

The 28th Chinese Control and Decision Conference

GENERAL INFORMATION

The 28th Chinese Control and Decision Conference (2016 CCDC) was successfully held in Yinchuan, China during May 28-30. 2016 CCDC was co-organized by Northeastern University, China and the Industrial Electronics (IE) Chapter of the IEEE Singapore Section. The local organizer was Beifang University of Nationalities, China. The conference was technically co-sponsored by IEEE Control Systems Society (CSS), Systems Engineering Society of China (SESC), Chinese Association for Artificial Intelligence (CAAI), Technical Committee on Control Theory of Chinese Association of Automation, and State Key Laboratory of Synthetical Automation for Process Industries of Northeastern University.

TECHNICAL PROGRAM

The 2016 CCDC received 1802 full paper submissions from authors from 17 countries and regions. After going through a rigorous reviewing process during which all the members in the Technical Program Committee worked professionally, timely, responsibly and diligently, 1356 papers were included in the technical program for presentation in 125 oral sessions and 9 interactive sessions in the conference. 1105 delegates attended the conference.

In addition to the normal technical sessions, the technical program also included 4 keynote addresses and 8 distinguished lectures covering the state-of-the-art in both theory and applications in control, decision, automation, robotics and emerging technologies. The 4 keynotes were as follows:

1. “*Control Algorithm Design for the Artificial Pancreas*” by Francis J. Doyle III, Harvard University, USA.
2. “*Decentralized Planning under Uncertainty: Theory and Practice for Multiagent Collaboration*” by Jonathan P. How, Massachusetts Institute of Technology, USA.
3. “*Adaptive Distributed Observer and the Cooperative Control of Multi-agent Systems*” by Jie Huang, The Chinese University of Hong Kong, Hong Kong, China.
4. “*Smart Optimization Control System for Energy-Intensive Equipments*” by Tianyou Chai, Northeastern University, China.

Distinguished lectures were delivered by Francesco Bullo of UC Santa Barbara on “*Network Systems in Science and Technology*”, Guoping Liu of Harbin Institute of Technology on “*Networked Predictive Control of Systems with Communication Constraints*”, Hong Chen of Jilin University on “*Control in Intelligent Vehicles*”, Paulo Tabuada of University of California at Los Angeles on “*Secure State-estimation and Control for Cyber-physical Systems under Adversarial Attacks*”, Peng Shi of University

of Adelaide on “*Formation Control and Analysis of Multi-Robot Systems*”, Shaoyuan Li of Shanghai Jiaotong University on “*Distributed Predictive Control for Large-Scale Networked Systems*”, Yaonan Wang of Hunan University on “*Robot Vision Perception and Control for Intelligent Manufacturing*”, Zhongsheng Hou of Beijing Jiaotong University on “*From Model Based Control to Data Driven Control*”.

All sessions, including keynote address sessions, distinguished lectures sessions, oral sessions and interactive sessions, were well attended and produced active discussions. The conference banquet, which included the presentation ceremony of the "Zhang Si-Ying Outstanding Youth Paper Award", was held in the evening of May 29, 2016.

A CD-ROM, containing all the papers presented at the conference, was provided to each registered delegate. The content written in English of official conference proceedings will be published by IEEE and included in the IEEE Xplore Database.

ZHANG SI-YING (CCDC) OUTSTANDING YOUTH AWARD

The Zhang Si-Ying (CCDC) Outstanding Youth Paper Award serves to recognize Academician Zhang Si-Ying’s highly-regarded perseverance, character and academic contribution. It also serves to inspire, motivate and encourage young scholars in their research. For a paper to be eligible for the award, the first author of the paper must not be older than 35 on the day of award presentation at the conference. The Zhang Si-Ying (CCDC) Outstanding Youth Paper Award winner may receive an award of 10000 CNY together with a certificate, each of the remaining finalists receives an award of 3000 CNY and the Certificate of Finalist.

The Award Committee for the 2016 CCDC was composed of five members: Francesco Bullo of USA, Zhong-Ping Jiang of USA, Changyun Wen of Singapore, Xinhe Xu of China and Guang-Hong Yang of China.

For the 2016 CCDC, 69 papers were selected for consideration for the “Zhang Si-Ying Outstanding Youth Paper Award” based on reviewers’ comments, nominations, and the evaluations of the Technical Program Committee members. These papers were sent to famous experts including some members of the International Advisory Committee for further evaluation. Based on their evaluations and recommendation, the Technical Program Committee shortlisted the following five papers as the finalists for the Award:

1. “*Distributed Event-triggered Consensus for Multi-agent Systems with Directed Topologies*” by Xinlei Yi, Wenlian Lu and Tianping Chen of Fudan University;
2. “*Design of Robust Positively Invariant Set for Nonholonomic Vehicle*” by Peng Wang, Xinxi Feng and Weihua Li of Air Force Engineering University;
3. “*Spatial Mean-Field Games for Combatting Corruption Propagation*” by Alain Tcheukam and Hamidou Tembine of New York University;
4. “*Cluster Synchronization for Networks of Generic Linear Systems and Nonlinear Oscillators via Intermittent Pinning Control*” by Jiahu Qin and Qichao Ma of University of Science and Technology of China, Huijun Gao of

- Harbin Institute of Technology, Weixing Zheng of Western Sydney University;
5. “*Sufficient Conditions on Distributed Averaging with Compound Noises and Fixed Topologies*” by Jiexiang Wang and Tao Li of Shanghai University.

During the conference, all the Award Committee members attended the oral presentations of the 5 finalist papers. Each member independently assessed their originality, technical quality and written and oral presentations. On the basis of these assessments, Paper 5 listed above won the 2016 CCDC Zhang Si-Ying Outstanding Youth Paper Award. Professor Fuli Wang of Northeastern University and Professor Yuelin Gao of Beifang University of Nationalities presented the awards with certificates to all the finalists and the winner in the presentation ceremony during the banquet.

The 29th CHINESE CONTROL AND DECISION CONFERENCE

The 29th Chinese Control and Decision Conference (2017 CCDC) will be held in Chongqing, China during May 27-29, 2017. Keynote addresses on the state-of-the-art of the theories and applications in control and decision will be delivered by Edwin E. P. Chong of Colorado State University, USA, Naomi Leonard of Princeton University, USA and Stephen P. Boyd of Stanford University, USA. The Organizing Committee will invite additional prominent professors/academicians as speakers of keynotes and distinguished lectures for the 2017 CCDC. Information for the 2017 CCDC will consistently be updated on the conference website: <http://www.ccdc.neu.edu.cn>.

International Technical Program Chairs

Changyun Wen,
Zhong-Ping Jiang

LIST OF FIGURES



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Caption: Opening ceremony of 2016 CCDC



Figure 2: ccdc16_Keynote Address Session _Prof Jonathan P. How
Caption: Prof Jonathan P. How delivering his keynote address



Figure 3: ccdc16_ Keynote Address Session _Prof Tianyou Chai
Caption: Prof Tianyou Chai delivering his keynote address



Figure 4: ccdc16_ Keynote Address Session _Prof Francis J. Doyle III
Caption: Prof Francis J. Doyle III delivering his keynote address

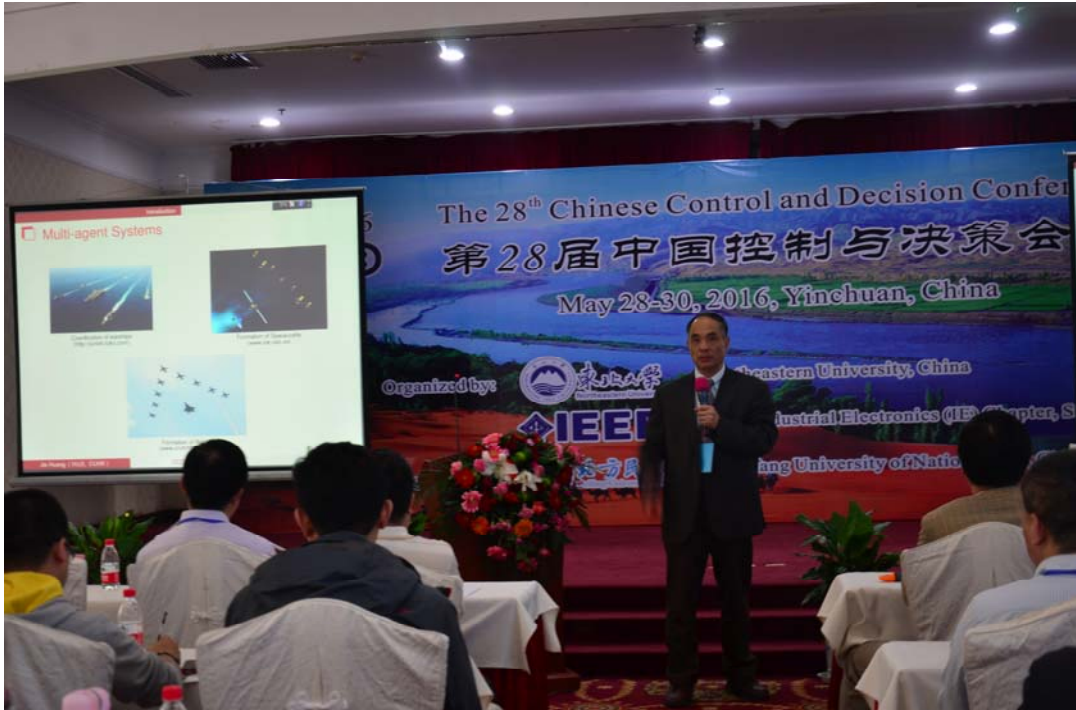


Figure 5: ccdc16_ Keynote Address Session _Prof Jie Huang
Caption: Prof Jie Huang delivering his keynote address



Figures 6: ccdc16_Award
Caption: 2016 CCDC Award Committee Members and Finalists of ZHANG SI-YING Outstanding Youth Award