vehicle Management - a Simulation Study -</i> , pp. 485-488.	
Moriwaki, Katsumi	Daido Univ

Mo1Po-03	Room T1
Adaptive and Robust Control (Interactive Session)	
Chair: Masuda, Shiro	Tokyo Metropolitan Univ

Co-Chair: Ha, Q.P.	UTS
15:30-17:00	Mo1Po-03.1
<i>A Study on Efficient Adaptation to Inexperienced Situations by Robots with Different Action Control Individualities</i> , pp. 489-494.	
Yoshida, Yu	Tokai Univ
Mikami, Yutaro	Tokai Univ
Suzuki, Masakazu	Tokai Univ
15:30-17:00	Mo1Po-03.2
<i>Multivariable MRAC for a Quadrotor UAV with a Non-Diagonal Interactor Matrix</i> , pp. 495-500.	
Sheng, Yu	Univ. of Virginia
Tao, Gang	Univ. of Virginia
15:30-17:00	Mo1Po-03.3
<i>Distributed Adaptive Neural Consensus Tracking Control for a Class of Nonlinear Strict-Feedback Multi-Agent Systems</i> , pp. 501-506.	
Shang, Yun	Qingdao Univ
Chen, Bing	Qingdao Univ
Lin, Chong	Qingdao Univ
Zhang, Li	Qingdao Univ
15:30-17:00	Mo1Po-03.4
<i>Interaction between a Fault-Tolerant Flight Control System Using Simple Adaptive Control and Pilot's Pitch Control</i> , pp. 507-512.	
Takase, Ryoichi	The Univ. of Tokyo
Entzinger, Jorg Onno	The Univ. of Tokyo
Suzuki, Shinji	The Univ. of Tokyo
15:30-17:00	Mo1Po-03.5
<i>Data-Driven Linearly Parametrized Controller Design Based on Minimum Variance Evaluation</i> , pp. 513-518.	
Okada, Shogo	Tokyo Metropolitan Univ
Masuda, Shiro	Tokyo Metropolitan Univ
15:30-17:00	Mo1Po-03.6
<i>Pre-Filter Design for Non-Iterative Data-Driven Controller Parameters Tuning Using Closed-Loop Step Response Data</i> , pp. 519-524.	
Kajiwar, Ryota	Tokyo Metropolitan Univ
Masuda, Shiro	Tokyo Metropolitan Univ
Matsui, Yoshihiro	National Inst. of Tech. Tokyo Coll
15:30-17:00	Mo1Po-03.7
<i>Non-Iterative Data-Driven Controller Parameters Tuning of Feedback Linearizing Controller</i> , pp. 525-530.	
Tsukui, Fumiya	Tokyo Metropolitan Univ
Masuda, Shiro	Tokyo Metropolitan Univ
15:30-17:00	Mo1Po-03.8
<i>Attitude Control Law for Reentry Vehicle Based on Extended State Observer</i> , pp. 531-536.	
Quan, Shenming	Harbin Inst. of Tech
Chao, Tao	Harbin Inst. of Tech
Wang, Songyan	Harbin Inst. of Tech
Yang, Ming	Harbin Inst. of Tech
15:30-17:00	Mo1Po-03.9

<i>Adaptive Sliding Mode Control for Head-Angle and Velocity Tracking of Planar Snake Robot</i> , pp. 537-542.	
Mukherjee, Joyjit	Indian Inst. of Tech. Delhi
Kar, Indra Narayan	Indian Inst. of Tech. Delhi
Mukherjee, Sudipto	Indian Inst. of Tech. Delhi
15:30-17:00	Mo1Po-03.10
<i>L1 Adaptive Control of the Flying Wing UAV with Unknown Time-Varying Disturbances</i> , pp. 543-548.	
Xi, Ao	Monash Univ
ZHAO, YIJIN	Commercial Aircraft Corp. of China
15:30-17:00	Mo1Po-03.11
<i>Decentralized Second-Order Sliding Mode Control Design for a Small-Scale Magnetic Levitation Platform</i> , pp. 549-554.	
Banza, Arnold Tshimanga	Univ. of Melbourne
Chen, Qiang	Coll. of Mechatronics Engineering and Automation, National Uni
15:30-17:00	Mo1Po-03.12
<i>A Study on Robust Electromagnetic Shunt Damping by Parallel R-C or Parallel L-R Shunt Circuit Based on μ-Synthesis</i> , pp. 555-560.	
Ikegame, Toru	Nagoya Univ
Takagi, Kentaro	Nagoya Univ
15:30-17:00	Mo1Po-03.13
<i>A Study on Robust Control Method of Underwater Vehicle Using SMCSPO</i> , pp. 561-564.	
Kim, Hyun Hee	Pusan National Univ
Won, Jong Seob	Jeonju Univ
Cho, Hyeon Jin	Agency for Defense Development
Hwang, Jun Ho	Agency for Defense Development
Lee, Min Cheol	Pusan National Univ
15:30-17:00	Mo1Po-03.14
<i>Reliable Robust PID Controller Design for TRMS</i> , pp. 565-569.	
Rao, Vidya	Manipal Inst. of Tech. Manipal Univ
George, V.I	Manipal Inst. of Tech. Manipal Univ
Kamath, Sureka	Manipal Inst. of Tech. Manipal Univ
Chokkadi, Shreesha	Manipal Inst. of Tech
15:30-17:00	Mo1Po-03.15
<i>Observer-Based Dynamic Output-Feedback Protocol for H_∞ Tracking Control of Multi-Agent Systems</i> , pp. 570-575.	
Wang, Dong	Dalian Univ. of Tech
guo, shixin	Dalian Univ. of Tech
Lian, Jie	Dalian Univ. of Tech
Wang, Wei	Dalian Univ. of Tech
15:30-17:00	Mo1Po-03.16
<i>All Stabilizing PID Controllers for Interval Systems and Systems with Affine Parametric Uncertainties</i> , pp. 576-581.	
Mihailescu-Stoica, Dinu	TU Darmstadt
Schrödel, Frank	IAV GmbH
Adamy, Juergen	Tech. Univ. Darmstadt

15:30-17:00	Mo1Po-03.17
<i>Effectiveness of Higher Order Controllers for Uncertain Systems</i> , pp. 582-587.	
Tada, Tomoki	Kyushu Inst. of Tech
Izumiguchi, Yuya	Kyushu Inst. of Tech
Sebe, Noboru	Kyushu Inst. of Tech
15:30-17:00	Mo1Po-03.18
<i>Strong Stability Based Robust Sliding Mode Control</i> , pp. 588-593.	
Argha, Ahmadreza	Univ. of Tech. Sydney
Li, Li	Univ. of Tech. Sydney
Ha, Q.P.	UTS
Su, Steven Weidong	Univ. of Tech. Sydney
Nguyen, Hung T.	Univ. of Tech. Sydney
15:30-17:00	Mo1Po-03.19
<i>A Tuning Method for Uncertain Processes of Thermal Power Plant Based on the Worst Soft Characteristic</i> , pp. 594-599.	
Do Cao, Trung	Hanoi Univ. of Science and Tech
Nguyen Van, Manh	Hanoi Univ. of Science and Tech
15:30-17:00	Mo1Po-03.20
<i>H∞ Based State Feedback Robust Controller for Nonlinear Teleoperation System with Variable Time Delays</i> , pp. 600-605.	
Al-Wais, Saba	Inst. for Intelligent Systems Res. and Innovation, Waurm
Lee, Tae H.	Deakin Univ
Shanmugam, Lakshmanan	Kunsan National Univ
Abdi, Hamid	Deakin Univ
Nahavandi, Saeid	Deakin Univ
15:30-17:00	Mo1Po-03.21
<i>Reduction of Chattering for a Sliding Mode Control of a Bi-Steerable Car</i> , pp. 606-611.	
Hamerlain, Faiza	LAGIS
Mo1Po-04 Room T1	
Nonlinear Control and System Theory (Interactive Session)	
Chair: Guo, Hai-jiao	Tohoku Gakuin Univ
Co-Chair: chen, yong	Univ. of Electronic Science and Tech. of China
15:30-17:00	Mo1Po-04.1
<i>Time-Delay Control Based on a Nonlinear Vehicle Lateral Dynamics</i> , pp. 612-616.	
Cho, Soonwan	Pohang Univ. of Science and Tech
Baek, jaemin	Pohang Univ. of Science and Tech
Hong, Sangseok	Mechatronics & Manufacturing Tech. Center, Samsung Electron
Lee, Hyoung woong	POSTECH, Electrical Engineering
Kim, Changhyun	Pohang Univ. of Science and Tech
HAN, Soohee	Pohang Univ. of Science and Tech
15:30-17:00	Mo1Po-04.2
<i>Discrete-Time Nonlinear Attitude Tracking Control of Spacecraft</i> , pp. 617-622.	
Ikeda, Yuichi	Shonan Inst. of Tech

15:30-17:00	Mo1Po-04.3
<i>Disturbance Observer-Enhanced Nonlinear Dynamic Inversion Control for Unmanned Helicopter Path Tracking</i> , pp. 623-628.	
Chen, Nanyu	Beihang Univ
Zhou, Yaoming	Beihang Univ
Jun, Huang	Beihang Univ
Yang, Haipeng	Beihang Univ
15:30-17:00	Mo1Po-04.4
<i>Gain-Scheduled H2-Performance Control of Individual Synchronous Generators with Static VAR Compensator Controllers</i> , pp. 629-634.	
Zhou, Jun	Hohai Univ
Wang, Cui	Hohai Univ
Qian, Huimin	Hohai Univ
15:30-17:00	Mo1Po-04.5
<i>Nonlinear Model Predictive Control of a Planar Three-Link Space Manipulator</i> , pp. 635-640.	
Kayastha, Sharmila	Univ. of New South Wales
Shi, Lingling	Univ. of New South Wales
Katupitiya, Jayantha	Univ. of New South Wales
Pearce, Garth	Univ. of New South Wales
15:30-17:00	Mo1Po-04.6
<i>Geometric Tracking Control of a Three-Dimensional Revolute Joint Robot</i> , pp. 641-646.	
Hoffman, Derek	Embry-Riddle Aeronautical Univ
Reyhanoğlu, Mahmut	Univ. of North Carolina at Asheville
15:30-17:00	Mo1Po-04.7
<i>Approximation of the Robust Domain of Attraction for Uncertain Polynomial Systems</i> , pp. 647-652.	
Pursche, Thomas	Univ. of Wuppertal
Clauss, Roland	Univ. of Wuppertal
Tibken, Bernd	Wuppertal Univ
15:30-17:00	Mo1Po-04.8
<i>Creation and Stabilization of Limit Cycles in Chaotic Attractors through Closure of Orbits</i> , pp. 653-658.	
Kumar, Aravind	Indian Inst. of Tech. Madras
Ali, Shaikh Faruque	Indian Inst. of Tech. Madras
Friswell, Michael	Coll. of Engineering Swansea Univ
Arunachalakasi, Arockiarajan	IIT Madras
15:30-17:00	Mo1Po-04.9
<i>PID-Based Stability Analysis for Unknown Affine Nonlinear Discrete-Time Systems</i> , pp. 659-664.	
Xiong, Shuangshuang	Advanced Control Systems Lab
Jin, Shangtai	Beijing Jiaotong Univ
Hou, Zhongsheng	Beijing Jiaotong Univ
15:30-17:00	Mo1Po-04.10
<i>Evaluation of Tracking Performance of NPID Double Hyperbolic Controller Design for XY Table Ball-Screw Drive System</i> , pp. 665-670.	
Junoh, Sahida	Univ. Teknikal Malaysia Melaka (UTeM)

Abdullah, Lokman	Univ. Teknikal Malaysia Melaka (UTeM)
Syed Salim, Syed Najib	Univ. Teknikal Malaysia Melaka (UTeM)
Jamaludin, Zamberi	Univ. Teknikal Malaysia Melaka (UTeM)
Anang, Nur Amira	Univ. Teknikal Malaysia Melaka (UTeM)
Tsung Heng, Chiew	Univ. Teknikal Malaysia Melaka (UTeM)
Retas, Zain	Pol. Merlimau
15:30-17:00	Mo1Po-04.11
<i>Adaptive Twisting Sliding Mode Control for Quadrotor Unmanned Aerial Vehicles</i> , pp. 671-676.	
Hoang, Van Truong	Univ. of Tech. Sydney
Phung, Manh Duong	Univ. of Tech. Sydney
Ha, Q.P.	UTS
15:30-17:00	Mo1Po-04.12
<i>Sliding Mode Fault Tolerant Control for Nonlinear Dynamic Systems with Actuator Fault and External Disturbances</i> , pp. 677-681.	
Guo, Bin	Univ. of Electronic Science and Tech. of China
chen, yong	Univ. of Electronic Science and Tech. of China
15:30-17:00	Mo1Po-04.13
<i>Improved Linear Sliding Mode Controller of Buck Converter through Adding Terminal Sliding Mode</i> , pp. 682-686.	
WANG, Yanmin	Harbin Inst. of Tech
15:30-17:00	Mo1Po-04.14
<i>A Random Opinion Formation Model Over Signed Networks</i> , pp. 687-692.	
Xing, Yu	Acad. of Mathematics and Systems Science, Chinese Acad. of S
Fang, Haitao	Acad. of Mathematics and Systems Science, Chinese Acad. Of
15:30-17:00	Mo1Po-04.15
<i>Some Fundamental Aspects of Second and Third Order Repetitive Controllers</i> , pp. 693-698.	
Guo, Hai-jiao	Tohoku Gakuin Univ
Ishihara, Tadashi	Fukushima Univ
15:30-17:00	Mo1Po-04.16
<i>A Non-Smooth Stochastic Lyapunov Function and Its Relationship with Viscosity Solutions</i> , pp. 699-704.	
Nishimura, Yuki	Kagoshima Univ
Hoshino, Kenta	Aoyama Gakuin Univ
15:30-17:00	Mo1Po-04.17
<i>Optimal Energy Management System for Strategic Prosumer Microgrids: An Average Bidding Algorithm for Prosumer Aggregators</i> , pp. 705-710.	
Macana, Carlos Andres	Univ. of New South Wales
Pota, Hemanshu R.	Univ. of New South Wales
15:30-17:00	Mo1Po-04.18

<i>Passivity-Based Conditional Servo-Mechanism Design for a Nonlinear Benchmark System</i> , pp. 711-716.	
Azhar, Muhammad Aatif Mobeen	National Univ. of Sciences and Tech. (NUST) - PNec
Memon, Attaullah Y.Memon	Pnec, Nust
15:30-17:00	Mo1Po-04.19
<i>Control of Underactuated Bridge Cranes: A Simplified IDA-PBC Approach</i> , pp. 717-722.	
Li, Xue	Peking Univ
Geng, Zhiyong	Peking Univ
15:30-17:00	Mo1Po-04.20
<i>Closed-Loop PDa -Type Iterative Learning Control for Fractional Nonlinear Systems with Time-Delay</i> , pp. 723-728.	
Yu, Chenchen	Beijing Univ. of Chemical Tech
Wang, Jing	Beijing Univ. of Chemical Tech

MoC1	Room 1
Collective Intelligent Control in Multi-Agent Dynamical Systems (Invited Session)	
Chair: Yu, Wenwu	Southeast Univ
Organizer: Yu, Wenwu	Southeast Univ
Organizer: Wen, Guanghui	Southeast Univ
Organizer: Fu, Junjie	Peking Univ
17:00-17:15	MoC1.1
<i>Robust Consensus Tracking for Heterogeneous Linear Multi-Agent Systems with Disturbances (I)</i> , pp. 729-734.	
Hong, Huifen	Southeast Univ
Yu, Wenwu	Southeast Univ
Wen, Guanghui	Southeast Univ
Fu, Junjie	Peking Univ
17:15-17:30	MoC1.2
<i>Stability Analysis and Synthesis of Uncertain Two-Dimensional Switched Positive Systems (I)</i> , pp. 735-740.	
Wang, Jinling	Southeast Univ
Liang, Jinling	Southeast Univ
17:30-17:45	MoC1.3
<i>Distributed Leader-Following Consensus of a Class of Nonlinear Multi-Agent Systems</i> , pp. 741-744.	
shi, yi	Inst. of Automation, Jiangnan Univ. Wuxi, 214122, Chin
Yin, Yanyan	Curtin Univ
Liu, Cheng-Lin	Jiangnan Univ
Liu, Fei	Jiangnan Univ
17:15-18:00	MoC1.4
<i>Cooperative Control in the Presence of Antagonistic Reciprocity</i> , pp. 745-749.	
zhang, wentao	Tianjin Univ
Zuo, Zhiqiang	Tianjin Univ
Wang, Yijing	Tianjin Univ
MoC2	Room 2
Robotics and Motion Control (3) (Regular Session)	

Chair: Yin, Chenkun	Beijing Jiaotong Univ
17:00-17:15	MoC2.1
<i>Modeling of Axial Drift of a Single Gimbal Control Moment Gyroscope</i> , pp. 750-753.	
lee, sangdeok	Chungnam National Univ
Jung, Seul	Chungnam National Univ
17:15-17:30	MoC2.2
<i>Analysis and Control of a Snake-Like Robot with Controllable Side-Thrust Links</i> , pp. 754-759.	
Takagi, Yuki	Osaka Univ
Sueoka, Yuichiro	Osaka Univ
Ishikawa, Masato	Osaka Univ
Osuka, Koichi	Osaka Univ. Japan
17:30-17:45	MoC2.3
<i>A Path Planning Algorithm for Unmanned Vehicles Based on Target-Oriented Rapidly-Exploring Random Tree</i> , pp. 760-765.	
gong, haijun	Beijing Jiaotong Univ
Yin, Chenkun	Beijing Jiaotong Univ
zhang, fang	Beijing Zhixingzhe Tech. Limited
Hou, Zhongsheng	Beijing Jiaotong Univ
Zhang, Ruikun	Qingdao Univ. of Science and Tech
17:15-18:00	MoC2.4
<i>Development and Verification of a 2-Link Flexible Serial Arm Testbed for 3D Spatial Movements</i> , pp. 766-771.	
Kivila, Arto	Georgia Inst. of Tech
Burgin, Jonah	Georgia Inst. of Tech
Book, Wayne	Georgia Inst. of Tech
Singhose, William E.	Georgia Inst. of Tech
MoC3	Room 3
Autonomous Systems (3) (Regular Session)	
Chair: Takeshi, Nishida	Kyushu Inst. of Tech
17:00-17:15	MoC3.1
<i>Towards the Realtime Sampling-Based Kinodynamic Planning for Quadcopters</i> , pp. 772-777.	
Lan, Menglu	National Univ. of Singapore
Lai, Shupeng	National Univ. of Singapore
Chen, Ben M.	National Univ. of Singapore
17:15-17:30	MoC3.2
<i>Development of Universal Parallel Gripper Using Reformed Magnetorheological Fluid</i> , pp. 778-783.	
Tsugami, Yusuke	Kyushu Inst. of Tech
barbie, thibault	Kyushu Inst. of Tech
Tadakuma, Kenjiro	Tohoku Univ
Takeshi, Nishida	Kyushu Inst. of Tech
17:30-17:45	MoC3.3
<i>Modelling and Control of a Quadrotor Equipped with an Unbalanced Load</i> , pp. 784-789.	
Xu, Zhongyan	Harbin Inst. of Tech
He, Fenghua	Harbin Inst. of Tech
Xing, Xiaowei	Harbin Inst. of Tech
Qi, Hongsheng	Chinese Acad. of Sciences

Huo, Xin	Harbin Inst. of Tech
17:15-18:00	MoC3.4
<i>Smooth Trajectory Generation for Soft Catching a Flying Object with an Aerial Vehicle</i> , pp. 790-794.	
Lee, Seungjoon	Seoul National Univ
Seo, Hoseong	Seoul National Univ
Choi, Seungwon	Seoul National Univ
Kim, Hyoin	Seoul National Univ
Kim, H Jin	Seoul National Univ

MoC4	Room 4
Signal Processing (Regular Session)	
Chair: Petersen, Ian R.	Australian Defence Force Acad
17:00-17:15	MoC4.1
<i>Continuous-Discrete Shifted Rayleigh Filter for Underwater Passive Bearings-Only Target Tracking</i> , pp. 795-800.	
Radhakrishnan, Rahul	Indian Inst. of Tech. Patna
Bhaumik, Shovan	Indian Inst. of Tech. Patna
Tomar, Nutan Kumar	Indian Inst. of Tech. Patna
17:15-17:30	MoC4.2
<i>Online Secondary Path Estimation in Active Noise Control Systems Using a Scheduled Step Size Algorithm</i> , pp. 801-806.	
Kim, Dong Woo	POSTECH
Park, PooGyeon	Pohang Univ. of Sci. & Tech
17:30-17:45	MoC4.3
<i>Feedback Control of a Non-Markovian Single Qubit System</i> , pp. 807-811.	
Xue, Shibe	Shanghai Jiao Tong Univ
Nguyen, Thien	Australian National Univ
Petersen, Ian R.	Australian Defence Force Acad
17:15-18:00	MoC4.4
<i>Bias Compensation Based Recursive Least-Squares Identification Algorithm for MISO System with Input and Output Noises</i> , pp. 812-816.	
Wu, Ai-Guo	Harbin Inst. of Tech. Shenzhen Graduate School
Qi, Wen-Nian	Harbin Inst. of Tech. Shenzhen Graduate School
Dong, Rui-Qi	Harbin Inst. of Tech. Shenzhen Graduate School

MoC5	Room 5
Cyber-Physical Systems: Optimal and Secure Control (3) (Invited Session)	
Chair: Wu, Jing	Shanghai Jiao Tong Univ
Organizer: Zou, Yuanyuan	Shanghai Jiao Tong Univ
Organizer: Yuan, Ye	Huazhong Univ. of Science and Tech
17:00-17:15	MoC5.1
<i>Dissipativity Based Distributed Model Predictive Control for Process Network Reconfiguration (I)</i> , pp. 817-822.	
He, Ye	Shanghai Jiao Tong Univ
Li, Shaoyuan	Shanghai Jiao Tong Univ

Zheng, Yi	Shanghai Jiao Tong Univ
17:15-17:30	MoC5.2
<i>Synchronization of Multilayer Networks with Stochastic Switching Layers (I)</i> , pp. 823-828.	
He, Wangli	East Chia Univ. of Science and Tech
Lv, Siqi	East China Univ. of Science and Tech
Peng, Chen	Shanghai Univ
Qian, Feng	East China Univ. of Sci. and Tech
17:30-17:45	MoC5.3
<i>Enhanced Distributed MPC Design for Efficiency Utility of Autonomous Multi-Microgrids (I)</i> , pp. 829-834.	
Du, Yigao	Shanghai Jiao Tong Univ
Wu, Jing	Shanghai Jiao Tong Univ
Li, Shaoyuan	Shanghai Jiao Tong Univ
Long, Chengnian	Shanghai Jiao Tong Univ
17:15-18:00	MoC5.4
<i>Hierarchical Nested Predictive Control for Energy Management of Multi-Microgrids System (I)</i> , pp. 835-840.	
Zou, Yuan yuan	Shanghai Jiao Tong Univ
Dong, Yi	East China Univ. of Science and Tech
Li, Shaoyuan	Shanghai Jiao Tong Univ
Niu, Yugang	East China Univ. of Science & Tech

MoC6	Room 6
Nonlinear Control (3) (Regular Session)	
Chair: Hoshino, Kenta	Aoyama Gakuin Univ
17:00-17:15	MoC6.1
<i>Finite-Time Stability of State-Dependent Homogeneous Systems</i> , pp. 841-846.	
Hoshino, Kenta	Aoyama Gakuin Univ
Nishimura, Yuki	Kagoshima Univ
17:15-17:30	MoC6.2
<i>Neural Network Integrated Sliding Mode Control of Floating Container Cranes</i> , pp. 847-852.	
Pham Van, Trieu	Vietnam Maritime Univ
17:30-17:45	MoC6.3
<i>Robust Attitude Tracking Control of a Rigid Spacecraft Based on Nonlinearly Controlled Quaternions</i> , pp. 853-858.	
Xu, Dabo	Nanjing Univ. of Science and Tech
He, Jiafan	Nanjing Univ. of Science and Tech
Sheng, Andong	Nanjing Univ. of Science and Tech
Chen, Zhiyong	The Univ. of Newcastle
Wang, Dan	Dalian Maritime Univ
17:15-18:00	MoC6.4
<i>Non-Contact Vibration Control of an Axially Moving Beam</i> , pp. 859-863.	
Nguyen, Quoc Chi	Ho Chi Minh City Univ. of Tech
Ho, Thanh Phuong	Ho Chi Minh City of Tech

MoC7	Arena B
Linear Systems (Regular Session)	
Chair: Oetomo, Denny	Univ. of Melbourne
17:00-17:15	MoC7.1
<i>Stability Analysis of Linear Systems with a Time-Varying Delay Via a New Integral Inequality</i> , pp. 864-868.	
Liu, Yajuan	Yeungnam Univ
Park, Ju H.	Yeungnam Univ
Jung, H.Y.	Yeungnam Univ
Lee, S.M.	Kyungpook National Univ
17:15-17:30	MoC7.2
<i>General Partial Synchronization of Drive-Response Boolean Networks</i> , pp. 869-874.	
Zhong, Jie	City Univ. of Hong Kong
Ho, Daniel W. C.	City Univ. of Hong Kong
Lu, Jianquan	Southeast Univ
Xu, Wenying	City Univ. of Hong Kong
17:30-17:45	MoC7.3
<i>Design of Feedback Gain in Feedback-Based Iterative Learning Control</i> , pp. 875-880.	
Sebastian, Gijo	Univ. of Melbourne
Tan, Ying	The Univ. of Melbourne
Oetomo, Denny	Univ. of Melbourne
Mareels, Iven	The Univ. of Melbourne
17:15-18:00	MoC7.4
<i>Mean-Square Stabilization for a Class of Discrete-Time Systems with Random Delay</i> , pp. 881-886.	
Li, Junhui	South China Univ. of Tech
Lu, Jieying	South China Univ. of Tech
Su, Weizhou	South China Univ. of Tech

MoC8	Room 7
Transportation Systems (Regular Session)	
Chair: Wang, Danwei	Nanyang Tech. Univ
17:00-17:15	MoC8.1
<i>Convergence Analysis of Iterative Tuning Strategy for Urban Traffic Signal Control</i> , pp. 887-892.	
Wang, Yu	Nanyang Tech. Univ
YANG, HUAN	Nanyang Tech. Univ
Wang, Danwei	Nanyang Tech. Univ
17:15-17:30	MoC8.2
<i>Ensuring Service Level in Dynamic Vehicle Routing Problem</i> , pp. 893-898.	
Ye, Yonghong	Tsinghua Univ
Chen, Xi	Tsinghua Univ
17:30-17:45	MoC8.3
<i>Two-Region Macroscopic Traffic Network Perimeter Control Via Model Free Adaptive Control Based Strategy</i> , pp. 899-904.	
Ren, Ye	Beijing Jiaotong Univ
Hou, Zhongsheng	Beijing Jiaotong Univ
Lei, Ting	Beijing Jiaotong Univ

17:15-18:00

MoC8.4

Analysis and Control of Compensation Rope Response in Elevator System with Time-Varying Length, pp. 905-910.

Nguyen, Xuan Thuan

Kyoto Inst. of Tech

Miura, Nanako

Kyoto Inst. of Tech

Sone, Akira

Kyoto Institute of Tech

Interactive Paper Presentation Session (Poster Papers) - Monday 18 Dec 2017
Foyer F, 15:30-17:00

Poster Board	Paper Title	Session	Paper ID
1	3 Dimensional Laser Scanner Roll Patterning	Practitioner papers	446
2	Observability Singularity of Batch Reactor: A Solution Based on High Order Sliding Mode Differentiator Approach	Practitioner papers	493
3	An On-Line Process Dead-Time Estimation Algorithm	Practitioner papers	90
4	Path Generation of Industrial Robot for Tracking Surface of Workpiece Using CAD-Based Off-Line Programming	Practitioner papers	405
5	Automatic Assembly Method with the Passive Compliant Device	Practitioner papers	499
6	Predictive Control using Mirror Plant and Application to LNG Regasification Plants	Practitioner papers	251
7	Optimal Control of an Autonomous Underwater Vehicle Equipped with the Collective and Cyclic Pitch Propeller	Practitioner papers	544
8	A Study on Efficient Adaptation to Inexperienced Situations by Robots with Different Action Control Individualities	Adaptive and Robust Control	609
9	Multivariable MRAC for a Quadrotor UAV with a Non-Diagonal Interactor Matrix	Adaptive and Robust Control	589
10	Distributed Adaptive Neural Consensus Tracking Control for a Class of Nonlinear Strict-Feedback Multi-Agent Systems	Adaptive and Robust Control	49
11	Interaction between a Fault-Tolerant Flight Control System Using Simple Adaptive Control and Pilot's Pitch Control	Adaptive and Robust Control	292
12	Data-Driven Linearly Parametrized Controller Design Based on Minimum Variance Evaluation	Adaptive and Robust Control	282
13	Pre-Filter Design for Non-Iterative Data-Driven Controller Parameters Tuning Using Closed-Loop Step Response Data	Adaptive and Robust Control	283
14	Non-Iterative Data-Driven Controller Parameters Tuning of Feedback Linearizing Controller	Adaptive and Robust Control	284
15	Attitude Control Law for Reentry Vehicle Based on Extended State Observer	Adaptive and Robust Control	578
16	Adaptive Sliding Mode Control for Head-Angle and Velocity Tracking of Planar Snake Robot	Adaptive and Robust Control	476
17	L1 Adaptive Control of the Flying Wing UAV with Unknown Time-Varying Disturbances	Adaptive and Robust Control	9
18	Decentralized Second-Order Sliding Mode Control Design for a Small-Scale Magnetic Levitation Platform	Adaptive and Robust Control	635
19	A Study on Robust Electromagnetic Shunt Damping by Parallel R-C or Parallel L-R Shunt Circuit Based on μ -Synthesis	Adaptive and Robust Control	196
20	A Study on Robust Control Method of Underwater Vehicle Using SMCSPO	Adaptive and Robust Control	399
21	Reliable Robust PID Controller Design for TRMS	Adaptive and Robust Control	356
22	Observer-Based Dynamic Output-Feedback Protocol for H _∞ ; Tracking Control of Multi-Agent Systems	Adaptive and Robust Control	262
23	All Stabilizing PID Controllers for Interval Systems and Systems with Affine Parametric Uncertainties	Adaptive and Robust Control	194
24	Effectiveness of Higher Order Controllers for Uncertain Systems	Adaptive and Robust Control	306
25	Strong Stability Based Robust Sliding Mode Control	Adaptive and Robust Control	474
26	A Tuning Method for Uncertain Processes of Thermal Power Plant Based on the Worst Soft Characteristic	Adaptive and Robust Control	525
27	H _∞ ; Based State Feedback Robust Controller for Nonlinear Teleoperation System with Variable Time Delays	Adaptive and Robust Control	71
28	Reduction of Chattering for a Sliding Mode Control of a Bi-Steerable Car	Adaptive and Robust Control	473
29	Design of UAV Distributed Aided Navigation Simulation System Based on Scene/Terrain Matching	Autonomous Vehicles	220
30	Development of a Generic Loiter Automation for a Fixed Wing UAV/OPV	Autonomous Vehicles	376

31	Fault-Tolerant Control of Fixed-Wing UAV Using GA-Optimised Control Allocation Technique	Autonomous Vehicles	534
32	Flight Control of Gasoline-Engine Driven Hexacopter with Variable-Pitch: Towards Stable and Long-Endurance Flight	Autonomous Vehicles	539
33	Disturbance-Compensated Intercept Guidance Using Line-of-Sight Rate Information	Autonomous Vehicles	179
34	Optimal Path Planning utilizing Dissipation Function based on Terrain Elevation Map for Lunar Rovers	Autonomous Vehicles	585
35	UAV Path Following Based on BLADRC and Inverse Dynamic Guidance Approach	Autonomous Vehicles	10
36	Ride Comfort Quality Improvement for a Quarter Car Semi-Active Suspension System Via State-Feedback Controller	Autonomous Vehicles	517
37	Investigation of Basis Functions in Boundary Modeling for Automotive Engine	Autonomous Vehicles	482
38	Energy Conserving Vehicle Motion Control for Electric Vehicle Equipped with Multiple Drive Motors	Autonomous Vehicles	618
39	A Study on Detection Method of Vehicle Based on Lane Detection for a Driver Assistance System Using a Camera on Highway	Autonomous Vehicles	145
40	Sensor Anomaly Detection and Recovery in a Nonlinear Autonomous Ground Vehicle Model	Autonomous Vehicles	172
41	Distributed Group Consensus of Discrete-Time Heterogeneous Multi-Agent Systems with Directed Communication Topology	Autonomous Vehicles	541
42	Dynamic Mission Allocation for Interceptions by Using Multiple Rotary-Wing UAVs	Autonomous Vehicles	241
43	Detection of Landslide Disaster by Telemetric Sensing Node Network System	Autonomous Vehicles	484
44	Identification of Critical Cases of ADAS Safety by FOT Based Parameterization of a Catalogue	Autonomous Vehicles	395
45	A Sensor-Based Exploration Algorithm for Autonomous Map Generation on Mobile Robot Using Kinect	Autonomous Vehicles	119
46	Design of Self-Localization Based Autonomous Driving Platform for an Electric Wheelchair	Autonomous Vehicles	642
47	Simultaneous Dual-Arm Motion Planning Considering Shared Transfer Path for Minimizing Operation Time	Autonomous Vehicles	339
48	A Lane-Change Maneuver of Automated Vehicles for Improving Traffic Flow on Highways with Multiple Lanes	Autonomous Vehicles	180
49	Modal Analysis for Lateral Dynamics of a High-Speed Train	Autonomous Vehicles	139
50	On Sustainable Vehicle Management - a Simulation Study -	Autonomous Vehicles	303
51	Step Response Based Identification of Hammerstein Models: Application to Mach number Drift in an Intermittent Wind Tunnel	Autonomous Vehicles	12
52	Time-Delay Control Based on a Nonlinear Vehicle Lateral Dynamics	Nonlinear Control and System Theory	353
53	Discrete-Time Nonlinear Attitude Tracking Control of Spacecraft	Nonlinear Control and System Theory	602
54	Disturbance Observer-Enhanced Nonlinear Dynamic Inversion Control for Unmanned Helicopter Path Tracking	Nonlinear Control and System Theory	428
55	Gain-Scheduled H2-Performance Control of Individual Synchronous Generators with Static VAR Compensator Controllers	Nonlinear Control and System Theory	63
56	Nonlinear Model Predictive Control of a Planar Three-Link Space Manipulator	Nonlinear Control and System Theory	58
57	Geometric Tracking Control of a Three-Dimensional Revolute Joint Robot	Nonlinear Control and System Theory	28
58	Approximation of the Robust Domain of Attraction for Uncertain Polynomial Systems	Nonlinear Control and System Theory	514
59	Creation and Stabilization of Limit Cycles in Chaotic Attractors through Closure of Orbits	Nonlinear Control and System Theory	104
60	PID-Based Stability Analysis for Unknown Affine Nonlinear Discrete-Time Systems	Nonlinear Control and System Theory	506
61	Evaluation of Tracking Performance of NPID Double Hyperbolic Controller Design for XY Table Ball-Screw Drive System	Nonlinear Control and System Theory	348
62	Adaptive Twisting Sliding Mode Control for Quadrotor Unmanned Aerial Vehicles	Nonlinear Control and System Theory	516
63	Sliding Mode Fault Tolerant Control for Nonlinear Dynamic Systems with Actuator Fault and External Disturbances	Nonlinear Control and System Theory	643
64	Improved Linear Sliding Mode Controller of Buck Converter through Adding Terminal Sliding Mode	Nonlinear Control and System Theory	350

65	A Random Opinion Formation Model over Signed Networks	Nonlinear Control and System Theory	289
66	Some Fundamental Aspects of Second and Third Order Repetitive Controllers	Nonlinear Control and System Theory	378
67	A Non-Smooth Stochastic Lyapunov Function and Its Relationship with Viscosity Solutions	Nonlinear Control and System Theory	361
68	Optimal Energy Management System for Strategic Prosumer Microgrids: An Average Bidding Algorithm for Prosumer Aggregators	Nonlinear Control and System Theory	498
69	Passivity-Based Conditional Servo-Mechanism Design for a Nonlinear Benchmark System	Nonlinear Control and System Theory	623
70	Control of Underactuated Bridge Cranes: A Simplified IDA-PBC Approach	Nonlinear Control and System Theory	198
71	Closed-Loop PDα -Type Iterative Learning Control for Fractional Nonlinear Systems with Time-Delay	Nonlinear Control and System Theory	402
72	A Maximum Principle for a Special Optimal Multiprocess Problem with State Constraints	Nonlinear Control and System Theory	492

ASCC 2017

Tuesday Sessions

(page intentionally left blank)

Technical Program for Tuesday December 19, 2017

TuAPI	Arena B
Plenary Session (2) (Plenary Session)	

Chair: Tan, Ying	The Univ. of Melbourne
<hr/>	
08:30-09:30	TuAPI.1
<i>PDE Control: Designs and Applications*</i> .	
Krstic, Miroslav	Univ. of California at San Diego

TuA1	Room 1
New Developments of MPC Application Technology (1) (Invited Session)	

Chair: Li, Dewei	Shanghai Jiao Tong Univ
Organizer: Li, Dewei	Shanghai Jiao Tong Univ

10:00-10:15	TuA1.1
-------------	--------

Extending Signal Temporal Logic Specifications for Distributed Model Predictive Control (I), pp. 911-916.

Zhang, Linli	Shanghai Jiao Tong Univ
Li, Dewei	Shanghai Jiao Tong Univ
Xi, Yugeng	Shanghai Jiao Tong Univ
Li, Jiwei	Shanghai Jiao Tong Univ

10:15-10:30	TuA1.2
-------------	--------

Distributed Model Predictive Control for a Multi-Reach Open-Channel System (I), pp. 917-922.

Zeng, Ningjun	Central South Univ
Cen, Lihui	Central South Univ
Li, Dewei	Shanghai Jiao Tong Univ

10:30-10:45	TuA1.3
-------------	--------

Distributed Model Predictive Control Algorithm Based on Event-Trigger (I), pp. 923-927.

Chen, Minhao	Zhejiang Univ
Liu, Yuanlong	Zhejiang Univ
Zhao, Jun	Zhejiang Univ
Xu, Zuhua	Zhejiang Univ

10:45-11:00	TuA1.4
-------------	--------

Robust Model Predictive Control of Linear Systems with Constraints (I), pp. 928-933.

Yu, Shuyou	Univ. of Stuttgart
Guo, Yang	Jilin Univ
Chen, Hong	Jilin Univ. Campus NanLing
Zhou, Yu	Jilin Univ

TuA2	Room 2
Optimization Theory for Cyber-Physical Systems with Limited Resources (1) (Invited Session)	

Chair: Zhang, Heng	Zhejiang Univ
Organizer: Zheng, Wei Xing	Western Sydney Univ
Organizer: Zhang, Heng	Zhejiang Univ

10:00-10:15	TuA2.1
-------------	--------

Game-Theoretic Pricing and Selection with Fading Channels (I), pp. 934-939.

Ni, Yuqing	Hong Kong Univ. of Science and Tech
------------	-------------------------------------

Leong, Alex	Paderborn Univ
Quevedo, Daniel	Paderborn Univ
Shi, Ling	Hong Kong Univ. of Sci. and Tech

10:15-10:30	TuA2.2
-------------	--------

Cost-Effective Watermark Based Detector for Replay Attacks on Cyber-Physical Systems (I), pp. 940-945.

Fang, Chongrong	Zhejiang Univ
Qi, Yifei	Zhejiang Univ
Cheng, Peng	Zhejiang Univ
Zheng, Wei Xing	Western Sydney Univ

10:30-10:45	TuA2.3
-------------	--------

Probabilistic Denial of Service Attack against Remote State Estimation Over a Markov Channel in Cyber-Physical Systems (I), pp. 946-951.

Cao, Xianghui	Southeast Univ
Sun, Changyin	Southeast Univ

10:45-11:00	TuA2.4
-------------	--------

Stabilization of Networked Nonlinear Systems with Time-Varying Transmission Delays (I), pp. 952-957.

Tang, Yang	East China Univ. of Science and Tech
------------	--------------------------------------

Zhang, Dandan	East China Univ. of Science and Tech. Shanghai, 20023
---------------	---

TuA3	Room 3
Advanced Control Methods and Applications (1) (Invited Session)	

Chair: Song, Kai-Tai	National Chiao Tung Univ
Organizer: Tsai, Ching-Chih	National Chung-Hsing Univ

10:00-10:15	TuA3.1
-------------	--------

Intelligent Brain Emotional Learning Control System Design for Nonlinear Systems (I), pp. 958-963.

Lin, Chih-Min	Yuan Ze Univ
Muthusamy, Praveen Kumar	Yuan Ze Univ

10:15-10:30	TuA3.2
-------------	--------

Sparse Edge Visual Odometry Using an RGB-D Camera (I), pp. 964-969.

Syu, Jhih-Lei	National Chung Cheng Univ
Lin, Huei-Yung	National Chung Cheng Univ

10:30-10:45	TuA3.3
-------------	--------

Virtual Reality Control of a Robotic Camera Holder for Minimally Invasive Surgery (I), pp. 970-975.

Song, Kai-Tai	National Chiao Tung Univ
Zinchenko, Kateryna	National Chiao Tung Univ
Komarov, Oleksii	National Chiao Tung Univ

10:45-11:00	TuA3.4
-------------	--------

Precision Contouring Control of 5 DOF Dual-Arm Robot Manipulators with Holonomic Constraints (I), pp. 976-981.

Chen, Shyh-Leh	National Chung Cheng Univ
Nuchkrua, Thanana	National Chung Cheng Univ
Boonto, Sudchai	King Mongkut's Univ. of Tech. Thonburi

TuA4		Room 4
Adaptive Control and Tuning (1) (Regular Session)		
Chair: Takahashi, Masanori		Tokai Univ
10:00-10:15		TuA4.1
<i>An Adaptive Control Allocation Algorithm for Nonlinear Vehicles with Parameter Uncertainty</i> , pp. 982-987.		
Chen, Dong-liang		Harbin Inst. of Tech
Guoping, Liu		South Wales
10:15-10:30		TuA4.2
<i>Adaptive Neural Network Control for Quadrotor Unmanned Aerial Vehicles</i> , pp. 988-992.		
Teng, Yan-Fei		Huazhong Univ. of Science & Tech
HU, Bin		Huazhong Univ. of Science & Tech
Liu, Zhi-Wei		Huazhong Univ. of Science & Tech
Huang, Jian		Huazhong Univ. of Science & Tech
Guan, Zhi-Hong		Huazhong Univ. of Sci. & Tech
10:30-10:45		TuA4.3
<i>Genetic Algorithm for Decentralized PI Controller Tuning of a Multi-Span Web Transport System Based on Overlapping Decomposition</i> , pp. 993-998.		
Giannoccaro, Nicola Ivan		Univ. of Salento
Manieri, Giancarlo		Univ. of Salento
Martina, Paolo		Univ. of Salento
Sakamoto, Tetsuzo		Kyushu Inst. of Tech
10:45-11:00		TuA4.4
<i>Simple Adaptive Control for Plants with Unknown Sensor Failures</i> , pp. 999-1004.		
Takahashi, Masanori		Tokai Univ

TuA5		Room 5
Automotive Systems (1) (Regular Session)		
Chair: Ondes, Ertugrul Baris		Istanbul Tech. Univ
10:00-10:15		TuA5.1
Autonomous Overtaking Using Stochastic Model Predictive Control, pp. 1005-1010.		
NGUYEN, Ngoc Anh	Johannes Kepler Univ. Linz	
Moser, Dominik	Johannes Kepler Univ. Linz	
Schranagl, Patrick	Johannes Kepler Univ. Linz	
Del Re, Luigi	Johannes Kepler Univ. Linz	
Jones, Stephen John	AVL List GmbH, Graz	
10:15-10:30		TuA5.2
Model-Based 2-D Look-Up Table Calibration Tool Development, pp. 1011-1016.		
Ondes, Ertugrul Baris	Istanbul Tech. Univ	
Bayezit, Ismail	Istanbul Tech. Univ	
Poergye, Imre	FEV GmbH	
Hafsi, Ahmed	FEV GmbH	

10:30-10:45	TuA5.3	
<i>Risk Functions Oriented Autonomous Overtaking</i> , pp. 1017-1022.		
Moser, Dominik	Johannes Kepler Univ. Linz	
Ramezani, Zahra	Johannes Kepler Univ. Linz	
Davide, Gagliardi	Johannes Kepler Univ. Linz	
Zhou, Jinwei	Johannes Kepler Univ	
Del Re, Luigi	Johannes Kepler Univ. Linz	
10:45-11:00	TuA5.4	
<i>A Bio-Inspired Sensor System for Vibration Measurement in Noisy Environment</i> , pp. 1023-1028.		
Pan, Huihui	Hong Kong Pol. Univ	
Jing, Xing Jian	Hong Kong Pol. Univ	
Li, Zhengchao	Hong Kong Pol. Univ	

TuA6		Room 6
Intelligent and Learning Control (1) (Regular Session)		
Chair: Kim, H Jin		Seoul National Univ
10:00-10:15		TuA6.1
<i>Zero-Error Tracking of Iterative Learning Control Using Probabilistically Quantized Measurements</i> , pp. 1029-1034.		
Shen, Dong		Beijing Univ. of Chemical Tech
Xu, Jian-Xin		National Univ. of Singapore
10:15-10:30		TuA6.2
<i>A New Learning Controller for Periodic Disturbance Rejection</i> , pp. 1035-1040.		
Han, Sanem Evren		Sabanci Univ
Unel, Mustafa		Sabanci Univ
10:30-10:45		TuA6.3
<i>Direct Learning Control of Trajectories Subject to High-Order Internal Model for a Class of Continuous-Time Linear Systems</i> , pp. 1041-1045.		
Zhou, Wei		Jiangsu Vocational Inst. of Commerce
Yu, Miao		Zhejiang Univ
Li, Chaoyong		Zhejiang Univ
10:45-11:00		TuA6.4
<i>Vision-Based Deep Reinforcement Learning to Control a Manipulator</i> , pp. 1046-1050.		
Kim, Wonchul		Seoul National Univ
Kim, Taewan		Seoul National Univ
Lee, jonggu		Seoul National Univ
Kim, H Jin		Seoul National Univ

TuA7		Arena B
Pattern Recognition (Regular Session)		
Chair: Huang, Biao		Univ. of Alberta
10:00-10:15		TuA7.1
<i>Robust Visual Tracking Via Occlusion Detection Based on Staple Algorithm</i> , pp. 1051-1056.		
Niu, Xiaoguang	Shanghai Jiao Tong Univ	
Fang, Xingqi	Shanghai Jiao Tong Univ	

Qiao, Yu	Shanghai Jiao Tong Univ
10:15-10:30	TuA7.2
<i>Target Detection Algorithm for IARC Seventh Mission</i> , pp. 1057-1062.	
Hou, Yi	Harbin Inst. of Tech
Yao, Yu	Harbin Inst. of Tech
He, Fenghua	Harbin Inst. of Tech
Xu, Zhongyan	Harbin Inst. of Tech
Huo, Xin	Harbin Inst. of Tech
10:30-10:45	TuA7.3
<i>Nesterov Accelerated Gradient Descent-Based Convolution Neural Network with Dropout for Facial Expression Recognition</i> , pp. 1063-1068.	
Su, Wanjuan	China Univ. of Geosciences
Chen, Luefeng	China Univ. of Geosciences
Wu, Min	China Univ. of Geosciences
Zhou, Mengtian	China Univ. of Geosciences
Liu, Zhentao	China Univ. of Geosciences
Cao, Weihua	China Univ. of Geosciences, Wuhan, China
10:45-11:00	TuA7.4
<i>Simultaneous Estimation of Sub-Model Number and Parameters for Mixture Probability Principal Component Regression</i> , pp. 1069-1074.	
Sedghi, Shabnam	Univ. of Alberta
Huang, Biao	Univ. of Alberta

TuBPI	Arena B
Semi-Plenary Session (2) (Plenary Session)	
Chair: Ahn, Hyo-Sung	Gwangju Inst. of Sci & Tech
13:00-14:00	TuBPI.1
<i>Adaptive Operation of Small Flying Robots*</i> .	
Kim, H Jin	Seoul National Univ
14:00-15:00	TuBPI.2
<i>Autonomous Distributed Control of Next-Generation Smart Grids*</i> .	
Zhong, Qing-Chang	The Univ. of Sheffield

TuB1	Room 1
New Developments of MPC Application Technology (2) (Invited Session)	
Chair: Okuda, Hiroyuki	Nagoya Univ
Organizer: Li, Dewei	Shanghai Jiao Tong Univ
11:00-11:15	TuB1.1
<i>Network-Based Predictive Control Strategy for Spatially Distributed System Based with Quantization (I)</i> , pp. 1075-1079.	
wang, mengling	East China Univ. of Science and Tech
Xue, Binqiang	Qingdao Univ
Yan, Huaicheng	Ec
Shi, Hongbo	Key Lab. of Advanced Control and Optimization for Chemical

11:15-11:30	TuB1.2
<i>Multiple Model Predictive Control with Undisturbed Switch for Wind Turbines System (I)</i> , pp. 1080-1085.	
Huang, Xianda	Jiangsu Univ
Pan, Tianhong	Jiangsu Univ
Li, Zhengming	Jiangsu Univ
Ding, Shihong	Jiangsu Univ
Tan, Shuai	East China Univ. of Science and Tech
11:30-11:45	TuB1.3
<i>Real-Time Collision Avoidance Control Based on Continuation Method for Nonlinear Model Predictive Control with Safety Constraint</i> , pp. 1086-1091.	
Okuda, Hiroyuki	Nagoya Univ
Sugie, Nobuto	Nagoya Univ
Suzuki, Tatsuya	Nagoya Univ
11:45-12:00	TuB1.4
<i>Gaussian Process-Based Model Predictive Control of Blood Glucose for Patients with Type 1 Diabetes Mellitus</i> , pp. 1092-1097.	
Ortmann, Lukas	RWTH Aachen Univ
Shi, Dawei	Harvard Univ
Dassau, Eyal	HARVARD Univ
Doyle, Francis	Harvard Univ
Leonhardt, Steffen	RWTH Aachen Univ
Misgeld, Berno	RWTH Aachen Univ

TuB2	Room 2
Optimization Theory for Cyber-Physical Systems with Limited Resources (2) (Invited Session)	
Chair: Zheng, Wei Xing	Western Sydney Univ
Organizer: Zheng, Wei Xing	Western Sydney Univ
Organizer: Zhang, Heng	Zhejiang Univ
11:00-11:15	TuB2.1
<i>Optimal Sensor Power Control Via a Correlated Block Fading Channel (I)</i> , pp. 1098-1103.	
Zhang, Heng	Zhejiang Univ
Zheng, Wei Xing	Western Sydney Univ
11:15-11:30	TuB2.2
<i>Optimal Sensor Schedule under Limited Resources for Two Linear Dynamical Systems in Wireless Sensor Network (I)</i> , pp. 1104-1109.	
Wang, Jie	Univ. of Science and Tech. of China
Qin, Jiahu	Univ. of Science and Tech. of China
Ma, Qichao	Univ. of Science and Tech. of China
Kang, Yu	Univ. of Science and Tech. of China
11:30-11:45	TuB2.3
<i>On Stability of Sampled-Data Extended State Observer for Networked Systems (I)</i> , pp. 1110-1115.	
Huang, Yuan	Beijing Inst. of Tech

Wang, Junzheng	Beijing Inst. of Tech
Shi, Dawei	Harvard Univ
Xue, Jian	Beijing Inst. of Tech

11:45-12:00 TuB2.4

Strategic Air Traffic Flow Management under Uncertainties Using Scalable Sampling-Based Dynamic Programming and Q-Learning Approaches (I), pp. 1116-1121.

Xie, Junfei	Texas A&M Univ. Christi
Wan, Yan	Univ. of Texas at Arlington
Lewis, Frank L.	Univ. of Texas at Arlington

TuB3 Room 3 Advanced Control Methods and Applications (2) (Invited Session)

Chair: Tsai, Ching-Chih	National Chung-Hsing Univ
Organizer: Tsai, Ching-Chih	National Chung-Hsing Univ

11:00-11:15 TuB3.1

A Fast CLSM Undersampling Image Reconstruction Framework with Precise Stage Positioning for Random Measurements (I), pp. 1122-1127.

Chang, Kuang Yao	National Taiwan Univ
Liu, Yi-Lin	National Taiwan Univ
Liu, Da-Wei	National Taiwan Univ
Chou, Meng-Hao	National Taiwan Univ
Wu, Jim-Wei	National Taiwan Univ
Fu, Li-Chen	National Taiwan Univ

11:15-11:30 TuB3.2

Digital Command Feedforward and PID Temperature Control for PET Stretch Blow Molding Machines (I), pp. 1128-1133.

Tsai, Ching-Chih	National Chung-Hsing Univ
Tsai, Chia-Ta	National Chung Hsing Univ

11:30-11:45 TuB3.3

Application of Phase-Locked Loop to Mass Measurement Using Damped Dynamic Vibration Absorber, pp. 1134-1139.

Mizuno, Takeshi	Saitama Univ
Takasaki, Masaya	Saitama Univ
Ishino, Yuji	Saitama Univ

11:45-12:00 TuB3.4

Realization of Zero-Power Control in a Two-Degree-Of-Freedom Double Parallel Magnetic Suspension System, pp. 1140-1145.

Narisawa, Yoshinori	Shinshu Univ
Mizuno, Takeshi	Saitama Univ
Takasaki, Masaya	Saitama Univ
Ishino, Yuji	Saitama Univ
Hara, Masayuki	Saitama Univ
Yamaguchi, Daisuke	Saitama Univ

TuB4 Room 4 Adaptive Control and Tuning (2) (Regular Session)

Chair: De Keyser, Robin M.C.	Ghent Univ
------------------------------	------------

11:00-11:15 TuB4.1

Adaptive Optimal Control for a Class of Uncertain System

with Saturating Actuators and External Disturbance Using Integral Reinforcement Learning, pp. 1146-1151.

Zhao, Jingang	Beijing Inst. of Tech
Gan, Ming-Gang	Beijing Inst. of Tech
Chen, Jie	Beijing Inst. of Tech
Hou, Dongyang	Beijing Inst. of Tech
Zhang, Meng	Beijing Inst. of Tech
Bai, Yongqiang	Beijing Inst. of Tech

11:15-11:30 TuB4.2

An Adaptive State Feedback Control Scheme with Sensor Failure Compensation, pp. 1152-1157.

Song, Ge	Univ. of Virginia
Tao, Gang	Univ. of Virginia

11:30-11:45 TuB4.3

Hypersonic Vehicle System Models and Adaptive Turbulence Compensation, pp. 1158-1163.

Wen, Liyan	Nanjing Univ. of Aeronautics and Astronautics
Tao, Gang	Univ. of Virginia
Yang, Hao	Nanjing Univ. of Aeronautics and Astronautics
Jiang, Bin	NUAA

11:45-12:00 TuB4.4

Comparative Evaluation of a Novel Principle for PID Autotuning, pp. 1164-1169.

De Keyser, Robin M.C.	Ghent Univ
Ionescu, Clara	Ghent Univ
Muresan, Cristina Ioana	Tech. Univ. of Cluj-Napoca

TuB5 Room 5 Automotive Systems (2) (Regular Session)

Chair: Hara, Shinji	The Univ. of Tokyo
---------------------	--------------------

11:00-11:15 TuB5.1

Robust Control of the Boost-Pressure of a Turbocharger Subject to Model Uncertainty and Disturbances, pp. 1170-1175.

Posielek, Tobias	German Aerospace Center (DLR)
Wulff, Kai	Tech. Univ. Ilmenau
Reger, Johann	TU Ilmenau

11:15-11:30 TuB5.2

Hierarchically Decentralized Control for In-Wheel-Motored Electric Vehicles with Global and Local Objectives, pp. 1176-1181.

Nguyen, Binh Minh	The Univ. of Tokyo
Hara, Shinji	The Univ. of Tokyo
Tsumura, Koji	The Univ. of Tokyo

11:30-11:45 TuB5.3

Discrete-Time LPV H2 Observer for Vehicle Model-Based State Observer, pp. 1182-1187.

Kang, Chang Mook	Hanyang Univ
Lee, Seung Hee	Hanyang Univ
Chung, Chung Choo	Hanyang Univ

11:45-12:00 TuB5.4

Plantwide Control of Industrial-Scale Crude Distillation Unit Processes, pp. 1188-1193.

Wu, Wei

National Cheng Kung Univ

TuB6 Room 6
Intelligent and Learning Control (2) (Regular Session)

Chair: Tao, Gang Univ. of Virginia

11:00-11:15 TuB6.1

Design of Backstepping Controller Based on Online Multiparameter Estimation for Permanent Magnet Synchronous Motor, pp. 1194-1198.

Kim, Hyoung-Woo Pusan National Univ
Cho, Hyung Man Pusan National Univ
Park, Sung-Mun Pusan National Univ
Moon, Byung-Hun Pusan National Univ
Choi, Joon-Young Pusan Natinal Univ

11:15-11:30 TuB6.2

A Multi-Objective Multi-Agent Framework for Traffic Light Control, pp. 1199-1204.

Jin, Junchen KTH Royal Inst. of Tech
Ma, Xiaoliang KTH Royal Inst. of Tech

11:30-11:45 TuB6.3

A Multiple-Model Adaptive Tracking Scheme for High-Speed Train Motion Control, pp. 1205-1210.

Tan, Chang East China Jiaotong Univ
Tao, Gang Univ. of Virginia
Yang, Hui East China Jiaotong Univ

11:45-12:00 TuB6.4

An Implicit Function Based Control Scheme for Discrete-Time Non-Canonical Form Neural Network Systems, pp. 1211-1216.

Zhang, Yanjun Nanjing Univ. of Aeronautics and Astronautics
Tao, Gang Univ. of Virginia
Chen, Mou Nanjing Univ. of Aeronautics and Astronautics
Lin, Wei Case Western Res. Univ

TuB7 Arena B
Optimal Control and Optimization (3) (Regular Session)

Chair: Dower, Peter M. Univ. of Melbourne

11:00-11:15 TuB7.1

Hamilton-Jacobi-Bellman Equations for Two-Point Boundary Value Problems Constrained by Conservative Dynamics, pp. 1217-1221.

Dower, Peter M. Univ. of Melbourne
McEneaney, William Univ. of California, San Diego

11:15-11:30 TuB7.2

A Dynamic Contract Mechanism for Risk-Sharing Management on Interdependent Electric Power and Gas Supply Networks, pp. 1222-1227.

Wasa, Yasuaki Waseda Univ
HIRATA, Kenji Nagaoka Univ. of Tech
Uchida, Kenko Waseda Univ

11:30-11:45 TuB7.3

Adaptive Dynamic Programming and Optimal Stabilization for Linear Systems with Time-Varying Uncertainty, pp. 1228-1233.

Zhang, Meng Beijing Inst. of Tech
Gan, Ming-Gang Beijing Inst. of Tech
Chen, Jie Beijing Inst. of Tech
Jiang, Zhong-Ping New York Univ

11:45-12:00 TuB7.4

Multi-Objective Drilling Trajectory Optimization Based on NSGA-II, pp. 1234-1239.

Huang, Wendi China Univ. of Geosciences
Wu, Min China Univ. of Geosciences
Cheng, Jun China Univ. of Geosciences
Chen, Xin China Univ. of Geosciences
Cao, Weihua China Univ. of Geosciences, Wuhan, China

Hu, Yule China Univ. of Geosciences

Gao, Hui China Univ. of Geosciences

Tu1Po Room T1
Poster Sessions Tuesday (Interactive Session)

15:30-17:00 Sub-session Tu1Po-01

Robotic and Mechatronics Systems
Interactive Session, 26 papers

15:30-17:00 Sub-session Tu1Po-02

Identification and Observation
Interactive Session, 28 papers

15:30-17:00 Sub-session Tu1Po-03

Intelligent and Predictive Control
Interactive Session, 24 papers

Tu1Po-01 Room T1
Robotic and Mechatronics Systems (Interactive Session)

Chair: Chen, Ben M. National Univ. of Singapore
Co-Chair: Lau, Darwin Chinese Univ. of Hong Kong

15:30-17:00 Tu1Po-01.1

Resonance Frequency Tracking Control of Ultrasonic Transducer for Diminished Haptics, pp. 1240-1245.

Takasaki, Masaya Saitama Univ
Yamaguchi, Daisuke Saitama Univ
Hara, Masayuki Saitama Univ
Ishino, Yuji Saitama Univ
Mizuno, Takeshi Saitama Univ

15:30-17:00 Tu1Po-01.2

A Method to Estimate the Axial Force Applied to a Surgical Instrument Tip Considering the Effect of the Gravity, pp. 1246-1251.

Kim, Suyong KAIST
Kim, Cheongjun Korea Advanced Inst. of Science and Tech
Lee, Doo Yong KAIST

15:30-17:00	Tu1Po-01.3
<i>Hardware Adaptation of a Small Commercial ROV for Autonomous Use</i> , pp. 1252-1257.	
Tan, Yu Herng	National Univ. of Singapore
Liu, Xiaodong	National Univ. of Singapore
Chen, Ben M.	National Univ. of Singapore
15:30-17:00	Tu1Po-01.4
<i>Motion Trajectory Design for Underactuated Three-Link Gymnast Robot</i> , pp. 1258-1263.	
Zhang, Ancai	Linyi Univ
She, Jin-Hua	Tokyo Univ. of Tech
Qiu, Jianlong	Linyi Univ
Yang, Chengdong	Linyi Univ
zhou, lan	Hunan Univ. of Science and Tech
15:30-17:00	Tu1Po-01.5
<i>Simplified Modeling and Identification Approach for Model-Based Control of Parallel Mechanism Robot Leg</i> , pp. 1264-1269.	
Kim, Jungyeong	Univ. of Science and Tech. (UST)
Seo, Jaehong	Univ. of Science and Tech. (UST)
PARK, Sangdeok	KITECH
Park, ByungYun	, Korea Inst. of Industrial Tech. (KITECH), Robotics R&
Park, Sangsin	Korea Inst. of Industrial Tech. (KITECH), Robotics R&D
Cho, Jungsan	Korea Inst. of Industrial Tech. (KITECH)
Kwon, Ingu	KITECH
15:30-17:00	Tu1Po-01.6
<i>Adaptive Neural Network Control for Time-Delay Teleoperation with Uncertainties</i> , pp. 1270-1275.	
Liu, Shan	Univ. of Electronic Science and Tech. of China
Zhang, Xia	Univ. of Electronic Science and Tech. of China
Zheng, Wenfeng	Univ. of Electronic Science and Tech. of China
Yang, Bo	Shanghai Jiao Tong Univ
15:30-17:00	Tu1Po-01.7
<i>Curvature Constrained Trajectory Planning for a UAV through a Sequence of Points: A Perturbation Approach</i> , pp. 1276-1281.	
Maini, Parikshit	IIT D
Rathinam, Sivakumar	Texas a & M Univ
Sujit, P. B	IIITD
15:30-17:00	Tu1Po-01.8
<i>An AR-Based Manipulation System for Industrial Robots</i> , pp. 1282-1285.	
Su, Yu-Hsuan	National Chiao Tung Univ
Liao, Chen Fong	National Chiao Tung Univ
Ko, Chun-hsu	I-Shou Univ
Shu-ling, Cheng	Far East Univ
Young, Kuu-young	National Chiao-Tung Univ
15:30-17:00	Tu1Po-01.9

<i>Quantifying the Control Performance of Gearless Servo Drives for Real Time Applications</i> , pp. 1286-1291.	
Aldag, Mario	Helmut-Schmidt-Univ
Horn, Joachim	Helmut-Schmidt-Univ. / Univ. of the Federal Armed Forc
15:30-17:00	Tu1Po-01.10
<i>Optimization of Limb Reaching Movement for Climbing Humanoid Robots</i> , pp. 1292-1297.	
Fukushima, Kai	Kyoto Univ
Satoh, Yasuyuki	Tokyo Univ. of Science
Doi, Masahiro	Toyota Motor Coporation
Ohtsuka, Toshiyuki	Kyoto Univ
15:30-17:00	Tu1Po-01.11
<i>Moving Obstacle Avoidance Control by Fuzzy Potential Method and Model Predictive Control</i> , pp. 1298-1303.	
Nishio, Yuuki	Tokyo City Univ
Nonaka, Kenichiro	Tokyo City Univ
Sekiguchi, Kazuma	Tokyo City Univ
15:30-17:00	Tu1Po-01.12
<i>Pitching Motion Control of a Wheeled Mobile Robot Via Full-State Linearization and Extremum Seeking</i> , pp. 1304-1309.	
Yokoyama, Makoto	Niigata Univ
Sugihara, Kazuya	Niigata Univ
15:30-17:00	Tu1Po-01.13
<i>A Position Control Design for UAVs Low-Altitude Visual Tracking of Linear Ground Structures by Variant PID Controller</i> , pp. 1310-1313.	
Huang, Xiaoqian	The Petroleum Inst
Shukla, Amit	The Petroleum Inst
Karki, Hamad	Assistant Professor
Zhang, Xiaoxiong	The Petroleum Inst
15:30-17:00	Tu1Po-01.14
<i>Using Physical Experiments to Estimate the Curvatures of Principal Connections Underlying Swimming at Low Reynolds Number</i> , pp. 1314-1319.	
Abrajan-Guerrero, Rodrigo	Univ. of North Carolina at Charlotte
Bhansali, Rakshit	Univ. of North Carolina at Charlotte
Kelly, Scott	Univ. of North Carolina at Charlotte
15:30-17:00	Tu1Po-01.15
<i>Development of Practical Application for Sensorless Crane Control System</i> , pp. 1320-1325.	
Masaomi, Wada	Hitachi, Ltd
Yoshihito, Mori	Tokyo Univ. of Agriculture and Tech
Tagawa, Yasutaka	Tokyo Univ. of Agriculture and Tech
Kiyotada, Honma	Hitachi Plant Mechanics Co
15:30-17:00	Tu1Po-01.16
<i>Motion Planning for a Knife-Edge on the Surface of a Hyperboloid</i> , pp. 1326-1330.	
Rehan, Muhammad	Embry-Riddle Aeronautical Univ

Reyhanoglu, Mahmut	Embry-Riddle Aeronautical Univ
McClamroch, N. Harris	Univ. of Michigan
15:30-17:00	Tu1Po-01.17
<i>Using Fish-Eye Stereo Vision System for Autonomous Vehicles</i> , pp. 1331-1334.	
Samadi, Masoud	Univ. Teknologi Malaysia
Othman, Mohd Fauzi	Univ. Teknologi Malaysia
15:30-17:00	Tu1Po-01.18
<i>Finite-Time Control of a Compliant Base Robot Manipulator</i> , pp. 1335-1340.	
Reyhanoglu, Mahmut	Univ. of North Carolina at Asheville
Hoffman, Derek	Embry-Riddle Aeronautical Univ
15:30-17:00	Tu1Po-01.19
<i>A Backstepping Design Approach to a Class of Mobile Robots</i> , pp. 1341-1344.	
Al-shamali, Saleh	Kuwait Univ
15:30-17:00	Tu1Po-01.20
<i>Performance Control System of Dulcimer Music-Playing Robot</i> , pp. 1345-1350.	
Fei, Ting	China Univ. of Geosciences
Chen, Xin	China Univ. of Geosciences
Jiang, Chen Xu	China Univ. of Geosciences
Zhou, Li	China Univ. of Geosciences
Liu, Zhentao	China Univ. of Geosciences
15:30-17:00	Tu1Po-01.21
<i>Information Supervisory Control of Human Behavior - Experiments and Formal Modeling -</i> , pp. 1351-1356.	
Hiraishi, Kunihiro	JAIST
Uchihira, Naoshi	Japan Advanced Inst. of Science and Tech
CHOE, Sunseong	Osaka Univ. of Ec. and Law
Kobayashi, Koichi	Hokkaido Univ
15:30-17:00	Tu1Po-01.22
<i>Development of Mobile Operation System of a Vehicle</i> , pp. 1357-1360.	
Okada, Ryosuke	Tokyo Denki Univ
Hatakeyama, Shoshiro	Tokyo Denki Univ
Iwase, Masami	Tokyo Denki Univ
15:30-17:00	Tu1Po-01.23
<i>Hand and Finger Control of Myo-Prosthesis Based on Motion Discriminator and Voluntary Control</i> , pp. 1361-1366.	
HIROKI, RISA KO	Tokyo Denki Univ
Iwase, Masami	Tokyo Denki Univ
15:30-17:00	Tu1Po-01.24
<i>Hand-Free Maneuvering System for Electric Wheelchair Using Laser Range Finder</i> , pp. 1367-1372.	
Ohtsuka, Hirofumi	National Inst. of Tech. Kumamoto Coll
Shibasato, Koki	National Inst. of Tech. Kumamoto Coll
Shimada, Yasuyuki	National Inst. of Tech. Kumamoto Coll
Kato, Tatsuya	Kumamoto National Coll. of Tech

15:30-17:00	Tu1Po-01.25
<i>Contact Force Distribution Predictive Control System for Wearable Robot with Tactile Sensors</i> , pp. 1373-1378.	
Sato, Asuka	Nagoya Univ
Funabora, Yuki	Nagoya Univ
Doki, Shinji	Nagoya Univ
Doki, Kae	Aichi Inst. of Tech
15:30-17:00	Tu1Po-01.26
<i>Suggestion and Verification of the Modular Robot Education</i> , pp. 1379-1383.	
Mitsubishi, Kaoru	Pol. Univ. of Japan
Yasuhiro, Ohyama	Tokyo Univ. of Tech

Tu1Po-02	Room T1
Identification and Observation (Interactive Session)	
Chair: Iftar, Altug	Anadolu Univ
Co-Chair: Zhao, Jun	Dalian Univ. of Tech. Dalian, Liaoning

15:30-17:00	Tu1Po-02.1
<i>Robust Adaptive Finite Time Parameter Estimation with Relaxed Persistence of Excitation</i> , pp. 1384-1388.	
Zhi, Jianhui	Air Force Engineering Univ
Dong, Xinmin	Aeronautics and Astronautics Engineering Coll. Air Force Engi
Chen, Yong	Aeronautics and Astronautics Engineering Coll. Air Force Engi
Liu, Zongcheng	Aeronautics and Astronautics Engineering Coll. Air Force Engi
Shi, Chao	Aeronautics and Astronautics Engineering Coll. Air Force Engi

15:30-17:00	Tu1Po-02.2
<i>Implementation and Validation of a Lumped Model for an Experimental Multi-Span Web Transport System</i> , pp. 1389-1394.	
Giannoccaro, Nicola Ivan	Univ. of Salento
Manieri, Giancarlo	Univ. of Salento
Martina, Paolo	Univ. of Salento
Sakamoto, Tetsuzo	Kyushu Inst. of Tech

15:30-17:00	Tu1Po-02.3
<i>Quasi-Online Method for the Identification of Heat Flux Densities and Trajectories of Two Mobile Heating Sources</i> , pp. 1395-1400.	
TRAN, Thanh Phong	Univ. of Angers & Tien Giang Univ
PEREZ, Laetitia	Lab De Thermocinétique De Nantes
AUTRIQUE, Laurent	Univ. of Angers

15:30-17:00	Tu1Po-02.4
<i>Improved Dynamic Time Warping Algorithm with Adaptive Scaling for Steel Plate Thickness Matching</i> , pp. 1401-1405.	
SONG, XIAOHAN	Dalian Univ. of Tech
LV, ZHENG	Dalian Univ. of Tech
Zhao, Jun	Dalian Univ. of Tech. Dalian, Liaoning
Wang, Wei	Dalian Univ. of Tech

Wang, Linqing	Dalian Univ. of Tech. Dalian, Liaoning
15:30-17:00	Tu1Po-02.5
<i>Building Occupancy Estimation with Robust Kalman Filter</i> , pp. 1406-1410.	
Li, Keyu	United Tech. Res. Center
Zhang, Kai	United Tech. Res. Center (China)
15:30-17:00	Tu1Po-02.6
<i>Minimal Information Based, Simple Identification Method of Fractional Order Systems for Model-Based Control Applications</i> , pp. 1411-1416.	
De Keyser, Robin M.C.	Ghent Univ
Ionescu, Clara	Ghent Univ
15:30-17:00	Tu1Po-02.7
<i>Identification of Nonlinear Errors-In-Variables Systems in State-Space Form: A Linear Parameter Varying Approach</i> , pp. 1417-1422.	
Wu, Ouyang	Basf Se
Kodamana, Hariprasad	IIT Kharagpur
Li, Juan	Qingdao Agricultural Univ
Huang, Biao	Univ. of Alberta
Forbes, J Fraser	Univ. of Alberta
15:30-17:00	Tu1Po-02.8
<i>Research on Speed Sensorless Operation of PMSM Based on Improved MRAS</i> , pp. 1423-1427.	
xu, jian	Jiangsu Univ
xu, bo	Jiangsu Univ
ji, wei	Jiangsu Univ
shi, guoding	Jiangsu Univ
Ding, Shihong	Jiangsu Univ
15:30-17:00	Tu1Po-02.9
<i>Matrix Rank Minimization Approach to Signal Recovery and Nonlinear Function Estimation for Nonlinear ARX Model with Input Nonlinearity</i> , pp. 1428-1431.	
Konishi, Katsumi	Kogakuin Univ
Fujii, Masashi	Univ. of Tokyo
Kunida, Katsuyuki	Univ. of Tokyo
Uda, Shinsuke	Kyushu Univ
Kuroda, Shinya	Univ. of Tokyo
15:30-17:00	Tu1Po-02.10
<i>Modeling the Aerodynamics of Wind Turbines for Real-Time Simulation and Control Purposes</i> , pp. 1432-1437.	
Gambier, Adrian	Fraunhofer Inst. for Wind Energy and Energy System Tech
Gebhardt, Cristian Guillermo	Leibniz Univ. Hannover, Inst. of Structural Analysis
15:30-17:00	Tu1Po-02.11
<i>Gasoline Dry Point Prediction of Fractionation Processes Using Dynamic Inner Partial Least Squares</i> , pp. 1438-1442.	
Xu, Xue	Northeastern Univ
Liu, Qiang	Northeastern Univ
Ding, Jinliang	Northeastern Univ
15:30-17:00	Tu1Po-02.12

<i>A Bias Fault Estimation of Actuators and Sensors by Optimization with L0 Norm Constraint</i> , pp. 1443-1448.	
Ichikawa, Mai	Kyushu Inst. of Tech
Sebe, Noboru	Kyushu Inst. of Tech
Suyama, Koichi	Tokyo Univ. of Marine Science and Tech
Indriawati, Katherin	Inst. Teknologi Sepuluh November Surabaya (ITS)
15:30-17:00	Tu1Po-02.13
<i>Observer Based Control of a Brushed DC Motor at Very Low Speeds Over Controller Area Network: An Application in Astronomical Telescopes</i> , pp. 1449-1453.	
Tripurari, Kumar S.	Aryabhata Res. Inst. of Observational Sciences
Banavar, Ravi N.	Indian Inst. of Tech
15:30-17:00	Tu1Po-02.14
<i>Circuit Realization of a Hybrid Delay Chaotic Secure Communication System Over a Noisy Receiver</i> , pp. 1454-1459.	
GHANES, Malek	Centrale Nantes
Barbot, Jean Pierre	ENSEA
15:30-17:00	Tu1Po-02.15
<i>State Feedback Control with Disturbance Estimation and Compensation for Discrete-Time Linear Systems</i> , pp. 1460-1463.	
Kang, Dongyeop	Electronics and Telecommunications Res. Inst
Li, Song	Electronics and Telecommunications Res. Inst
15:30-17:00	Tu1Po-02.16
<i>ESO-Based Repetitive Control for Rejecting Periodic and Aperiodic Disturbances in Piezoelectric Actuators</i> , pp. 1464-1469.	
Bombuwela, Don Suneth	Swinburne Univ. of Tech
Sayem, A.H.M	Swinburne Univ. of Tech
Cao, Zhenwei	Swinburne Univ. of Tech
Man, Zhihong	Faculty of Engineering, Swinburne Univ. of Tech
Rsetam, Kamal	Swinburne Univ. of Tech
15:30-17:00	Tu1Po-02.17
<i>Observer Design and Analysis of Wnt-Cell Cycle Joint Pathway</i> , pp. 1470-1475.	
Khattak, Muhammad Nawaz Sharif	Capital Univ. of Science and Tech. Islamabad Pakistan
Bhatti, Aamer Iqbal Bhatti	Capital Univ. of Sciences & Tech. Islamabad
Fazal, Sahar Fazal	Capital Univ. of Science and Tech. Islamabad Pakistan
15:30-17:00	Tu1Po-02.18
<i>Recurrent Neural Network-Based Fault Detector for Aileron Failure of Aircraft</i> , pp. 1476-1481.	
Yoshikawa, Nobuyuki	The Univ. of Tokyo
Belkhir, Nacim	INRIA
Suzuki, Shinji	The Univ. of Tokyo
15:30-17:00	Tu1Po-02.19
<i>Transient Identification for Nuclear Power Plants: Effect of</i>	

the Length of Measured Data to Identification Result, pp. 1482-1486.

Zhou, Shuqiao	Tsinghua Univ
Guo, Chao	Tsinghua Univ
Huang, Xiaojin	Tsinghua Univ
15:30-17:00	Tu1Po-02.20

Nonlinear Chemical Process Monitoring Using Decentralized Kernel Principal Component Analysis and Bayesian Inference, pp. 1487-1492.

Cang, Wentao	Jiangnan Univ
Fu, Yujia	Jiangnan Univ
Xie, Li	Jiangnan Univ
Tao, Hongfeng	Jiangnan Univ
YANG, Huizhong	Jiangnan Univ
15:30-17:00	Tu1Po-02.21

Fault Identification with Modified Reconstruction-Based Contribution Based on Kernel Principal Component Analysis, pp. 1493-1498.

Kitano, Koji	Kyoto Univ
Kano, Manabu	Kyoto Univ
Gopaluni, Bhushan	Univ. of British Columbia
15:30-17:00	Tu1Po-02.22

Operating Performance Assessment for Multi-Mode Hydrometallurgy Process Based on Rough Set, pp. 1499-1504.

Chang, Yuqing	Northeastern Univ
Zhuang, Huan	Northeastern Univ
Ma, Ruxue	Northeastern Univ
ZHAO, Luping	Northeastern Univ
Wang, Shu	Northeastern Univ
15:30-17:00	Tu1Po-02.23

A Study on Anomaly Prediction Method of Machine Tools - Feature Extraction for Anomaly Prediction -, pp. 1505-1508.

Fujita, Ryo	Shibaura Inst. of Tech
Yoshimi, Takashi	Shibaura Inst. of Tech
15:30-17:00	Tu1Po-02.24

Event-Triggered Fault Detector and Controller Coordinated Design of Discrete-Time Nonlinear Systems in T-S Fuzzy Model, pp. 1509-1512.

Xia, Fengqin	Chongqing Univ. Coll. of Automation
Su, Xiaojie	Chongqing Univ
Chai, Yi	Chongqing Univ
15:30-17:00	Tu1Po-02.25

A Distributed Fault Detection Observer-Based Approach for a Network of Multi-Agent Systems with Switching Topologies, pp. 1513-1518.

Nguyen, Thi Thanh Quynh	Univ. of Reims Champagne Ardenne
Messai, Nadhir	Univ. De Reims Champagne-Ardenne
Martinez-Martinez, Sinuhé	Univ. of Reims Champagne-Ardenne
Manamanni, Nouredine	Univ. of Reims Champagne Ardenne
15:30-17:00	Tu1Po-02.26

Robust Fault Detection for Multi-Motor Winding System Based on Disturbance Observer and Sliding-Mode Observer, pp. 1519-1524.

Chu, Xiaoyan	Central South Univ
Nian, Xiaohong	Central South Univ
Liu, Jingjing	Central South Univ
Liao, Ye	Central South Univ
15:30-17:00	Tu1Po-02.27

Observer-Based Stabilization of Time-Delay Systems: An Application to Diesel Engine, pp. 1525-1530.

ozer, suleyman mert	Anadolu Univ
Iftar, Altug	Anadolu Univ
15:30-17:00	Tu1Po-02.28

Output Feedback Optimal Control of Fractional Order Delayed Systems, pp. 1531-1536.

Choudhary, Niraj	IIT Delhi
Janardhanan, S	IIT Delhi
Kar, Indra Narayan	Indian Inst. of Tech. Delhi

Tu1Po-03	Room T1
Intelligent and Predictive Control (Interactive Session)	

Chair: Date, Hisashi	Univ. of Tsukuba
Co-Chair: Hu, Guoqiang	Nanyang Tech. Univ

15:30-17:00	Tu1Po-03.1
-------------	------------

A Model Reference Adaptive Control with ADP-To-SMC Strategy for Unknown Nonlinear Systems, pp. 1537-1542.

Fu, Hao	China Univ. of Geosciences
Chen, Xin	China Univ. of Geosciences
Wang, Wei	China Univ. of Geosciences

15:30-17:00	Tu1Po-03.2
-------------	------------

Iterative Learning Control with Initial Rectifying for Nonlinear Robotic System, pp. 1543-1547.

Su, Xiaofeng	Beijing Inst. of Astronautical Systems Engineering
Huang, Chen	Beijing Inst. of Astronautical Systems Engineering
Wang, Wenming	Beijing Inst. of Astronautical Systems Engineering
Yi, Hang	Beijing Inst. of Astronautical Systems Engineering

15:30-17:00	Tu1Po-03.3
-------------	------------

Energy Efficiency Optimization of Belt Conveyors Based on Finite-Time Recurrent Neural Networks, pp. 1548-1553.

Shen, Yanjun	China Three Gorges Univ
Yu, Yu	Hubei Provincial Coll. Innovation Center for New Energy
Miao, Peng	Zhengzhou Coll. of Science & Tech

Yu, Hui	China Three Gorges Univ
shaocheng, Qu	Central China Normal Univ

15:30-17:00	Tu1Po-03.4
-------------	------------

Evaluation of Missing Values Estimation by Multiple SOMs, pp. 1554-1559.

Esaki, Yuya	Kitakyushu Univ
-------------	-----------------

Okada, Nobuhiro	The Univ. of Kitakyushu	15:30-17:00	Tu1Po-03.5
<i>Comparison of Different Model-Free Iterative Learning Control Methods Concerning a Nonlinear Mechanical Structure</i> , pp. 1560-1565.			
Madadi, Elmira	Univ. of Duisburg-Essen		
Söffker, Dirk	Univ. of Duisburg-Essen	15:30-17:00	Tu1Po-03.6
<i>A Maximum Principle for a Special Optimal Multiprocess Problem with State Constraints</i> , pp. 1566-1571.			
de Pinho, Maria do Rosario	Feup, Univ. Do Porto		
Zidani, Housnaa	ENSTA	15:30-17:00	Tu1Po-03.7
<i>RHO-Based Convex Optimization Method Applied to Cooperative Trajectory Planning for Multiple UAVs</i> , pp. 1572-1577.			
Zhou, Hui	Beihang Univ		
Cai, Zhihao	Beihang Univ		
Zhao, Jiang	Beihang Univ		
Wang, Yingxun	Beihang Univ	15:30-17:00	Tu1Po-03.8
<i>Design of Mixed Static/dynamic Output Feedback Controller Using Multi-Objective Distribute Particle Swarm Optimization</i> , pp. 1578-1583.			
Chun, Semin	Chung-Ang Univ		
Choi, Gihoon	JST&lab Co. Ltd		
Kim, Tae-Hyoung	Chung-Ang Univ	15:30-17:00	Tu1Po-03.9
<i>A Cross-Layer Design for Power Flow Control in Smart Grids</i> , pp. 1584-1589.			
Chiu, Wei-Yu	National Tsing Hua Univ		
LIN, GUAN-TING	National Tsing Hua Univ	15:30-17:00	Tu1Po-03.10
<i>Simulation of a Model-Based Predictive Control System to Optimize the Methane Production of a Biogas Reactor</i> , pp. 1590-1595.			
Attar, Shadi	Univ. Coll. of Southeast Norway		
Haugen, Finn Aakre	Univ. Coll. of Southeast Norway	15:30-17:00	Tu1Po-03.11
<i>Solution of Complex Optimal Control Problem with Time Varying Parameters and Bound State Constraints</i> , pp. 1596-1601.			
Jiang, Aipeng	Hangzhou Dianzi Univ		
Wang, Haokun	Hangzhou Dianzi Univ		
Chen, Yun	Zhejiang Univ		
Ding, Qiang	Hangzhou Dianzi Univ		
Jiangzhou, Shu	Hangzhou Dianzi Univ	15:30-17:00	Tu1Po-03.12
<i>Experimental Verification of Formation Control by Model Predictive Control Considering Collision Avoidance in Three Dimensional Space with Quadcopters</i> , pp. 1602-1607.			
Yamamoto, Kenta	Tokyo City Univ		
Sekiguchi, Kazuma	Tokyo City Univ		
Nonaka, Kenichiro	Tokyo City Univ	15:30-17:00	Tu1Po-03.13
<i>Distributed Model Predictive Control of Bilinear HVAC Systems Using a Convexification Method</i> , pp. 1608-1613.			
Wang, Zheming	Nanyang Tech. Univ		
Hu, Guoqiang	Nanyang Tech. Univ		
Spanos, Costas J.	Univ. of California at Berkeley	15:30-17:00	Tu1Po-03.14
<i>An Active Fault-Tolerant MPC for Systems with Partial Actuator Failures</i> , pp. 1614-1619.			
Wang, Haokun	Hangzhou Dianzi Univ		
Jiang, Aipeng	Hangzhou Dianzi Univ	15:30-17:00	Tu1Po-03.15
<i>Parallelized Nonlinear Model Predictive Control on GPU</i> , pp. 1620-1625.			
Ohyama, Shimpei	Univ. of Tsukuba		
Date, Hisashi	Univ. of Tsukuba	15:30-17:00	Tu1Po-03.16
<i>Augmented Model Predictive Control of Unmanned Quadrotor Vehicle</i> , pp. 1626-1631.			
Kuyumcu, Arden	Univ		
Bayazit, Ismail	Istanbul Tech. Univ	15:30-17:00	Tu1Po-03.17
<i>Generalized Predictive Control of DEAP Actuator Based on RBF Neural Network</i> , pp. 1632-1637.			
Jiang, Zhaoguo	Beijing Inst. of Tech		
Wang, Qinglin	Beijing Inst. of Tech		
Li, Yuan	Beijing Inst. of Tech	15:30-17:00	Tu1Po-03.18
<i>A Prediction Method Using Extreme Learning Machine with Immune Optimization</i> , pp. 1638-1643.			
Zhang, Jinxi	Donghua Univ		
Ding, Yongsheng	Donghua Univ		
Hao, Kuangrong	Donghua Univ		
Chen, Lei	Donghua Univ		
Ren, Lihong	Donghua Univ	15:30-17:00	Tu1Po-03.19
<i>Deep Learning for Picking Point Detection in Dense Cluster</i> , pp. 1644-1649.			
Liu, Wenhai	Shanghai Jiao Tong Univ		
Pan, Zhenyu	Shanghai Jiao Tong Univ		
Shao, Quanquan	Shanghai Jiao Tong Univ		
Hu, Jie	Shanghai Jiao Tong Univ		
Wang, Weiming	Shanghai Jiao Tong Univ. School of Mechanical Engineering		
Ma, Jin	Shanghai Jiao Tong Univ. School of Mechanical Engineering		
Qi, Jin	Shanghai Jiao Tong Univ		
Zhao, Wenjun	State Key Lab. of Smart Manufacturing for Special Vehicles		
Du, Shaofeng	The State Key Lab. of Smart Manufacturing for Special Vehi		
Liu, Weijie	Shanghai Jiao Tong Univ	15:30-17:00	Tu1Po-03.20

Hemodynamic Effects of Left Cerebral Artery Stenosis During Antegrade Cerebral Perfusion, pp. 1650-1654.

Han, Lu	Shanghai Children's Medical Center Affiliated to Shanghai Jiao T
Liu, Jinlong	Shanghai Children's Medical Center Affiliated to Shanghai Jiao T
Wang, Wei	Shanghai Children's Medical Center Affiliated to Shanghai Jiao T

15:30-17:00 Tu1Po-03.21

A Numerical Study of Hepatic Artery Flow for Prediction of Congenital Biliary Atresia, pp. 1655-1659.

Shen, Juanya	Shanghai Children's Medical Center (SCMC) Affiliated Shanghai Ji
Shi, Jing	Shanghai Children's Medical Center (SCMC) Affiliated Shanghai Ji
Liu, Jinlong	Shanghai Children's Medical Center Affiliated to Shanghai Jiao T
Deng, Chaohui	Shanghai Children's Medical Center (SCMC) Affiliated Shanghai Ji
Wang, Qian	Shanghai Children's Medical Center (SCMC) Affiliated Shanghai Ji
Du, Jun	Shanghai Children's Medical Center (SCMC) Affiliated Shanghai Ji

15:30-17:00 Tu1Po-03.22

Semantic Translation with Convolutional Encoder-Decoder Networks for Viewpoint Estimation, pp. 1660-1665.

Zhang, Liangjun	Shanghai Jiao Tong Univ
Gu, Changjian	Shanghai Jiaotong Univ
Gu, Chaochen	Shanghai Jiao Tong Univ
Wu, Kaijie	Shanghai Jiao Tong Univ
Guan, Xinping	Shanghai Jiao Tong Univ

15:30-17:00 Tu1Po-03.23

A Framework Based on Deep Learning and Mathematical Morphology for Cabin Door Detection in an Automated Aerobridge Docking System, pp. 1666-1671.

Jin, Ruibing	Nanyang Tech. Univ
Andonovski, Bojan	Nanyang Tech. Univ
Tu, Zhigang	Nanyang Tech. Univ. School of EEE
Wang, Jianliang	Nanyang Tech. Univ
yuan, Junsong	Nanyang Tech. Univ. School of EEE
Tham, Desmond Mark	Singapore Tech. Dynamics Pte Ltd

15:30-17:00 Tu1Po-03.24

Estimation System of Construction Equipment from Field Image by Combination Learning of Its Parts, pp. 1672-1676.

Fujitake, Masato	Shibaura Inst. of Tech
Yoshimi, Takashi	Shibaura Inst. of Tech

Interactive Paper Presentation Session (Poster Papers) - Tuesday 19 Dec 2017
Foyer F, 15:30-17:00

Poster Board	Paper Title	Session	Paper ID
1	Resonance Frequency Tracking Control of Ultrasonic Transducer for Diminished Haptics	Robotics and Mechatronic Systems	608
2	A Method to Estimate the Axial Force Applied to a Surgical Instrument Tip Considering the Effect of the Gravity	Robotics and Mechatronic Systems	309
3	Hardware Adaptation of a Small Commercial ROV for Autonomous Use	Robotics and Mechatronic Systems	419
4	Motion Trajectory Design for Underactuated Three-Link Gymnast Robot	Robotics and Mechatronic Systems	341
5	Simplified Modeling and Identification Approach for Model-Based Control of Parallel Mechanism Robot Leg	Robotics and Mechatronic Systems	489
6	Adaptive Neural Network Control for Time-Delay Teleoperation with Uncertainties	Robotics and Mechatronic Systems	430
7	Curvature Constrained Trajectory Planning for a UAV through a Sequence of Points: A Perturbation Approach	Robotics and Mechatronic Systems	616
8	An AR-Based Manipulation System for Industrial Robots	Robotics and Mechatronic Systems	372
9	Quantifying the Control Performance of Gearless Servo Drives for Real Time Applications	Robotics and Mechatronic Systems	92
10	Optimization of Limb Reaching Movement for Climbing Humanoid Robots	Robotics and Mechatronic Systems	247
11	Moving Obstacle Avoidance Control by Fuzzy Potential Method and Model Predictive Control	Robotics and Mechatronic Systems	584
12	Pitching Motion Control of a Wheeled Mobile Robot Via Full-State Linearization and Extremum Seeking	Robotics and Mechatronic Systems	614
13	A Position Control Design for UAVs Low-Altitude Visual Tracking of Linear Ground Structures by Variant PID Controller	Robotics and Mechatronic Systems	523
14	Using Physical Experiments to Estimate the Curvatures of Principal Connections Underlying Swimming at Low Reynolds Number	Robotics and Mechatronic Systems	627
15	Development of Practical Application for Sensorless Crane Control System	Robotics and Mechatronic Systems	176
16	Motion Planning for a Knife-Edge on the Surface of a Hyperboloid	Robotics and Mechatronic Systems	32
17	Using Fish-Eye Stereo Vision System for Autonomous Vehicles	Robotics and Mechatronic Systems	426
18	Finite-Time Control of a Compliant Base Robot Manipulator	Robotics and Mechatronic Systems	29
19	A Backstepping Design Approach to a Class of Mobile Robots	Robotics and Mechatronic Systems	35
20	Performance Control System of Dulcimer Music-Playing Robot	Robotics and Mechatronic Systems	224
21	Information Supervisory Control of Human Behavior - Experiments and Formal Modeling -	Robotics and Mechatronic Systems	163
22	Development of Mobile Operation System of a Vehicle	Robotics and Mechatronic Systems	481
23	Hand and Finger Control of Myo-Prosthesis Based on Motion Discriminator and Voluntary Control	Robotics and Mechatronic Systems	480
24	Hand-Free Maneuvering System for Electric Wheelchair Using Laser Range Finder	Robotics and Mechatronic Systems	268
25	Contact Force Distribution Predictive Control System for Wearable Robot with Tactile Sensors	Robotics and Mechatronic Systems	504
26	Suggestion and Verification of the Modular Robot Education	Robotics and Mechatronic Systems	248
27	Robust Adaptive Finite Time Parameter Estimation with Relaxed Persistence of Excitation	Identification and Observation	221
28	Implementation and Validation of a Lumped Model for an Experimental Multi-Span Web Transport System	Identification and Observation	420
29	Quasi-Online Method for the Identification of Heat Flux Densities and Trajectories of Two Mobile Heating Sources	Identification and Observation	450
30	Improved Dynamic Time Warping Algorithm with Adaptive Scaling for Steel Plate Thickness Matching	Identification and Observation	380

31	Building Occupancy Estimation with Robust Kalman Filter	Identification and Observation	47
32	Minimal information based, simple identification method of fractional order systems for model-based control applications	Identification and Observation	79
33	Identification of Nonlinear Errors-In-Variables Systems in State-Space Form: A Linear Parameter Varying Approach	Identification and Observation	217
34	Research on Speed Sensorless Operation of PMSM Based on Improved MRAS	Identification and Observation	349
35	Matrix Rank Minimization Approach to Signal Recovery and Nonlinear Function Estimation for Nonlinear ARX Model with Input Nonlinearity	Identification and Observation	66
36	Modeling the aerodynamics of wind turbines for real-time simulation and control purposes	Identification and Observation	625
37	Gasoline Dry Point Prediction of Fractionation Processes Using Dynamic Inner Partial Least Squares	Identification and Observation	31
38	A Bias Fault Estimation of Actuators and Sensors by Optimization with l_0 norm Constraint	Identification and Observation	455
39	Observer Based Control of a Brushed DC Motor at Very Low Speeds Over Controller Area Network: An Application in Astronomical Telescopes	Identification and Observation	276
40	Circuit Realization of a Hybrid Delay Chaotic Secure Communication System Over a Noisy Receiver	Identification and Observation	496
41	State Feedback Control with Disturbance Estimation and Compensation for Discrete-Time Linear Systems	Identification and Observation	512
42	ESO-Based Repetitive Control for Rejecting Periodic and Aperiodic Disturbances in Piezoelectric Actuators	Identification and Observation	237
43	Observer Design and Analysis of Wnt-Cell Cycle Joint Pathway	Identification and Observation	18
44	Recurrent Neural Network-Based Fault Detector for Aileron Failure of Aircraft	Identification and Observation	553
45	Transient Identification for Nuclear Power Plants: Effect of the Length of Measured Data to Identification Result	Identification and Observation	592
46	Nonlinear Chemical Process Monitoring Using Decentralized Kernel Principal Component Analysis and Bayesian Inference	Identification and Observation	65
47	Fault Identification with Modified Reconstruction-Based Contribution Based on Kernel Principal Component Analysis	Identification and Observation	509
48	Operating Performance Assessment for Multi-Mode Hydrometallurgy Process Based on Rough Set	Identification and Observation	411
49	A Study on Anomaly Prediction Method of Machine Tools - Feature Extraction for Anomaly Prediction -	Identification and Observation	577
50	Event-Triggered Fault Detector and Controller Coordinated Design of Discrete-Time Nonlinear Systems in T-S Fuzzy Model	Identification and Observation	501
51	A Distributed Fault Detection Observer-Based Approach for a Network of Multi-Agent Systems with Switching Topologies	Identification and Observation	598
52	Robust Fault Detection for Multi-Motor Winding System Based on Disturbance Observer and Sliding-Mode Observer	Identification and Observation	37
53	Observer-Based Stabilization of Time-Delay Systems: An Application to Diesel Engine	Identification and Observation	505
54	Output Feedback Optimal Control of Fractional Order Delayed Systems	Identification and Observation	524
55	A Model Reference Adaptive Control with ADP-To-SMC Strategy for Unknown Nonlinear Systems	Intelligent and Predictive Control	566
56	Iterative Learning Control with Initial Rectifying for Nonlinear Robotic System	Intelligent and Predictive Control	117
57	Energy Efficiency Optimization of Belt Conveyors Based on Finite-Time Recurrent Neural Networks	Intelligent and Predictive Control	3
58	Evaluation of Missing Values Estimation by Multiple SOMs	Intelligent and Predictive Control	294
59	Comparison of Different Model-Free Iterative Learning Control Methods Concerning a Nonlinear Mechanical Structure	Intelligent and Predictive Control	59
60	RHO-based Convex Optimization Method Applied to Cooperative Trajectory Planning for Multiple UAVs	Intelligent and Predictive Control	223
61	Design of Mixed Static/dynamic Output Feedback Controller Using Multi-Objective Distribute Particle Swarm Optimization	Intelligent and Predictive Control	336
62	A Cross-Layer Design for Power Flow Control in Smart Grids	Intelligent and Predictive Control	169
63	Simulation of a Model-Based Predictive Control System to Optimize the Methane Production of a Biogas Reactor	Intelligent and Predictive Control	396
64	Solution of Complex Optimal Control Problem with Time Varying Parameters and Bound State Constraints	Intelligent and Predictive Control	281

65	Experimental Verification of Formation Control by Model Predictive Control Considering Collision Avoidance in Three Dimensional Space with Quadcopters	Intelligent and Predictive Control	576
66	Distributed Model Predictive Control of Bilinear HVAC Systems Using a Convexification Method	Intelligent and Predictive Control	434
67	An Active Fault-Tolerant MPC for Systems with Partial Actuator Failures	Intelligent and Predictive Control	240
68	Parallelized Nonlinear Model Predictive Control on GPU	Intelligent and Predictive Control	613
69	Augmented Model Predictive Control of Unmanned Quadrotor Vehicle	Intelligent and Predictive Control	607
70	Generalized Predictive Control of DEAP Actuator Based on RBF Neural Network	Intelligent and Predictive Control	41
71	A Prediction Method Using Extreme Learning Machine with Immune Optimization	Intelligent and Predictive Control	401
72	Deep Learning for Picking Point Detection in Dense Cluster	Intelligent and Predictive Control	522
73	Hemodynamic Effects of Left Cerebral Artery Stenosis During Antegrade Cerebral Perfusion	Intelligent and Predictive Control	555
74	A Numerical Study of Hepatic Artery Flow for Prediction of Congenital Biliary Atresia	Intelligent and Predictive Control	570
75	Semantic Translation with Convolutional Encoder-Decoder Networks for Viewpoint Estimation	Intelligent and Predictive Control	201
76	A Framework Based on Deep Learning and Mathematical Morphology for Cabin Door Detection in an Automated Aerobridge Docking System	Intelligent and Predictive Control	298
77	Estimation System of Construction Equipment from Field Image by Combination Learning of Its Parts	Intelligent and Predictive Control	466

ASCC 2017

Wednesday Sessions

(page intentionally left blank)

Technical Program for Wednesday December 20, 2017

WeAPI Arena B Plenary Session (3) (Plenary Session)

Chair: Lau, Darwin Chinese Univ. of Hong Kong

08:30-09:30 WeAPI.1

*A Symmetric Perspective on Simultaneous Localisation and Mapping**.

Mahony, Robert Australian National Univ

WeA1 Room 1 Aerospace Engineering (1) (Regular Session)

Chair: Mumm, Nils Christian Tech. Univ. München

10:00-10:15 WeA1.1

System Identification & Attitude Control of Avian-Type Flyer with Flight Test, pp. 1677-1682.

Oh, Jangjin Chungnam National Univ

Kim, Seongyoung Chungnam National Univ

Lee, Byoungju Chungnam National Univ

Kim, Seungkeun Chungnam National Univ

Suk, Jinyoung Chungnam National Univ

10:15-10:30 WeA1.2

Automatic Takeoff of a General Aviation Research Aircraft, pp. 1683-1688.

Zollitsch, Alexander Wolfgang Tech. Univ. München

Mumm, Nils Christian Tech. Univ. München

Wulf, Simona Tech. Univ. München

Holzappel, Florian Tech. Univ. München

Hochstrasser, Markus Tech. Univ. München

Lauffs, Patrick Jonathan Tech. Univ. München

Peter, Lars Tech. Univ. München

10:30-10:45 WeA1.3

Design and Testing of a Ground Roll Runway Centerline Tracking Controller for a General Aviation Research Aircraft, pp. 1689-1694.

Mumm, Nils Christian Tech. Univ. München

Zollitsch, Alexander Wolfgang Tech. Univ. München

Schatz, Simon Philipp Tech. Univ. München

Wulf, Simona Tech. Univ. München

Holzappel, Florian Tech. Univ. München

Lauffs, Patrick Jonathan Tech. Univ. München

Peter, Lars Tech. Univ. München

10:45-11:00 WeA1.4

Step Response Based Identification of Hammerstein Models: Application to Mach Number Drift in an Intermittent Wind Tunnel, pp. 1695-1700.

Zhang, Jian Univ. of Hong Kong

WeA2 Room 2 Cooperative Control (1) (Regular Session)

Chair: Liao, Fang National Univ. of Singapore

10:00-10:15 WeA2.1

Adaptive Model-Free Consensus Control for a Network of Nonlinear Agents under the Presence of Measurement Noise, pp. 1701-1706.

Safaei, Ali PhD. Candidate, School of Electrical and Electronics Engineering
Univ. Sains Malaysia

Mahyuddin, Muhammad Univ. Sains Malaysia

Nasiruddin

10:15-10:30 WeA2.2

Motion Planning of UAV Platooning in Unknown Cluttered Environment, pp. 1707-1712.

Liao, Fang National Univ. of Singapore

Hu, Yuchao National Univ. of Singapore

Cui, Jinqiang NUS

Tang, Yaze National Univ. of Singapore

Lao, Mingjie National Univ. of Singapore

Lin, Feng National Univ. of Singapore

Teo, Rodney Temasek Lab. National Univ. of Singapore

Lai, Shupeng National Univ. of Singapore

Wang, Jianliang Nanyang Tech. Univ

10:30-10:45 WeA2.3

Adaptive Consensus Control of Coopetition Networks with High-Order Agent Dynamics, pp. 1713-1718.

WU, Yanzhi Univ. of Electronic Science and Tech. of China

Hu, Jiangping Univ. of Elec. Sci. and Tech. of China

Gao, Lixin Wenzhou Univ

Ghosh, Bijoy Texas Tech. Univ

10:45-11:00 WeA2.4

Barrier Coverage by Heterogeneous Sensor Network with Input Saturation, pp. 1719-1724.

Nguyen, Thien-Minh Nanyang Tech. Univ

Li, Xiuxian Nanyang Tech. Univ

Xie, Lihua Nanyang Tech. Univ

WeA3 Room 3 Delay Systems (1) (Regular Session)

Chair: Laraba, Mohammed Tahar Lab. of Signals and Systems L2S, CentraleSupélec

10:00-10:15 WeA3.1

A Predictor Feedback Control Method for Time-Delay Systems Using Guass-Legendre Integration, pp. 1725-1730.

Li, Chaolin The 802 Inst. of Shanghai Acad

Wu, Xiongjun The Eighth Acad. of China Aerospace Science and Tech. Co

Shi, Songhua The 802 Inst. of Shanghai Acad. of Space Flight Tech

Zhou, Jialing Nanjing Univ. of Science and Tech

10:15-10:30 WeA3.2

Guaranteed Cost Control of Quadratic Time-Delay Systems, pp. 1731-1736.

de Souza, Carlos E.	National Lab. for Scientific Computing (LNCC)
Coutinho, Daniel	Univ. Federal De Santa Catarina
Barbosa, Karina A.	Univ. De Santiago De Chile
10:30-10:45	WeA3.3
<i>Constrained Networked Control Systems Stabilization: A Lambda-D-Contractive Set Based Approach</i> , pp. 1737-1742.	
Laraba, Mohammed Tahar	Lab. of Signals and Systems L2S, CentraleSupélec
Olaru, Sorin	CentraleSupélec
Niculescu, Silviu-Iulian	Umr Cnrs 8506, Cnrs-Supelec
10:45-11:00	WeA3.4
<i>A Finsler-Based Result for the Stability Analysis of Takagi-Sugeno Fuzzy Models with Interval Time-Varying Delays</i> , pp. 1743-1748.	
bourahala1981, bourahala	Ferhat Abas Univ
Guelton, Kevin	Univ. De Reims Champagne Ardenne

WeA4	Room 4
Fault Detection (1) (Regular Session)	
Chair: Bao, Jie	The Univ. of New South Wales
10:00-10:15	WeA4.1
<i>Resilient Control under Denial-Of-Service Via Dynamic Event Triggering</i> , pp. 1749-1754.	
Tamba, Tua	Parahyangan Catholic Univ
Nazaruddin, Yul Yunazwin	ITB Bandung
HU, Bin	Univ. of Notre Dame
10:15-10:30	WeA4.2
<i>A Behavior Based Robust Fault Detection Approach for LTI Systems</i> , pp. 1755-1760.	
Wang, Ruigang	Univ. of New South Wales
Lei, Qingyang	Univ. of New South Wales
Bao, Jie	The Univ. of New South Wales
10:30-10:45	WeA4.3
<i>An Artificial Neural Network-Based Model for Analysing the R-Ratio Effect on Fatigue Crack Propagation</i> , pp. 1761-1765.	
Zhi, linxian	Swinburne Univ. of Tech
Man, Zhihong	Faculty of Engineering, Swinburne Univ. of Tech
Wang, Wenyi	Aerospace Div. Defence Science and Tech. Group
Cao, Zhenwei	Swinburne Univ. of Tech
10:45-11:00	WeA4.4
<i>On Experimental Verification of Model Based White List for PLC Anomaly Detection</i> , pp. 1766-1771.	
Mochizuki, Akinori	The Univ. of Electro-Communications
Sawada, Kenji	The Univ. of Electro-Communications
Shin, Seiichi	The Univ. of Electro-Communications
hosokawa, shu	Control System Security Center

WeA5	Room 5
Identification and Estimation (1) (Regular Session)	
Chair: Pursche, Thomas	Univ. of Wuppertal
10:00-10:15	WeA5.1
<i>An SDP Formulation for Consistent Estimate of Innovations Model</i> , pp. 1772-1777.	
Ikeda, Kenji	Tokushima Univ
Tanaka, Hideyuki	Hiroshima Univ
10:15-10:30	WeA5.2
<i>Causal Analysis Based on Non-Time-Series Kernel Granger Causality in a Steelmaking Process</i> , pp. 1778-1782.	
Sato, Ryosuke	Kyoto Univ
Fujiwara, Koichi	Kyoto Univ
Tani, Masahiro	Nippon Steel & Sumitomo Metal Corp
Mori, Junichi	Nippon Steel & Sumitomo Metal Corp
Ise, Junji	Nippon Steel & Sumitomo Metal Corp
Harada, Kohhei	Nippon Steel & Sumitomo Metal Corp
Kano, Manabu	Kyoto Univ
10:30-10:45	WeA5.3
<i>Soft Sensors of Nonlinear Industrial Processes Based on Self-Learning Kernel Regression Model</i> , pp. 1783-1788.	
Wei, Chihang	Zhejiang Univ
Chen, Junghui	Chung-Yuan Christian Univ
Song, Zhihuan	Zhejiang Univ
Chen, Chun-I	Western Digital Corp
10:45-11:00	WeA5.4
<i>Nonlinear System Identification of the High Pressure Value in a Heat Pump System Based on Stable Local Linear Model Network</i> , pp. 1789-1794.	
Clauss, Roland	Univ. of Wuppertal
Pursche, Thomas	Univ. of Wuppertal
Tibken, Bernd	Wuppertal Univ

WeA6	Room 6
Networked Control Systems (1) (Regular Session)	
Chair: Ahn, Hyo-Sung	Gwangju Inst. of Sci & Tech
10:00-10:15	WeA6.1
<i>Matrix-Weighted Consensus with Leader-Following Topologies</i> , pp. 1795-1800.	
Trinh, Minh Hoang	Gwangju Inst. of Science and Tech
Ye, Mengbin	Australian National Univ
Ahn, Hyo-Sung	Gwangju Inst. of Sci & Tech
Anderson, Brian D.O.	Australian National Univ
10:15-10:30	WeA6.2
<i>Distributed Control Network Design for Multirate Kuramoto Networks to Achieve Bounded Synchronization</i> , pp. 1801-1806.	
Wu, Liang	UNSW@ADFA
Pota, Hemanshu R.	Univ. of New South Wales

Petersen, Ian R.	Australian Defence Force Acad
10:30-10:45	WeA6.3
<i>H-Infinity Fault Detection for Networked Control Systems with Random Delay Via Delta Operator</i> , pp. 1807-1812.	
Gao, Jie	Zhengzhou Univ
Zhang, Duanjin	Zhengzhou Univ
10:45-11:00	WeA6.4
<i>Event-Triggered Active Disturbance Rejection Control for Nonlinear Stochastic Systems</i> , pp. 1813-1817.	
Li, Dandan	Tianjin Univ
Zuo, Zhiqiang	Tianjin Univ
Wang, Yijing	Tianjin Univ

WeA7	Arena B
Robust Control (1) (Regular Session)	
Chair: Barbosa, Karina A.	Univ. De Santiago De Chile
10:00-10:15	WeA7.1
<i>Stabilization of Rotary Double Inverted Pendulum Using Higher Order Sliding Modes</i> , pp. 1818-1823.	
Patil, Madhura	Coll. of Engineering Pune
Kurode, Shailaja	Coll. of Engineering, Shivajinagar, Pune INDIA
10:15-10:30	WeA7.2
<i>A Riccati Equation Negative Imaginary Lemma for Singular Negative Imaginary Systems</i> , pp. 1824-1828.	
Dannatt, James	Australian National Univ
Petersen, Ian R.	Australian Defence Force Acad
10:30-10:45	WeA7.3
<i>Self-Scheduling Robust Preview Controllers for Path Tracking and Autonomous Vehicles</i> , pp. 1829-1834.	
Boyali, Ali	Toyota Tech. Inst
John, Vijay	Toyota Tech. Inst
Lyu, Zheming	Toyota Tech. Inst
Rathour, Swarn	Toyota Tech. Univ
Mita, Seichi	Toyota Tech. Insitute
10:45-11:00	WeA7.4
<i>Bounded Real Lemma for Discrete Linear Time-Varying Descriptor Systems</i> , pp. 1835-1840.	
Barbosa, Karina A.	Univ. De Santiago De Chile
de Souza, Carlos E.	National Lab. for Scientific Computing (LNCC)
Coutinho, Daniel	Univ. Federal De Santa Catarina
Rodríguez L., Carlos	Univ. De Santiago De Chile

WeB1	Room 1
Aerospace Engineering (2) (Regular Session)	
Chair: Sekiguchi, Kazuma	Tokyo City Univ
11:00-11:15	WeB1.1
<i>Attitude Controller Design for a Small Satellite Using Spherical Reaction Wheel System</i> , pp. 1841-1846.	
Takehana, Ryo	Nihon Univ
Uchiyama, Kenji	Nihon Univ

11:15-11:30	WeB1.2
<i>Attitude Maneuver and Gimbal Angle Guidance by SDR Controller Using SGCMG Integrated Satellite SDR Model</i> , pp. 1847-1852.	
Ozawa, Ryotaro	Keio Univ
Takahashi, Masaki	Keio Univ
11:30-11:45	WeB1.3
<i>Novel Control Method for Quadcopter –Hierarchical Linearization Approach–</i> , pp. 1853-1858.	
Sekiguchi, Kazuma	Tokyo City Univ
11:45-12:00	WeB1.4
<i>Collision Avoidance of Robot Arms of Aerial Manipulators</i> , pp. 1859-1864.	
Jeon, Boseong	Seoul National Univ
Kim, Hyoin	Seoul National Univ
Kim, H Jin	Seoul National Univ

WeB2	Room 2
Cooperative Control (2) (Regular Session)	
Chair: Li, Xiuxian	Nanyang Tech. Univ
11:00-11:15	WeB2.1
<i>A Novel Approach to Time-Varying Formation Control</i> , pp. 1865-1870.	
Li, Xiuxian	Nanyang Tech. Univ
Xie, Lihua	Nanyang Tech. Univ
11:15-11:30	WeB2.2
<i>Multi-Hop Consensus for High-Order Integrator Multi-Agent Systems</i> , pp. 1871-1876.	
Li, Chang-Jiang	Harbin Inst. of Tech
Liu, Guoping	Univ. of Glamorgan
11:30-11:45	WeB2.3
<i>Spherical Formation Tracking of Non-Holonomic Vehicles in Three-Dimensional Space</i> , pp. 1877-1882.	
Ai, Xiang	Southeast Univ
Chen, Yangyang	Southeast Univ
Zhang, Ya	Southeast Univ
11:45-12:00	WeB2.4
<i>External Consensus of Networked Multi-Agent Systems with Nonlinear Dynamics and Random Network Delay</i> , pp. 1883-1887.	
Lei, Qi	Central South Univ
Li, Jia-Hui	Central South Univ
Liu, Guoping	Univ. of Glamorgan
Wu, Min	China Univ. of Geosciences

WeB3	Room 3
Delay Systems (2) (Regular Session)	
Chair: Sun, Xi-Ming	Dalian Univ. of Tech
11:00-11:15	WeB3.1
<i>Exponential Stability of Stochastic Impulsive Switched Delayed Systems Based on Vector Lyapunov Functions</i> , pp. 1888-1893.	

Ren, Wei	Univ. of Melbourne
Xiong, Junlin	Univ. of Science and Tech. of China

11:15-11:30	WeB3.2
-------------	--------

Controllability of Fractional Linear Switched Systems with Delays for the Fixed Sequence, pp. 1894-1899.

Babiarz, Artur	Inst. of Automatic Control, Silesian Univ. of Tech
----------------	--

Klamka, Jerzy	Silesian Univ. of Tech
---------------	------------------------

11:30-11:45	WeB3.3
-------------	--------

H2 Analytical Decoupling Control Design for Non-Square Systems with Time Delays, pp. 1900-1905.

Xu, Yongheng	Shanghai Jiao Tong Univ
--------------	-------------------------

Shuyi, Lin	Shanghai Jiao Tong Univ
------------	-------------------------

Zhou, Zehua	Shanghai Jiao Tong Univ
-------------	-------------------------

Zhang, Weidong	Shang Hai Jiaotong Univ
----------------	-------------------------

11:45-12:00	WeB3.4
-------------	--------

Suppressing the Pressure Fluctuations Caused by Drill String Vibration by SP-EID Method, pp. 1906-1911.

Zhou, Yang	China Univ. of Geosciences
------------	----------------------------

Chen, Xin	China Univ. of Geosciences
-----------	----------------------------

WeB4	Room 4
Fault Detection (2) (Regular Session)	

Chair: Mareels, Iven	The Univ. of Melbourne
----------------------	------------------------

11:00-11:15	WeB4.1
-------------	--------

Fault Detection for Markovian Jump Systems with Random Packet Dropout and Delay Using Delta Operator, pp. 1912-1917.

Zhou, Jianxun	Zhengzhou Univ
---------------	----------------

Zhang, Duanjin	Zhengzhou Univ
----------------	----------------

11:15-11:30	WeB4.2
-------------	--------

Fault Detection Based on a Bio-Inspired Vibration Sensor System, pp. 1918-1923.

Li, Zhengchao	Hong Kong Pol. Univ
---------------	---------------------

Jing, Xing Jian	Hong Kong Pol. Univ
-----------------	---------------------

YU, Jinyong	Harbin Inst. of Tech
-------------	----------------------

11:30-11:45	WeB4.3
-------------	--------

A Novel EFSM-Based ELM Double-Faults Identification Approach and Its Application to Non-Linear Processes, pp. 1924-1927.

XU, Yuan	Beijing Univ. of Chemical Tech
----------	--------------------------------

Zhou, Ziqian	Beijing Univ. of Chemical Tech
--------------	--------------------------------

geng, zhiqiang	Beijing Univ. of Chemical Tech
----------------	--------------------------------

Wang, Yanqing	Beijing Univ. of Chemical Tech
---------------	--------------------------------

He, Yan-Lin	Beijing Univ. of Chemical Tech
-------------	--------------------------------

ZHU, Qunxiong	Beijing Univ. of Chemical Tech
---------------	--------------------------------

11:45-12:00	WeB4.4
-------------	--------

A Hybrid Method of Roller Bearing Fault Diagnosis Based on Improved LMD and Spectral Kurtosis, pp. 1928-1933.

Wang, Jiying	Wuhan Univ. of Tech
--------------	---------------------

Hu, Jiquan	Wuhan Univ. of Tech
------------	---------------------

Pan, Lin	Wuhan Univ. of Tech
----------	---------------------

WeB5	Room 5
Identification and Estimation (2) (Regular Session)	

Chair: Nguyen, Hung Duc	Australian Maritime Coll. UTAS
-------------------------	--------------------------------

11:00-11:15	WeB5.1
-------------	--------

MUSIC-Like Joint Estimation of 2-D DOAs and Sensor Gain/Phase Responses for Rectangular Array, pp. 1934-1939.

Cui, Han	Huizhou Univ
----------	--------------

Peng, Wenjuan	Huizhou Univ
---------------	--------------

Liu, Tong	Huizhou Univ. Huizhou 516001, P.R.China
-----------	---

11:15-11:30	WeB5.2
-------------	--------

Recursive and Iterative Stochastic Gradient Algorithms Based on Two-Step Update Estimation for Wiener Systems, pp. 1940-1945.

Dong, Rui-Qi	Harbin Inst. of Tech. Shenzhen Graduate School
--------------	--

Zhang, Yi-Yang	Harbin Inst. of Tech
----------------	----------------------

Zhang, Ying	Harbin Inst. of Tech
-------------	----------------------

11:30-11:45	WeB5.3
-------------	--------

Partial Realization Theory and System Identification Redux, pp. 1946-1950.

Lindquist, Anders	Royal Inst. of Tech
-------------------	---------------------

11:45-12:00	WeB5.4
-------------	--------

Modelling and Simulation of a Surface Vessel by Experimental Approach with Low-Cost Sensors, pp. 1951-1955.

Kim, Jihwan	Australian Maritime Coll
-------------	--------------------------

Wang, Yuanyuan	National Centre for Maritime Engineering and Hydrodynamics, Austr
----------------	---

Nguyen, Hung Duc	Australian Maritime Coll. UTAS
------------------	--------------------------------

WeB6	Room 6
Networked Control Systems (2) (Regular Session)	

Chair: Zuo, Zhiqiang	Tianjin Univ
----------------------	--------------

11:00-11:15	WeB6.1
-------------	--------

Secure Control for Networked Control Systems under Denial-Of-Service Attacks, pp. 1956-1961.

Gan, Jiyang	Shanghai Jiao Tong Univ
-------------	-------------------------

Wu, Jing	Shanghai Jiao Tong Univ
----------	-------------------------

Long, Chengnian	Shanghai Jiao Tong Univ
-----------------	-------------------------

Li, Shaoyuan	Shanghai Jiao Tong Univ
--------------	-------------------------

11:15-11:30	WeB6.2
-------------	--------

Distributed Localization in Sensor Networks with Communication and Measurement Noises, pp. 1962-1967.

Wu, Fei	Southeast Univ
---------	----------------

Tian, Yu-Ping	Southeast Univ
---------------	----------------

Wang, Bo	Southeast Univ
----------	----------------

11:30-11:45	WeB6.3
-------------	--------

Event-Triggered H1 Tracking for Large-Scale Interconnected Systems, pp. 1968-1973.

Zhu, Jun-Wei	Zhejiang Univ. of Tech. Hangzhou
--------------	----------------------------------

Zhou, Jing	Zhejiang Univ. of Tech
------------	------------------------

11:45-12:00	WeB6.4
<i>An Error-Correcting Code in Delay Linear Network Coding</i> , pp. 1974-1979.	
Vu, Loc	Tokyo Inst. of Tech
Hayakawa, Tomohisa	Tokyo Inst. of Tech

WeB7	Arena B
Robust Control (2) (Regular Session)	

Chair: Morales, Rafael Mauricio	Univ. of Leicester
---------------------------------	--------------------

11:00-11:15	WeB7.1
-------------	--------

Stability of Networked Feedback System with Frequency-Wise Bounded Uncertainty Quartets, pp. 1980-1983.

Zhao, Di	The Hong Kong Univ. of Science and Tech
----------	---

Qiu, Li	Hong Kong Univ. of Sci. & Tech
---------	--------------------------------

11:15-11:30	WeB7.2
-------------	--------

Disturbance Rejection Based on Equivalent-Input-Disturbance Approach for Nonlinear Time-Delay Systems, pp. 1984-1989.

Gao, Fang	Anhui Normal Univ
-----------	-------------------

Wu, Min	China Univ. of Geosciences
---------	----------------------------

She, Jin-Hua	Tokyo Univ. of Tech
--------------	---------------------

Fang, Mingxing	Anhui Normal Univ
----------------	-------------------

Du, Youwu	China Univ. of Geosciences
-----------	----------------------------

Wang, Fang	Zhengzhou Univ. of Light Industry
------------	-----------------------------------

11:30-11:45	WeB7.3
-------------	--------

Decoupled Controller Tuning for Robust Principal Component Active Control, pp. 1990-1995.

Yang, Hao	Univ. of Leicester
-----------	--------------------

Morales, Rafael Mauricio	Univ. of Leicester
--------------------------	--------------------

11:45-12:00	WeB7.4
-------------	--------

Robust Controller Design with Fixed-Order Controllers Using FNFR Models, pp. 1996-2000.

Sakamoto, Yuki	Kyushu Inst. of Tech
----------------	----------------------

Nobuyama, Eitaku	Kyushu Inst. of Tech
------------------	----------------------

Kami, Yasushi	Akashi National Coll. of Tech
---------------	-------------------------------

WeC1	Room 1
AI and Expert Systems (Regular Session)	

Chair: Qi, Hongsheng	Chinese Acad. of Sciences
----------------------	---------------------------

13:00-13:15	WeC1.1
-------------	--------

A New Multilayer LSTM Method of Reconstruction for Compressed Sensing in Acquiring Human Pressure Data, pp. 2001-2006.

Han, Tao	Donghua Univ
----------	--------------

Hao, Kuangrong	Donghua Univ
----------------	--------------

Ding, Yongsheng	Donghua Univ
-----------------	--------------

Tang, Xuesong, Xuesong	Donghua Univ
------------------------	--------------

13:15-13:30	WeC1.2
-------------	--------

Joint Distribution Adaptation-Based Transfer Learning for Status Classification of Blast Furnace Gas Pipeline Network, pp. 2007-2012.

SUN, JIAN	Dalian Univ. of Tech
LV, ZHENG	Dalian Univ. of Tech
Zhao, Jun	Dalian Univ. of Tech. Dalian, Liaoning

Wang, Wei	Dalian Univ. of Tech
Wang, Linqing	Dalian Univ. of Tech. Dalian, Liaoning

Guo, Ge	Dalian Maritime Univ
---------	----------------------

13:30-13:45	WeC1.3
-------------	--------

Consensus-Based EM Algorithm for Gaussian Mixtures in Time-Varying Networks, pp. 2013-2018.

Lin, Peng	AMSS, Chinese Acad. of Sciences; Univ. of Chinese Acad
-----------	--

Wang, Yinghui	Key Lab of Systems and Control, AMSS, Chinese Acad. of Science
---------------	--

Qi, Hongsheng	Chinese Acad. of Sciences
---------------	---------------------------

13:45-14:00	WeC1.4
-------------	--------

Neural Network Quantizers for Discrete-Valued Input Control, pp. 2019-2024.

Rodriguez Ramirez, Juan Esteban	Nara Inst. of Science and Tech
---------------------------------	--------------------------------

Minami, Yuki	Osaka Univ
--------------	------------

Sugimoto, Kenji	Nara Inst. of Science and Tech
-----------------	--------------------------------

WeC2	Room 2
Cooperative Control (3) (Regular Session)	

Chair: Garratt, Matthew Adam	Univ. of New South Wales
------------------------------	--------------------------

13:00-13:15	WeC2.1
-------------	--------

A Cooperative Hunting Strategy for Mobile Sensing Agents Based on Bearings-Only Measurements, pp. 2025-2030.

Yang, Huizhen	Northwestern Polytechnical Univ
---------------	---------------------------------

Li, Ruizhen	Northwestern Polytechnical Univ
-------------	---------------------------------

13:15-13:30	WeC2.2
-------------	--------

Formation Control of Multi-UAVs Using Negative-Imaginary Systems Theory, pp. 2031-2036.

Tran, Vu Phi	Univ. of New South Wales
--------------	--------------------------

Garratt, Matthew Adam	Univ. of New South Wales
-----------------------	--------------------------

Petersen, Ian R.	Australian Defence Force Acad
------------------	-------------------------------

13:30-13:45	WeC2.3
-------------	--------

Minimal Data Rate for Quantized Consensus of Multi-Agent Systems, pp. 2037-2041.

Ma, Ji	City Univ. of Hong Kong
--------	-------------------------

Chen, Ziqin	Univ. of Science and Tech. of China
-------------	-------------------------------------

Ji, Haibo	Univ. of Science and Tech. of China
-----------	-------------------------------------

Xi, Hongsheng	Univ. of Science and Tech. of China
---------------	-------------------------------------

Yu, Xiao	The Chinese Univ. of Hong Kong, Shenzhen
----------	--

13:45-14:00	WeC2.4
-------------	--------

Finite-Time Output Consensus of Second-Order Multi-Agent Systems with Mismatched Disturbances Via Active Anti-Disturbance Control, pp. 2042-2047.

Li, Guipu	Southeast Univ
Wang, Xiangyu	Southeast Univ
Li, Shihua	Southeast Univ
Zheng, Wei Xing	Western Sydney Univ
Xisong, Chen	Southeast Univ

WeC3 Filtering (Regular Session) Room 3

Chair: Zhao, Yanlong Chinese Acad. of Sciences

13:00-13:15 WeC3.1

Command Filter and Observer-Based Adaptive Neural Networks Control for PMSMs, pp. 2048-2053.

Niu, Hao Qingdao Univ. Coll. of Automation and Electrical Enginee

Fu, Cheng Coll. of Automation and Electrical Engineering, Qingdao Univ

Ma, YuMei Coll. of Automation and Electrical Engineering, Qingdao Univ

Yu, Haisheng Qingdao Univ

Zhao, Lin Coll. of Automation and Electrical Engineering, Qingdao Univ

Zhao, Yang Qingdao Univ

Yu, JinPeng Qingdao Univ

13:15-13:30 WeC3.2

Nonlinear System Identification Based on Recurrent Neural Networks with Shared and Specialized Memories, pp. 2054-2059.

Guo, Yu Xi'an Jiaotong Univ

Wang, Fei Xi'an Jiaotong Univ

Lo, James Univ. of Maryland Baltimore County

13:30-13:45 WeC3.3

An Improved Labeled Multi-Bernoulli Filter for Bearings-Only Multi-Target Tracking, pp. 2060-2065.

Xie, Yifan Hanyang Univ

Song, Taek-Lyul Hanyang Univ

13:45-14:00 WeC3.4

Quickest Detection of Intermittent Signals with Estimated Anomaly Times, pp. 2066-2070.

James, Jasmin Queensland Univ. of Tech

Ford, Jason Queensland Univ. of Tech

Molloy, Timothy L. Queensland Univ. of Tech

WeC4 Game Theory (Regular Session) Room 4

Chair: Wada, Takayuki Osaka Univ

Co-Chair: Wang, Bingchang Shandong Univ

13:00-13:15 WeC4.1

A Stochastic Approximation for Finding an Element of the Core of Uncertain Cooperative Games, pp. 2071-2076.

Wada, Takayuki Osaka Univ

Fujisaki, Yasumasa Osaka Univ

13:15-13:30 WeC4.2

Utility Design for Two-Player Normal-Form Games, pp. 2077-2082.

Kitagawa, Koji The Univ. of Electro-Communications

Guo, Mingyu The Univ. of Adelaide

Kogiso, Kiminao The Univ. of Electro-Communications

Hata, Hideaki Nara Inst. of Science and Tech

13:30-13:45 WeC4.3

Nash Equilibrium Approximation under Communication and Computation Constraints in Large-Scale Non-Cooperative Games, pp. 2083-2088.

Nekouei, Ehsan KTH Royal Inst. of Tech

Alpcan, Tansu The Univ. of Melbourne

Nair, Girish N. Univ. of Melbourne

13:45-14:00 WeC4.4

Social Optima in Robust Mean Field LQG Control, pp. 2089-2094.

Wang, Bingchang Shandong Univ

Huang, James Jianhui Hong Kong Pol. Univ

WeC5 Observer Design (1) (Regular Session) Room 5

Chair: MESLEM, Nacim INP Grenoble (GIPSA-Lab)

13:00-13:15 WeC5.1

Dissipative Reset Adaptive Observer for a Class of Singular Systems, pp. 2095-2100.

Jin, Yongsik Kyungpook National Univ

Kwon, Wookyoung POSTECH

Yun, Jong Pil KITECH(Korea Inst. of Industrial Tech

Lee, S.M. Kyungpook National Univ

13:15-13:30 WeC5.2

Fractional-Order Observer for Integer-Order LTI Systems, pp. 2101-2106.

Weise, Christoph TU Ilmenau

Wulff, Kai Tech. Univ. Ilmenau

Reger, Johann TU Ilmenau

13:30-13:45 WeC5.3

A Luenberger-Like Interval Observer for a Class of Uncertain Discrete-Time Systems, pp. 2107-2112.

MESLEM, Nacim INP Grenoble (GIPSA-Lab)

LOUKKAS, Nassim GIPSA-Lab, Grenoble

Martinez Molina, John Jairo Gipsa-Lab, Grenoble-INP

13:45-14:00 WeC5.4

On Structural Approaches to H-Infinity Observer Design, pp. 2113-2118.

Zhang, Daipeng TU Ilmenau

Reger, Johann TU Ilmenau

WeC6 Predictive Control (1) (Regular Session) Room 6

Chair: Satoh, Yasuyuki Tokyo Univ. of Science

13:00-13:15	WeC6.1
<i>An Application of Explicit Model Predictive Control to Electric Power Assisted Steering Systems</i> , pp. 2119-2124.	
Lee, Junho	Kookmin Univ
Chang, H.J.	Kookmin Univ
13:15-13:30	WeC6.2
<i>Nonlinear Model Predictive Control for Systems with Autonomous State Jumps Using a Penalty Function Method</i> , pp. 2125-2130.	
Katayama, Sotaro	Kyoto Univ
Satoh, Yasuyuki	Tokyo Univ. of Science
Doi, Masahiro	Toyota Motor Coporation
Ohtsuka, Toshiyuki	Kyoto Univ
13:30-13:45	WeC6.3
<i>Parameter Sensitivity Reduction of Nonlinear Model Predictive Control for Discrete-Time Systems</i> , pp. 2131-2136.	
Schragl, Patrick	Johannes Kepler Univ. Linz
Ohtsuka, Toshiyuki	Kyoto Univ
Del Re, Luigi	Johannes Kepler Univ. Linz
13:45-14:00	WeC6.4
<i>Nonlinear Receding-Horizon Differential Game between a Multirotor UAV and a Moving Object</i> , pp. 2137-2142.	
Hirota, Kazuki	Graduate School of Informatics, Kyoto Univ
Satoh, Yasuyuki	Tokyo Univ. of Science
Motooka, Norizumi	Mitsubishi Electric Corp
Asano, Yuta	Mitsubishi Electric Corp
Kameoka, Shota	Mitsubishi Electric
Ohtsuka, Toshiyuki	Kyoto Univ
WeC7 Arena B	
Fuzzy Neural Systems (Regular Session)	
Chair: Yoneyama, Jun	Aoyama Gakuin Univ
13:00-13:15	WeC7.1
<i>Simulation of Waste Heat Recovery System with Fuzzy Based Evaporator Model</i> , pp. 2143-2147.	
NGUYEN, BAO KHA	Univ. of Sussex
13:15-13:30	WeC7.2
<i>Observer-Based Adaptive Fuzzy Control of Switched Nonlinear Systems under Arbitrary Switchings</i> , pp. 2148-2153.	
Liu, Zhiliang	Qingdao Univ
Chen, Bing	Qingdao Univ
Lin, Chong	Qingdao Univ
Zhang, Li	Qingdao Univ
13:30-13:45	WeC7.3
<i>New Conditions for Stability and Stabilizaion of Takagi-Sugeno Fuzzy Systems</i> , pp. 2154-2159.	
Yoneyama, Jun	Aoyama Gakuin Univ
13:45-14:00	WeC7.4
<i>Fuzzy and PSO-Based PID Controller for a Hybrid Autogyro Attitude Control</i> , pp. 2160-2165.	
Hou, Jiajia	Beihang Univ

Cai, Zhihao	Beihang Univ
Zhao, Jiang	Beihang Univ
Wang, Yingxun	Beihang Univ
Liu, Ningjun	Beihang Univ
Song, Ziwei	Beihang Univ

WeD1	Room 1
Decentralized Control (Regular Session)	
Chair: Sueoka, Yuichiro	Osaka Univ
14:00-14:15	WeD1.1
<i>Three-Dimensional Localization Method: Mi-Nashi in Multi-Robot Systems</i> , pp. 2166-2171.	
Takahashi, Ryosuke	Osaka Univ
Sueoka, Yuichiro	Osaka Univ
Osuka, Koichi	Osaka Univ. Japan
14:15-14:30	WeD1.2
<i>Robust Detection of Biasing Attacks on Misappropriated Distributed Observers Via Decentralized H_{∞} Synthesis</i> , pp. 2172-2176.	
Ugrinovskii, Valery	Univ. of New South Wales
14:30-14:45	WeD1.3
<i>Decentralized Tracking of a Class of Uncertain Interconnected Nonlinear Systems Using Filter-Driven Approximators</i> , pp. 2177-2181.	
Choi, Yunho	Chung-Ang Univ
Yoo, Sung Jin	Chung-Ang Univ
Kim, Hyoung Oh	Chungang Univ
14:45-15:00	WeD1.4
<i>Plug-And-Play Design of Current Controllers for Grid-Feeding Converters in DC Microgrids</i> , pp. 2182-2187.	
Han, Renke	Aalborg Univ
Tucci, Michele	Univ. Degli Studi Di Pavia
Soloperto, Raffaele	Univ. of Stuttgart
Ferrari-Trecate, Giancarlo	Ec. Pol. F'ed'erales De Lausanne
Guerrero, Josep	Aalborg Univ

WeD2	Room 2
Energy Technology (Regular Session)	
Chair: Lees, Michael	Carlton & United Breweries
14:00-14:15	WeD2.1
<i>A Dynamic Simulator of Adiabatic Compressed Air Energy Storage (A-CAES) Plant - Heat Medium Control Simulations -</i> , pp. 2188-2193.	
Takagi, Yasuo	Daido Univ
Minami, Atsushi	Daido Univ
Sakamoto, Kanami	Kobe Steel Ltd
14:15-14:30	WeD2.2
<i>Distributed Energy Dispatch of Electrical Energy Storage Systems</i> , pp. 2194-2199.	
Xie, Wenjing	Southwest Univ
Xia, Xiaohua	Univ. of Pretoria
14:30-14:45	WeD2.3

Compressor and Priority Panel Optimization for an Energy Efficient CNG Fuelling Station, pp. 2200-2203.

Kagiri, Charles Muiruri Univ. of Pretoria
Zhang, Lijun Univ. of Pretoria
Xia, Xiaohua Univ. of Pretoria

14:45-15:00 WeD2.4

Infrastructure Requirements to Support a User-Pays Energy Management Environment in a Manufacturing Plant, pp. 2204-2208.

Lees, Michael Carlton & United Breweries
Ellen, Robert EGA Tech

WeD3 Room 3

Human-Machine Systems (Regular Session)

Chair: Simic, Milan RMIT Univ

14:00-14:15 WeD3.1

Relation of Motivation Intensity, Stress Levels and Human Performance a Human Reliability Experiment, pp. 2209-2214.

wu, zekun Beihang Univ
pan, xing Beihang Univ
chen, xi Beihang Univ

14:15-14:30 WeD3.2

Detection of Knee Motor Imagery by Mu ERD/ERS Quantification for BCI Based Neurorehabilitation Applications, pp. 2215-2219.

Tariq, Madiha RMIT Univ
Trivailo, Pavel RMIT Univ
Simic, Milan RMIT Univ

14:30-14:45 WeD3.3

Regulation Mapping Design for Control System Viability by Revived Transformation, pp. 2220-2225.

Shudai, Hiroki Tokyo Univ. of Science
Nakamura, Hisakazu Tokyo Univ. of Science
Kimura, Shunsuke Tokyo Inst. of Tech

14:45-15:00 WeD3.4

Development of a Continuous-Passive-Motion Device with an Active Training Mode for Muscle Recovery, pp. 2226-2231.

Tagami, Masaharu Kindai Univ
Tagawa, Yasutaka Tokyo Univ. of Agriculture and Tech

WeD4 Room 4

LMIs (Regular Session)

Chair: Sato, Masayuki Japan Aerospace Exploration Agency

14:00-14:15 WeD4.1

Discrete-Time Observer-Based Gain-Scheduled Output Feedback Controller Design with Simultaneous Optimization of Scaling Matrices, pp. 2232-2237.

Sato, Masayuki Japan Aerospace Exploration Agency

14:15-14:30 WeD4.2

Non-Fragile L₂-L_{infinity} Control for Markov Jump Systems

with General Transition Probabilities against Multiple Disturbances, pp. 2238-2243.

Ye, Dan Northeastern Univ
Xu, Peipei Northeastern Univ
Zhao, Xingang Shenyang Inst. of Automation, CAS

14:30-14:45 WeD4.3

Reduction of H-Infinity State Feedback Control Problems for the Servo Systems, pp. 2244-2249.

Waki, Hayato Inst. of Mathematics for Industry, Kyushu Univ
Sebe, Noboru Kyushu Inst. of Tech

14:45-15:00 WeD4.4

Decoupling Compensation for a Dual Input Dual Output Servo System in Mobile Sat-Com Antennas, pp. 2250-2255.

Wen, Cheng South China Univ. of Tech
Li, Xiang South China Univ. of Tech
Su, Weizhou South China Univ. of Tech

WeD5 Room 5

Observer Design (2) (Regular Session)

Chair: Mareels, Iven The Univ. of Melbourne

14:00-14:15 WeD5.1

Intrinsically Stable Realization of a Resonant Current Regulator for a Single Phase Inverter, pp. 2256-2261.

McNabb, Luke RMIT Univ
Wang, Liuping RMIT Univ
McGrath, Brendan Royal Melbourne Inst. of Tech. Melbourne

14:15-14:30 WeD5.2

Output Feedback Nonlinear Model Predictive Control for a Class of Nonlinear Systems, pp. 2262-2267.

Hasan, Muhammad Noman National Univ. of Sciences and Tech. (NUST) Pakistan
Memon, Attaullah Y.Memon Pnec, Nust

14:30-14:45 WeD5.3

Integral Augmented Nonlinear Differentiator for Noisy Signals, pp. 2268-2273.

Su, Zikang Beihang Univ
Wang, Honglun Beihang Univ
Li, Na Unmanned System Res. Inst. Beihang Univ
Yu, Yue Beihang Univ
Wu, Jianfa Beihang Univ

14:45-15:00 WeD5.4

Resilient Moving Horizon Estimation for Cyber-Physical Systems under Sensor Attacks, pp. 2274-2279.

Wang, Yulei Jilin Univ
Yuan, Jingxin Jilin Univ
Yu, Shuyou Univ. of Stuttgart
hu, yunfeng Jilin Univ
Chen, Hong Jilin Univ. Campus NanLing

WeD6		Room 6
Predictive Control (2) (Regular Session)		
Chair: Defay, François		ISAE-SUPAERO
14:00-14:15	WeD6.1	
<i>On the Use of Intermediate Solutions in Parallel Model Predictive Control Based on Matrix Splitting</i> , pp. 2280-2285.		
Hara, Naoyuki	Osaka Prefecture Univ	
Konishi, Keiji	Osaka Prefecture Univ	
14:15-14:30	WeD6.2	
<i>Using Gated Recurrence Units Neural Network for Prediction of Melt Spinning Properties</i> , pp. 2286-2291.		
Xie, Ruimin	Donghua Univ	
Ding, Yongsheng	Donghua Univ	
Hao, Kuangrong	Donghua Univ	
Chen, Lei	Donghua Univ	
Wang, Tong	Donghua Univ	
14:30-14:45	WeD6.3	
<i>Pattern Trees Modeling for Prediction and Control of Hot Metal Temperature in Blast Furnace Ironmaking</i> , pp. 2292-2297.		
Zhang, Xinmin	Kyoto Univ	
Kano, Manabu	Kyoto Univ	
Matsuzaki, Shinroku	Nippon Steel & Sumitomo Metal Corp	
14:45-15:00	WeD6.4	
<i>Autonomous Landing of an UAV on a Moving Platform Using Model Predictive Control</i> , pp. 2298-2303.		
Jose-Alfredo, Maces-Hernandez	ISAE-SUPAERO - Toulouse Univ	
Defay, François	ISAE-SUPAERO	
Chauffaut, Corentin	ISAE Res. Center	

WeD7		Arena B
Mechatronics (Regular Session)		
Chair: Hirata, Kentaro		Okayama Univ
14:00-14:15	WeD7.1	
<i>Motion Tracking Control of Surgical Device Based on Sliding Mode Enhanced Adaptive Disturbance Observer Strategy</i> , pp. 2304-2309.		
Lau, Jun Yik	NATIONAL Univ. OF SINGAPORE	
Liang, Wenyu	National Univ. of Singapore	
Tan, Kok Kiong	National Univ. of Singapore	
14:15-14:30	WeD7.2	
<i>Velocity Tracking of a High-Rise Building Elevator Using PDF Control</i> , pp. 2310-2315.		
Mangera, Muhammed	Univ. of the Witwatersrand	
Parshotam, Dushil	Univ. of the Witwatersrand	
Hill, Ike-Lee	Univ. of the Witwatersrand	
Panday, Aarti	Univ. of the Witwatersrand	
Pedro, Jimoh Olarewaju	Univ. of the Witwatersrand	
14:30-14:45	WeD7.3	
<i>Visual Feedback Control of a Pendubot with Varying Moment of Inertia</i> , pp. 2316-2321.		

Hatada, Kazuyoshi	Fukuoka Univ
Hirata, Kentaro	Okayama Univ
14:45-15:00	WeD7.4
<i>Positioning Control and Model Estimation of Vibrating System in 2DoF-FRIT Control Architecture with Kautz Expansion</i> , pp. 2322-2327.	
Si, Hnin	Kanazawa Univ
Kaneko, Osamu	The Univ. of Electro-Communications

We1Po	Room T1
Poster Sessions Wednesday (Interactive Session)	
15:30-17:00	Sub-session We1Po-01
Network and Distributed Systems Interactive Session, 19 papers	
15:30-17:00	Sub-session We1Po-02
Linear Systems and Signal Processing Interactive Session, 26 papers	
15:30-17:00	Sub-session We1Po-03
Control Applications Interactive Session, 31 papers	

We1Po-01		Room T1
Network and Distributed Systems (Interactive Session)		
Chair: Sun, Zhiyong		The Australian National Univ
Co-Chair: Ahn, Hyo-Sung		Gwangju Inst. of Sci & Tech
15:30-17:00		We1Po-01.1
<i>Modeling and Investigating Load Distribution and Resource (Re-)Allocation for Next Generation Automation Solutions</i> , pp. 2328-2333.		
Elfaham, Haitham		RWTH Aachen Univ
Wagner, Constantin		RWTH Aachen Univ
Anapolska, Mariia		RWTH Aachen Univ
Epple, Ulrich		RWTH Aachen Univ
15:30-17:00		We1Po-01.2
<i>Awareness Design and Analysis Upon Two Infectious States Based on Susceptible-Exposed-Infected-Vigilant (SEIV) Model</i> , pp. 2334-2339.		
Li, Zhixun		The Australian National Univ
HONG, JIE		Nanyang Tech. Univ
YU, Changbin		Australian National Univ
Sun, Zhiyong		The Australian National Univ
15:30-17:00		We1Po-01.3
<i>Stochastic Stability of Opinion Dynamics with Stubbornness</i> , pp. 2340-2345.		
Liang, Haili		Shanghai Univ
Zhou, Zhao		East China Univ. of Science and Tech
15:30-17:00		We1Po-01.4
<i>Synchronization of Delayed Lur'e Complex Dynamical Networks with Delayed Coupling</i> , pp. 2346-2351.		
Gao, Yanbo		Nantong Univ
Sun, Binghua		Nantong Univ

Zhang, Zhenjuan	Nantong Univ
15:30-17:00	We1Po-01.5
<i>Autonomous Remote Monitoring System by Flexible Data Flow Management</i> , pp. 2352-2357.	
Kasuga, Satoshi	Ritsumeikan Univ
Takayama, Shigeru	Ritsumeikan Univ
15:30-17:00	We1Po-01.6
<i>Adaptive Fault-Tolerant Tracking Control for Singular Multi-Agent Systems</i> , pp. 2358-2363.	
Shi, Weimin	Wenzhou Univ
Chen, Wenhai	Wenzhou Univ
Gao, Lixin	Wenzhou Univ
Hu, Jiangping	Univ. of Elec. Sci. and Tech. of China
15:30-17:00	We1Po-01.7
<i>Distributed Model Predictive Control with Switching Topology Network</i> , pp. 2364-2369.	
Qiu, Quanwei	Griffith Univ
Yang, Fuwen	Griffith Univ
Zhu, Yong	Griffith Univ
15:30-17:00	We1Po-01.8
<i>Frequency-Dependent Filtering for Networked Control Systems with Communication Constraints</i> , pp. 2370-2375.	
Long, Yue	Liaoning Univ
Park, Ju H.	Yeungnam Univ
Jung, Hoyoul	YNU
Yao, Xiuming	Harbin Inst. of Tech
Hao, Liying	Dalian Maritime Univ
15:30-17:00	We1Po-01.9
<i>Dynamic Output Feedback Control of Networked Control Systems with Aperiodic Sampling and Time-Varying Delays</i> , pp. 2376-2381.	
Meng, Su	Beijing Inst. of Tech
Sun, Jian	Beijing Inst. of Tech
Chen, Jie	Beijing Inst. of Tech
15:30-17:00	We1Po-01.10
<i>H∞ Formation Control Design for Multiple Euler-Lagrange Agents Subjected to Switching Topologies</i> , pp. 2382-2386.	
Huang, Jie	Univ. of Groningen
Zhou, Ning	Fujian Agriculture and Forestry Univ
Chen, Riqing	Fujian Agriculture and Forestry Univ
Zhang, Weida	Univ. of Oxford
15:30-17:00	We1Po-01.11
<i>Formation-Containment Control of Second-Order Multi-Agent Systems with Time Delays</i> , pp. 2387-2392.	
xia, mao dong	Jiangnan Univ
Liu, Cheng-Lin	Jiangnan Univ
Liu, Fei	Jiangnan Univ
15:30-17:00	We1Po-01.12
<i>Distributed Convex Optimization in Networks of Agents with Single-Integrator Dynamics</i> , pp. 2393-2398.	

Adibzadeh, Amir	Amirkabir Univ. of Tech
Zamani, Mohsen	Univ. of Newcastle
Amir Abolfazl, Suratgar	Amirkabir Univ. of Tech
Menhaj, Mohammad Bagher	Amirkabir Univ. of Tech
15:30-17:00	We1Po-01.13
<i>Distributed Model Predictive Formation Control with Inter-Vehicle Collision Avoidance</i> , pp. 2399-2404.	
Van Parys, Ruben	KU Leuven
Pipeleers, Goele	KU Leuven, LRD
15:30-17:00	We1Po-01.14
<i>Robust Cooperative Tracking Protocol Design for Networked Higher Order Nonlinear Systems Via Adaptive Second Order Sliding Mode</i> , pp. 2405-2410.	
Khan, Qudrat	COMSATS Inst. of Information Tech. Islamabad
Akmeliawati, Rini	International Islamic Malaysia
15:30-17:00	We1Po-01.15
<i>Interaction Measurement for Complex Multivariable Models with Various Reference Inputs Based on RNGA</i> , pp. 2411-2416.	
Luan, Xiaoli	Jiangnan Univ
Liu, Fei	Jiangnan Univ
Chen, Qiang	Jiangnan Univ
15:30-17:00	We1Po-01.16
<i>A Distributed Control Algorithm Via Saddle Point Dynamics for Optimal Resource Allocation Problem Over Networked Systems</i> , pp. 2417-2422.	
Hoang, Phuong Huu	GIST
Nguyen, Chuong Van	GIST
Kim, Hong-Kyong	GIST
Ahn, Hyo-Sung	Gwangju Inst. of Sci & Tech
15:30-17:00	We1Po-01.17
<i>Active Vibration Control and Shape Morphing of Thin Plates Using Dynamic Inversion Technique</i> , pp. 2423-2428.	
Dhurvas, Vishnu Pradeesh	Indian Inst. of Tech. Madras
Ali, Shaikh Faruque	Indian Inst. of Tech. Madras
15:30-17:00	We1Po-01.18
<i>Active Vortex-Induced Vibration Control of a Flexible Rod Transported in Water</i> , pp. 2429-2434.	
Shah, Muhammad Umer Hameed	Pusan National Univ
Hong, Keum-Shik	Pusan National Univ
15:30-17:00	We1Po-01.19
<i>Backstepping-Based Observer for Output Feedback Stabilization of a Boundary Controlled Fractional Reaction Diffusion System</i> , pp. 2435-2440.	
Chen, Juan	Jiangnan Univ
Cui, Baotong	Jiangnan Univ
Chen, YangQuan	Univ. of California, Merced
Mao, Li	Jiangnan Univ
We1Po-02 Room T1	
Linear Systems and Signal Processing (Interactive Session)	
Chair: Jikuya, Ichiro	Kanazawa Univ
Co-Chair: MORI, Kazuyoshi	The Univ. of Aizu

15:30-17:00	We1Po-02.1
<i>Time-Delay Compensator Design</i> , pp. 2441-2446.	
Erol, Huseyin Ersin	Anadolu Univ
Iftar, Altug	Anadolu Univ
15:30-17:00	We1Po-02.2
<i>Finite-Time L_2-L_∞ Control of Markovian Jump Linear Systems with Partly Accessible Hidden Information Via Asynchronous Output Feedback</i> , pp. 2447-2452.	
Song, Jun	East China Univ. of Science and Tech
Niu, Yugang	East China Univ. of Science & Tech
Zhao, Haijuan	East China Univ. of Science and Tech
Cao, Zhiru	East China Univ. of Science and Tech
15:30-17:00	We1Po-02.3
<i>Computation of Feasible Parametric Regions for Lyapunov Functions</i> , pp. 2453-2458.	
Tong, Jiancheng	Univ. of Kaiserslautern
Bajcinca, Naim	Univ. of Kaiserslautern
15:30-17:00	We1Po-02.4
<i>Stabilizing Controllers from Non-Coprime Factorization for Single-Input Single-Output Plants</i> , pp. 2459-2463.	
MORI, Kazuyoshi	The Univ. of Aizu
15:30-17:00	We1Po-02.5
<i>Design of Prediction Governors for Linear Systems with Input Saturation</i> , pp. 2464-2468.	
Minami, Yuki	Osaka Univ
15:30-17:00	We1Po-02.6
<i>Transition Rule of Differentially Controllable Subspace for Linear Periodic Systems</i> , pp. 2469-2472.	
Jikuya, Ichiro	Kanazawa Univ
15:30-17:00	We1Po-02.7
<i>To Fish or Cut Bait?</i> , pp. 2473-2477.	
DIAO, JIAHAO	Univ. of Queensland
Nazarathy, Yoni	The Univ. of Queensland
Taimre, Thomas	School of Mathematics and Physics, the Univ. of Queensland,
Filar, Jerzy	Univ. of Queensland
15:30-17:00	We1Po-02.8
<i>A Markov Decision Process Model for Inventory Control under Invisible Stock Loss and Inaccurate Record</i> , pp. 2478-2483.	
Zhang, Yajun	Southeast Univ
Wang, Zheng	Southeast Univ
15:30-17:00	We1Po-02.9
<i>Stabilization of Switched Linear Systems under Arbitrary Switching Via Switched Observers</i> , pp. 2484-2489.	
Otsuka, Naohisa	Tokyo Denki Univ
Kakehi, Daiki	Tokyo Denki Univ
15:30-17:00	We1Po-02.10
<i>Observer-Based Event-Triggered H-Infinity Control for Switched Linear Systems</i> , pp. 2490-2495.	

Qi, Yiwen	Shenyang Aerospace Univ
Cao, Zheng	Shenyang Aerospace Univ
Liu, Jun	NHI Group Co., Ltd
15:30-17:00	We1Po-02.11
<i>On Software Update Analysis Via Kalman Decomposition</i> , pp. 2496-2501.	
Kishida, Takamitsu	The Univ. of Electro-Communications
Sawada, Kenji	The Univ. of Electro-Communications
Shin, Seiichi	The Univ. of Electro-Communications
15:30-17:00	We1Po-02.12
<i>Cooperative Spectrum Sensing Via 2-SPRT Based Multiple-Model Hypothesis Testing</i> , pp. 2502-2507.	
Liu, Bao	Xi'an Univ. of Science and Tech
Huang, Mengtao	Xi'an Univ. of Science and Tech
Wang, Jingting	Xi'an Fanyi Univ
15:30-17:00	We1Po-02.13
<i>A Monocycle Pulse Generator with Variable Capacitance Diodes for Radar Target Detecting Application</i> , pp. 2508-2510.	
Xia, Xinfan	National Defense Key Lab. of Science and Tech. on Ele
Guan, Hongfei	Key Lab. of Space Utilization, Tech. and Engineering
Zhang, Yan	National Defense Key Lab. of Science and Tech. on Ele
Peng, Jingjing	National Defense Key Lab. of Science and Tech. on Ele
Fang, guangyou	Key Lab. of Electromagnetic Radiation and Sensing Tech
Zongfei, Li	Key Lab. of Space Utilization, Tech. and Engineering
Wu, Xiongjun	The Eighth Acad. of China Aerospace Science and Tech. Co
15:30-17:00	We1Po-02.14
<i>A Novel Ambiguity Resolution Method of Rolling Interferometer Based on Differential Reduction</i> , pp. 2511-2515.	
Jiang, Kaichuang	National Defense Key Lab. of Science and Tech. on Ele
Wu, Yingchun	National Defense Key Lab. of Science and Tech. on Ele
Wu, Xiongjun	The Eighth Acad. of China Aerospace Science and Tech. Co
Cai, Ye	National Defense Key Lab. of Science and Tech. on Ele
Du, Longhai	The 54th Res. Inst. of China Electronics Tech. Grou
Zhou, Jialing	Nanjing Univ. of Science and Tech
15:30-17:00	We1Po-02.15
<i>Estimation Error Stability of the SDDRE Based Filter</i> , pp. 2516-2521.	
Rusnak, Ilan	RAFAEL
Peled-Eitan, Liat	RAFAEL
15:30-17:00	We1Po-02.16
<i>Least Squares Error Criterion Based Estimator of Nonlinear</i>	

Systems, pp. 2522-2527.

Rusnak, Ilan
Peled-Eitan, Liat

RAFAEL
RAFAEL

15:30-17:00 We1Po-02.17

Convergence-Enhanced Dense RGB-D Odometry with a Rotational Motion Prior from a Gyroscope, pp. 2528-2533.

Kim, Changhyeon
Lee, Sangil
Kim, H Jin

Seoul National Univ
Seoul National Univ
Seoul National Univ

15:30-17:00 We1Po-02.18

On the Sensor Fusion in the Walking Robots Design, pp. 2534-2539.

Anderle, Milan

Inst. of Information Theory and
Automation of the CAS

Celikovsky, Sergej

Acad. of Sciences of the Czech
Republic

15:30-17:00 We1Po-02.19

Vision-Inertia Based Navigation Algorithms for Quadrotors, pp. 2540-2545.

Hao, Ning
He, Fenghua
Yao, Yu
Qi, Hongsheng
Wang, Ningyuan
Hou, Yi

Harbin Inst. of Tech
Harbin Inst. of Tech
Harbin Inst. of Tech
Chinese Acad. of Sciences
Harbin Inst. of Tech
Harbin Inst. of Tech

15:30-17:00 We1Po-02.20

Key Technologies of GNSS/INS/VO Deep Integration for UGV Navigation in Urban Canyon, pp. 2546-2551.

Wang, Meiling
Li, Yafeng
Feng, Guoqiang
Yang, Yi
Liu, Tong
XIAO, xuan

Beijing Inst. of Tech
Beijing Inst. of Tech
Beijing Inst. of Tech
Beijing Inst. of Tech
Beijing Inst. of Tech
Beijing Inst. of Tech

15:30-17:00 We1Po-02.21

Stabilization of Pan-Tilt Systems Using Acceleration Based LMI-LQR Controller, pp. 2552-2557.

Unel, Mustafa
Han, Sanem Evren

Sabanci Univ
Sabanci Univ

15:30-17:00 We1Po-02.22

Fast Algorithm of High-Dimensional Quantum State Estimation Via Low Measurement Rates, pp. 2558-2562.

Zhang, Jiaojiao
Li, Kezhi
Cong, Shuang

Univ. of Science and Tech. of
China
Imperial Coll. London
Univ. of Sci. & Tech. of China

15:30-17:00 We1Po-02.23

A New Approach to Clock Jitter Simulation in Digital Control System, pp. 2563-2568.

Tran, Long Quang
Radcliffe, PJ
Wang, Liuping

RMIT Univ
RMIT Univ
RMIT Univ

15:30-17:00 We1Po-02.24

Dynamic Evaluation of Field Characteristics by Pedestrian Flow, pp. 2569-2574.

Higuchi, Akira
Takayama, Shigeru

Ritsumeikan Univ
Ritsumeikan Univ

15:30-17:00 We1Po-02.25

Active User Interface of Telemetric Body Area Network System, pp. 2575-2580.

Amano, Junki
Takayama, Shigeru

Ritsumeikan Univ
Ritsumeikan Univ

15:30-17:00 We1Po-02.26

Synchronization of Master-Slave Neural Networks with Sampled-Data Control and Actuator Saturation, pp. 2581-2585.

Li, Liuwen
Zou, Wenlin
Fei, Shumin

Southeast Univ
Nanjing Xiaozhuang Univ
Southeast Univ

We1Po-03 Room T1
Control Applications (Interactive Session)

Chair: Hong, Keum-Shik
Co-Chair: Tan, Ying

Pusan National Univ
The Univ. of Melbourne

15:30-17:00 We1Po-03.1

Trajectory Tracking Control for Unmanned Helicopter Based on Sliding Mode Observer, pp. 2586-2591.

Yang, Haipeng
Chen, Nanyu
Zhou, Yaoming
Meng, Zhijun

Beihang Univ
Beihang Univ
Beihang Univ
Beihang Univ

15:30-17:00 We1Po-03.2

Study on the Controllability of a Drogue for Hose-Drogue Aerial Refueling System, pp. 2592-2595.

Yuan, Dongli

Northwestern Pol. Univ

15:30-17:00 We1Po-03.3

Fractional Order PID Control of Four Links Mechanism Using Particle Swarm Optimization Algorithm with Parameters Tuning, pp. 2596-2599.

li, sultan

Xidian Univ

15:30-17:00 We1Po-03.4

Data Driven Disturbance Observer Design and Control for Diesel Engine Airpath, pp. 2600-2605.

Unel, Mustafa
Aran, Volkan

Sabanci Univ
Ford Otosan, Sabanci Univ

15:30-17:00 We1Po-03.5

GMVC-Based Optimal Plant-Wide PID Tuning for a Multiple Effect Evaporator, pp. 2606-2611.

Obika, Masanobu
Yamamoto, Toru

ADAPTEX Co., Ltd
Hiroshima Univ

15:30-17:00 We1Po-03.6

Quantitative Robust Control Design of Discharge Air Temperature System, pp. 2612-2617.

Zhang, Kai
Li, Keyu

United Tech. Res. Center (China)
United Tech. Res. Center

15:30-17:00 We1Po-03.7

Downhole-Friction-Estimation-Based Rotary Speed Control for Drillstring System with Stick-Slip Vibrations, pp. 2618-2623.

Lu, Chengda	China Univ. of Geosciences
Wu, Min	China Univ. of Geosciences
Chen, Xin	China Univ. of Geosciences
Cao, Weihua	China Univ. of Geosciences, Wuhan, China
Gan, Chao	China Univ. of Geosciences
She, Jin-Hua	Tokyo Univ. of Tech
15:30-17:00	We1Po-03.8

Cruise Control of a Heavy Duty Truck on Open Road the Benchmark Problem, pp. 2624-2629.

Adnan, Syed Atif	Capital Univ. of Science and Tech
Bhatti, Aamer Iqbal Bhatti	Capital Univ. of Sciences & Tech. Islamabad
15:30-17:00	We1Po-03.9

Moving Horizon Velocity Estimation for Caster Odometer on Uneven Ground, pp. 2630-2635.

Ogawa, Naoto	Tokyo City Univ
Nonaka, Kenichiro	Tokyo City Univ
Sekiguchi, Kazuma	Tokyo City Univ
15:30-17:00	We1Po-03.10

Reheated Steam Temperature Control in Thermal Power Plant Using Integral-Linear Active Disturbance Rejection Control, pp. 2636-2640.

Li, Haoran	Jiangsu Univ
Pan, Tianhong	Jiangsu Univ
Li, Zhengming	Jiangsu Univ
Ding, Shihong	Jiangsu Univ
Guo, Shiwei	Jiangsu Univ
Ahsan, Mian Khuram	Jiangsu Univ
15:30-17:00	We1Po-03.11

Control Method for Reducing Energy Consumption of Active Seismic Isolation Device with Power Generation Function, pp. 2641-2645.

Nakamura, Keigo	Kyoto Inst. of Tech
Miura, Nanako	Kyoto Inst. of Tech
Sone, Akira	Kyoto Institute of Tech
15:30-17:00	We1Po-03.12

EGR-VGT Equipped Heavy Duty Diesel Engine Calibration and Air Path Control for Optimized Nitric Oxide (NOx) Emissions, pp. 2646-2651.

Haras, Muhammad	Coll. of Electrical and Mechanical Engineering (CEME), NUST
Bhatti, Aamer Iqbal	M a Jinnah Univ
Liaquat, Muwahida	National Univ. of Sciences and Tech
15:30-17:00	We1Po-03.13

Wind Turbine Down-Regulation Strategy for Minimum Wake Deficit, pp. 2652-2656.

Ma, Kuichao	Aalborg Univ
Zhu, Jiangsheng	Aalborg Univ
Soltani, Mohsen	Aalborg Univ
Chen, Zhe	Aalborg Univ

Hajizadeh, Amin	Aalborg Univ
15:30-17:00	We1Po-03.14

Fundamentals for the Next Generation of Automation Solutions of the Fourth Industrial Revolution, pp. 2657-2662.

Wagner, Constantin	RWTH Aachen Univ
von Trotha, Christian	RWTH Aachen
Palm, Florian	RWTH Aachen
Eppe, Ulrich	RWTH Aachen Univ

15:30-17:00	We1Po-03.15
-------------	-------------

On the Tuning of Nested-Structure Dynamic-Positioning Control of a Marine Craft, pp. 2663-2668.

Kazantzidou, Christina	Queensland Univ. of Tech
Perez, Tristan	Queensland Univ. of Tech
Donaire, Alejandro	Queensland Univ. of Tech

15:30-17:00	We1Po-03.16
-------------	-------------

Sliding Mode Control Design with the Time Varying Parameters of the Sliding Surface of an Offshore Container Crane, pp. 2669-2674.

Ngo, Quang Hieu	Can Tho Univ
Nguyen, Ngo-Phong	Cantho Univ. of Tech

15:30-17:00	We1Po-03.17
-------------	-------------

Teleoperate System of Underwater Cleaning Robot Based on HUD, pp. 2675-2679.

Huang, Zhengming	Zhejiang Univ
Chen, Yanhu	Zhejiang Univ
Yang, Canjun	Zhejiang Univ
Fan, Jinchang	Zhejiang Univ
Jiang, Ping	Zhejiang Univ

15:30-17:00	We1Po-03.18
-------------	-------------

Sliding Mode Control of a Dual-Trolley Mobile Harbor Crane in the Presence of Wave-Induced Ship Motions, pp. 2680-2685.

Kim, Gyoung-Hahn	Pusan National Univ
Piao, Mingxu	Pusan National Univ. Busan
Hong, Keum-Shik	Pusan National Univ

15:30-17:00	We1Po-03.19
-------------	-------------

An Adaptive Direct Power Controller for Three-Phase Grid-Connected Photovoltaic Systems with Parametric Uncertainties, pp. 2686-2691.

Roy, Tushar Kanti	Deakin Univ
Mahmud, Md. Apel	Deakin Univ
Oo, Amanullah M. T.	Deakin Univ
Haque, Enamul	Deakin Univ

15:30-17:00	We1Po-03.20
-------------	-------------

The Design of Wide-Area Supplementary Reduced-Order DOFC with Prescribed Stability Degree for Damping Inter-Area Low-Frequency Oscillations in Uncertain Power System, pp. 2692-2697.

Sun, Miaoping	Central South Univ
Liu, Jingjing	Central South Univ
Nian, Xiaohong	Central South Univ
Deng, Zhenhua	Central South Univ

15:30-17:00	We1Po-03.21
-------------	-------------

Remaining Useful Life Prediction of Lithium-Ion Battery Using

a Hybrid Model-Based Filtering and Data-Driven Approach, pp. 2698-2703.

Zheng, xiujuan Wuhan Univ. of Science and Tech
Wu, Huaiyu Wuhan Univ. of Science and Tech
Chen, Yang Wuhan Univ. of Science and Tech

15:30-17:00 We1Po-03.22

A GA-SVM and D-S Evidence Theory Based Method for Shunt-Fault Diagnosis in Power Systems, pp. 2704-2709.

Wu, Xiaomin China Univ. of Geosciences(Wuhan)
Wang, Dianhong China Univ. of Geosciences
Cao, Weihua China Univ. of Geosciences, Wuhan, China
Ding, Min China Univ. of Geosciences(Wuhan)

15:30-17:00 We1Po-03.23

An Enhanced Extreme Learning Machine with a Double Parallel Structure and Its Application to Modeling Complex Chemical Processes, pp. 2710-2713.

He, Yan-Lin Beijing Univ. of Chemical Tech
Wang, Pingjiang Beijing Univ. of Chemical Tech
geng, zhiqiang Beijing Univ. of Chemical Tech
Han, Yongming Beijing Univ. of Chemical Tech
Sheng, Hao Beihang Univ
ZHU, Qunxiong Beijing Univ. of Chemical Tech

15:30-17:00 We1Po-03.24

A Method for Process Identification and Model Reduction to Design PID Controller for Thermal Power Plant, pp. 2714-2719.

Do Cao, Trung Hanoi Univ. of Science and Tech

15:30-17:00 We1Po-03.25

Control-Oriented Identification Using Maximum Likelihood for a District Heating Plant, pp. 2720-2725.

Godoy, Boris I. The Univ. of New South Wales
Vansovits, Vitali Department of Computer Systems, Centre for Intelligent Systems,

Tepljakov, Aleksei Tallinn Univ. of Tech
Petlenkov, Eduard Tallinn Univ. of Tech
Vassiljeva, Kristina Tallinn Univ. of Tech

15:30-17:00 We1Po-03.26

Modeling and Active Disturbance Rejection Control of a Single Effect LiBr-H₂O Absorption Chiller, pp. 2726-2731.

He, Ting Tsinghua Univ
Li, Donghai Tsinghua Univ
Wu, Zhenlong Tsinghua Univ
Xue, Yali Tsinghua Univ
Yang, Yuxin Talent Exchange Service Centre of Haidian District

15:30-17:00 We1Po-03.27

Adaptive Nonlinear Control of the Czochralski Process Via Integration of Second Order Sliding Mode and Iterative Learning Control, pp. 2732-2737.

Bukhari, Halima Zahra Norwegian Univ. of Science and Tech. NTNU
Aftab, Muhammad Faisal NTNU
Hovd, Morten Norwegian Univ. of Science and

Tech. Trondheim

15:30-17:00 We1Po-03.28

Nonlinear Tracking Control of a Cryogenic Separation Process, pp. 2738-2743.

Tamba, Tua Parahyangan Catholic Univ
Nazaruddin, Yul Yunazwin ITB Bandung

15:30-17:00 We1Po-03.29

Dynamic Model of a Three-Dimensional Flexible Cantilever Beam Attached a Moving Hub, pp. 2744-2749.

Nguyen, Quoc Chi Ho Chi Minh City Univ. of Tech
Pham, Phuong Tung Ho Chi Minh City Univ. of Tech

15:30-17:00 We1Po-03.30

Path Planning and Control of a Quadrotor UAV: A Symbolic Approach, pp. 2750-2755.

Zhang, Tianze Harbin Inst. of Tech
Huo, Xin Harbin Inst. of Tech

15:30-17:00 We1Po-03.31

Robust Design of DNA Feedback Regulator for Molecular Robot, pp. 2756-2759.

Misawa, Michiko Kyushu Inst. of Tech
Nakakuki, Takashi Kyushu Inst. of Tech

WeE1 Room 1
Distributed Parameter Systems (Regular Session)

Chair: Strecker, Timm Norwegian Univ. of Science and Tech

17:00-17:15 WeE1.1

LQ Preview State Feedback with Output Regulation Constraint, pp. 2760-2765.

Hashikura, Kotaro Tokyo Metropolitan Univ
Kojima, Akira Tokyo Metropolitan Univ

17:15-17:30 WeE1.2

Adaptive Set-Point Regulation of Linear 2x2 Hyperbolic Systems with Uncertain Affine Boundary Condition Using Collocated Sensing and Control, pp. 2766-2771.

Holta, Haavard Norwegian Univ. of Science and Tech

Anfinssen, Henrik NTNU
Aamo, Ole Morten NTNU

17:30-17:45 WeE1.3

Control System Design for Concrete Irrigation Channels, pp. 2772-2777.

Strecker, Timm Norwegian Univ. of Science and Tech

Cantoni, Michael Univ. of Melbourne
Aamo, Ole Morten NTNU

17:15-18:00 WeE1.4

Adaptive Stabilization of Linear 2 X 2 Hyperbolic PDEs with Spatially Varying Coefficients Using Swapping, pp. 2778-2783.

Anfinssen, Henrik NTNU
Aamo, Ole Morten NTNU

WeE2		Room 2
Environmental Technology Applications (Regular Session)		
Chair: Hara, Naoyuki		Osaka Prefecture Univ
17:00-17:15	WeE2.1	
<i>Comparison of Loads for Wind Turbine down Regulation Strategies</i> , pp. 2784-2789.		
Zhu, Jiangsheng	Aalborg Univ	
Ma, Kuichao	Aalborg Univ	
Soltani, Mohsen	Aalborg Univ	
Hajizadeh, Amin	Aalborg Univ	
Chen, Zhe	Aalborg Univ	
17:15-17:30	WeE2.2	
<i>Model-Based Design of Individual Blade Pitch and Generator Torque Controllers for Floating Offshore Wind Turbines</i> , pp. 2790-2795.		
Suemoto, Hiroki	Osaka Prefecture Univ	
Hara, Naoyuki	Osaka Prefecture Univ	
Konishi, Keiji	Osaka Prefecture Univ	
17:30-17:45	WeE2.3	
<i>Setpoint Control for Reacting to Wastewater Influent in BSM1</i> , pp. 2796-2801.		
Sadeghassadi, Mahsa	Univ. of Calgary	
Westwick, David	Calgary	
Macnab, Chris	Univ. of Calgary	
17:15-18:00	WeE2.4	
<i>Adaptive Control and Setpoint Optimization for the BSM1 Model of Wastewater Treatment</i> , pp. 2802-2807.		
Sadeghassadi, Mahsa	Univ. of Calgary	
Macnab, Chris	Univ. of Calgary	
Westwick, David	Calgary	

WeE3		Room 3
Power Systems and Power Electronics (Regular Session)		
Chair: Hovd, Morten		Norwegian Univ. of Science and Tech. Trondheim
17:00-17:15	WeE3.1	
<i>Distributed Economic Dispatch for Power Systems</i> , pp. 2808-2812.		
Fitri, Ismi Rosyiana	Univ	
Kim, Jung-Su	Seoul National Univ. of Science and Tech	
Song, Hwachang	SeoulTech	
17:15-17:30	WeE3.2	
<i>Constrained Control of Wind Turbines for Power Regulation in Full Load Operation</i> , pp. 2813-2818.		
Habibi, Hamed	Faculty of Science and Engineering, School of Civil and Mechanic	
Rahimi Nohooji, Hamed	Curtin Univ. Perth, Australia	
howard, Ian	Faculty of Science and Engineering, School of Civil and Mechanic	
17:30-17:45	WeE3.3	

Lyapunov-Based Robust Controller Design for Single-Inductor Dual-Output Buck Converters Using Sum of Squares Programming, pp. 2819-2824.

Vatani, Mohsen Norwegian Univ. of Science and Tech

Hovd, Morten Norwegian Univ. of Science and Tech. Trondheim

17:15-18:00 WeE3.4

Decentralized Control Approach to Power Curtailment Instruction Problem for PV Generation Plants with Storage, pp. 2825-2830.

Akutsu, Hikaru Nagaoka Univ. of Tech

HIRATA, Kenji Nagaoka Univ. of Tech

Ohori, Akihiro DAIHEN Corp

Hattori, Nobuyuki DAIHEN Corp

Ohta, Yoshito Kyoto Univ

WeE4 Room 4
Process and Chemical Systems (Regular Session)

Chair: Klemets, Jonatan Ralf Axel Norwegian Univ. of Science and Tech

17:00-17:15 WeE4.1

Neural Network Based Linearization and Control of Sputter Processes, pp. 2831-2836.

Wölfel, Christian Ruhr-Univ. Bochum

Awakowicz, Peter Ruhr-Univ. Bochum

Lunze, Jan Ruhr-Univ. Bochum

17:15-17:30 WeE4.2

A Stick-Slip Vibration Suppression Method for the Drillstring System Based on Neutral Type Model, pp. 2837-2842.

Cheng, Jun China Univ. of Geosciences

Wu, Min China Univ. of Geosciences

Lu, Chengda China Univ. of Geosciences

Chen, Luefeng China Univ. of Geosciences

Chen, Xin China Univ. of Geosciences

Cao, Weihua China Univ. of Geosciences, Wuhan, China

Lai, Xuzhi China Univ. of Geosciences

17:30-17:45 WeE4.3

A Kind of Modeling Method Based on the Bayesian Dynamic Linear Model for Model Predictive Control of a Nitrobenzene Prefractionator, pp. 2843-2848.

Huang, Bingqiang Zhejiang Univ. of Science and Tech

17:15-18:00 WeE4.4

An Iterative LMI Approach to Controller Design and Measurement Selection in Self-Optimizing Control, pp. 2849-2854.

Klemets, Jonatan Ralf Axel Norwegian Univ. of Science and Tech

Hovd, Morten Norwegian Univ. of Science and Tech. Trondheim

WeE5	Room 5
Sensor and Sensor Fusion (Regular Session)	
Chair: Sekiguchi, Kazuma	Tokyo City Univ
17:00-17:15	WeE5.1
<i>Vehicle Guidance with Control Action Computed by a Rao-Blackwellized Particle Filter</i> , pp. 2855-2860.	
Sans-Muntadas, Albert	NTNU
Brekke, Edmund	NTNU
Pettersen, Kristin Y.	Norwegian Univ. of Science and Tech
17:15-17:30	WeE5.2
<i>Accessible Ground Reaction Force Estimation Using Insole Force Sensors without Force Plates</i> , pp. 2861-2865.	
Eguchi, Ryo	Keio Univ
yorozu, ayanori	Keio Univ
Takahashi, Masaki	Keio Univ
17:30-17:45	WeE5.3
<i>Avoidance of Singular Localization Environment Using Model Predictive Control for Mobile Robots</i> , pp. 2866-2871.	
Koizumi, Masaki	Tokyo City Univ
Nonaka, Kenichiro	Tokyo City Univ
Sekiguchi, Kazuma	Tokyo City Univ
17:15-18:00	WeE5.4
<i>Walking Direction Detection Using Received Signal Strengths in Correlated RF Links</i> , pp. 2872-2877.	
Liu, Tong	Huizhou Univ. Huizhou 516001, P.R.China
Chen, Zhi-ming	Department of Electronics Engineering, Huizhou Univ
Liang, Zhuo-qian	Coll. of Information Science and Tech. Jinan Univ

WeE6	Room 6
Switched Systems (Regular Session)	
Chair: Yang, Rongni	Western Sydney Univ
17:00-17:15	WeE6.1
<i>Two-Dimensional H-Infinity Filtering for Fornasini-Marchesini Model under Arbitrary Switching</i> , pp. 2878-2883.	
Yang, Rongni	Western Sydney Univ
Zheng, Wei Xing	Western Sydney Univ
17:15-17:30	WeE6.2
<i>Sliding Mode Fault-Tolerant Control for Switched Systems with Disturbance and Faults</i> , pp. 2884-2888.	
li, meng	Univ. of Electronic Science and Tech. of China
chen, yong	Univ. of Electronic Science and Tech. of China
17:30-17:45	WeE6.3
<i>Robust Tracking for a Class of Uncertain Switched Linear Systems Based on the Uncertainty and Disturbance Estimator</i> , pp. 2889-2894.	
Guo, Rongwei	Qilu Univ. of Tech
Dai, Jiguo	Texas Tech. Univ

Ren, Beibei	Texas Tech. Univ
17:15-18:00	WeE6.4
<i>Fault Detection for Networked Switched Nonlinear Systems</i> , pp. 2895-2898.	
Liu, Xinxin	Chongqing Univ
Su, Xiaojie	Chongqing Univ
Liu, Jianxing	Harbin Inst. of Tech

WeE7	Arena B
Variable-Structure/Sliding-Mode Control (Regular Session)	
Chair: Guan, Zhi-Hong	Huazhong Univ. of Sci. & Tech
17:00-17:15	WeE7.1
<i>Sliding Mode Based MIMO Control of Autonomous Underwater Vehicle</i> , pp. 2899-2904.	
Farhan, Muhammad Farhan	Capital Univ. of Sciences & Tech. Islamabad
Bhatti, Aamer Iqbal Bhatti	Capital Univ. of Sciences & Tech. Islamabad
Kamal, Waseem Ahmed Kamal	Centers of Excellence in Science & Applied Tech. Pakistan
yousafzai, Imran Khan	Capital Univ. of Sciences & Tech. Islamabad
17:15-17:30	WeE7.2
<i>Super-Twisting Based Integral Sliding Mode Control Applied to a Rotary Flexible Joint Robot Manipulator</i> , pp. 2905-2910.	
Rsetam, Kamal	Swinburne Univ. of Tech
Cao, Zhenwei	Swinburne Univ. of Tech
Man, Zhihong	Faculty of Engineering, Swinburne Univ. of Tech
17:30-17:45	WeE7.3
<i>Reduced Output Feedback Based Discrete-Time First-Order and Higher-Order Sliding Mode Control</i> , pp. 2911-2916.	
Sharma, Nalin Kumar	Indian Inst. of Tech. Delhi
Janardhanan, S	IIT Delhi
17:15-18:00	WeE7.4
<i>Proxy-Based Sliding Mode Stabilization of a Class of Second-Order Nonlinear System</i> , pp. 2917-2922.	
Ding, Guangzheng	Huazhong Univ. of Science and Tech
Huang, Jian	Huazhong Univ. of Science & Tech
HU, Bin	Huazhong Univ. of Science & Tech
Guan, Zhi-Hong	Huazhong Univ. of Sci. & Tech

Interactive Paper Presentation Session (Poster Papers) - Wednesday 20 Dec 2017 Foyer F, 15:30-17:00			
Poster Board	Paper Title	Session	Paper ID
1	Modeling and Investigating Load Distribution and Resource (Re-)Allocation for Next Generation Automation Solutions	Network and Distributed Systems	443
2	Awareness Design and Analysis Upon Two Infectious States Based on Susceptible-Exposed-Infected-Vigilant (SEIV) Model	Network and Distributed Systems	460
3	Stochastic Stability of Opinion Dynamics with Stubbornness	Network and Distributed Systems	182
4	Synchronization of Delayed Lur'e Complex Dynamical Networks with Delayed Coupling	Network and Distributed Systems	228
5	Autonomous Remote Monitoring System by Flexible Data Flow Management	Network and Distributed Systems	278
6	Adaptive Fault-Tolerant Tracking Control for Singular Multi-Agent Systems	Network and Distributed Systems	185
7	Distributed Model Predictive Control with Switching Topology Network	Network and Distributed Systems	238
8	Frequency-Dependent Filtering for Networked Control Systems with Communication Constraints	Network and Distributed Systems	99
9	Dynamic Output Feedback Control of Networked Control Systems with Aperiodic Sampling and Time-Varying Delays	Network and Distributed Systems	464
10	H _∞ Formation Control Design for Multiple Euler-Lagrange Agents Subjected to Switching Topologies	Network and Distributed Systems	310
11	Formation-containment Control of Second-order Multi-agent Systems with Time Delays	Network and Distributed Systems	461
12	Distributed Convex Optimization in Networks of Agents with Single-Integrator Dynamics	Network and Distributed Systems	423
13	Distributed Model Predictive Formation Control with Inter-Vehicle Collision Avoidance	Network and Distributed Systems	158
14	Robust Cooperative Tracking Protocol Design for Networked Higher Order Nonlinear Systems Via Adaptive Second Order Sliding Mode	Network and Distributed Systems	429
15	Interaction Measurement for Complex Multivariable Models with Various Reference Inputs Based on RGA	Network and Distributed Systems	445
16	A Distributed Control Algorithm Via Saddle Point Dynamics for Optimal Resource Allocation Problem Over Networked Systems	Network and Distributed Systems	121
17	Active Vibration Control and Shape Morphing of Thin Plates Using Dynamic Inversion Technique	Network and Distributed Systems	560
18	Active Vortex-Induced Vibration Control of a Flexible Rod Transported in Water	Network and Distributed Systems	286
19	Backstepping-Based Observer for Output Feedback Stabilization of a Boundary Controlled Fractional Reaction Diffusion System	Network and Distributed Systems	17
20	Time-Delay Compensator Design	Linear Systems and Signal Processing	530
21	Finite-Time L ₂ -L _∞ Control of Markovian Jump Linear Systems with Partly Accessible Hidden Information Via Asynchronous Output Feedback	Linear Systems and Signal Processing	91
22	Computation of Feasible Parametric Regions for Lyapunov Functions	Linear Systems and Signal Processing	615
23	Stabilizing Controllers from Non-Coprime Factorization for Single-Input Single-Output Plants	Linear Systems and Signal Processing	629
24	Design of Prediction Governors for Linear Systems with Input Saturation	Linear Systems and Signal Processing	138
25	Transition Rule of Differentially Controllable Subspace for Linear Periodic Systems	Linear Systems and Signal Processing	187
26	To Fish or Cut Bait?	Linear Systems and Signal Processing	416
27	A Markov Decision Process Model for Inventory Control under Invisible Stock Loss and Inaccurate Record	Linear Systems and Signal Processing	75
28	Stabilization of Switched Linear Systems under Arbitrary Switching Via Switched Observers	Linear Systems and Signal Processing	166
29	Observer-Based Event-Triggered H-Infinity Control for Switched Linear Systems	Linear Systems and Signal Processing	632
30	On Software Update Analysis via Kalman Decomposition	Linear Systems and Signal Processing	156
31	Cooperative Spectrum Sensing Via 2-SPRT Based Multiple-Model Hypothesis Testing	Linear Systems and Signal Processing	159

32	A Monocycle Pulse Generator with Variable Capacitance Diodes for Radar Target Detecting Application	Linear Systems and Signal Processing	583
33	A Novel Ambiguity Resolution Method of Rolling Interferometer Based on Differential Reduction	Linear Systems and Signal Processing	620
34	Estimation Error Stability of the SDDRE Based Filter	Linear Systems and Signal Processing	45
35	Least Squares Error Criterion Based Estimator of Nonlinear Systems	Linear Systems and Signal Processing	255
36	Convergence-Enhanced Dense RGB-D Odometry with a Rotational Motion Prior from a Gyroscope	Linear Systems and Signal Processing	468
37	On the Sensor Fusion in the Walking Robots Design	Linear Systems and Signal Processing	529
38	Vision-Inertia Based Navigation Algorithms for Quadrotors	Linear Systems and Signal Processing	610
39	Key Technologies of GNSS/INS/VO Deep Integration for UGV Navigation in Urban Canyon	Linear Systems and Signal Processing	531
40	Stabilization of Pan-Tilt Systems Using Acceleration Based LMI-LQR Controller	Linear Systems and Signal Processing	367
41	Fast Algorithm of High-Dimensional Quantum State Estimation Via Low Measurement Rates	Linear Systems and Signal Processing	23
42	A New Approach to Clock Jitter Simulation in Digital Control System	Linear Systems and Signal Processing	14
43	Dynamic Evaluation of Field Characteristics by Pedestrian Flow	Linear Systems and Signal Processing	295
44	Active User Interface of Telemetric Body Area Network System	Linear Systems and Signal Processing	296
45	Synchronization of master-slave neural networks with sampled-data control and actuator saturation	Linear Systems and Signal Processing	462
46	Trajectory Tracking Control for Unmanned Helicopter Based on Sliding Mode Observer	Control Applications	597
47	Study on the Controllability of a Drogue for Hose-Drogue Aerial Refueling System	Control Applications	20
48	Fractional Order PID Control of Four Links Mechanism Using Particle Swarm Optimization Algorithm with Parameters Tuning	Control Applications	80
49	Data Driven Disturbance Observer Design and Control for Diesel Engine Airpath	Control Applications	360
50	GMVC-Based Optimal Plant-Wide PID Tuning for a Multiple Effect Evaporator	Control Applications	442
51	Quantitative Robust Control Design of Discharge Air Temperature System	Control Applications	44
52	Downhole-Friction-Estimation-Based Rotary Speed Control for Drillstring System with Stick-Slip Vibrations	Control Applications	186
53	Cruise Control of a Heavy Duty Truck on Open Road The Benchmark Problem	Control Applications	542
54	Moving Horizon Velocity Estimation for Caster Odometer on Uneven Ground	Control Applications	587
55	Reheated Steam Temperature Control in Thermal Power Plant Using Integral-Linear Active Disturbance Rejection Control	Control Applications	109
56	Control Method for Reducing Energy Consumption of Active Seismic Isolation Device with Power Generation Function	Control Applications	147
57	EGR-VGT Equipped Heavy Duty Diesel Engine Calibration and Air Path Control for Optimized Nitric Oxide (NOx) Emissions	Control Applications	124
58	Wind Turbine Down-Regulation Strategy for Minimum Wake Deficit	Control Applications	214
59	Fundamentals for the Next Generation of Automation Solutions of the Fourth Industrial Revolution	Control Applications	543
60	On the Tuning of Nested-Structure Dynamic-Positioning Control of a Marine Craft	Control Applications	439
61	Sliding Mode Control Design with the Time Varying Parameters of the Sliding Surface of an Offshore Container Crane	Control Applications	142
62	Teleoperate System of Underwater Cleaning Robot Based on HUD	Control Applications	39
63	Sliding Mode Control of a Dual-Trolley Mobile Harbor Crane in the Presence of Wave-Induced Ship Motions	Control Applications	335
64	An Adaptive Direct Power Controller for Three-Phase Grid-Connected Photovoltaic Systems with Parametric Uncertainties	Control Applications	250
65	The Design of Wide-Area Supplementary Reduced-Order DOFC with Prescribed Stability Degree for Damping Inter-Area Low-Frequency Oscillations in Uncertain Power System	Control Applications	36

66	Remaining useful life prediction of Lithium-ion battery using a hybrid model-based filtering and data-driven approach	Control Applications	153
67	A GA-SVM and D-S Evidence Theory Based Method for Shunt-Fault Diagnosis in Power Systems	Control Applications	116
68	An Enhanced Extreme Learning Machine with a Double Parallel Structure and Its Application to Modeling Complex Chemical Processes	Control Applications	410
69	A Method for Process Identification and Model Reduction to Design PID Controller for Thermal Power Plant	Control Applications	634
70	Control-Oriented Identification Using Maximum Likelihood for a District Heating Plant	Control Applications	112
71	Modeling and Active Disturbance Rejection Control of a Single Effect LiBr-H ₂ O Absorption Chiller	Control Applications	222
72	Adaptive Nonlinear Control of the Czochralski Process Via Integration of Second Order Sliding Mode and Iterative Learning Control	Control Applications	554
73	Nonlinear Tracking Control of a Cryogenic Separation Process	Control Applications	640
74	Dynamic Model of a Three-Dimensional Flexible Cantilever Beam Attached a Moving Hub	Control Applications	293
75	Path Planning and Control of a Quadrotor UAV: A Symbolic Approach	Control Applications	387
76	Robust Design of DNA Feedback Regulator for Molecular Robot	Control Applications	619
77	Model Reference Adaptive Guidance for Trajectory Correction Projectile	Control Applications	513