

2018



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The 30th Chinese Control and Decision Conference

June 9-11, 2018, Shenyang, China



CALL FOR PAPERS



Organizers

-Northeastern University (NEU), China
 -Technical Committee on Control and Decision of Cyber Physical Systems (TCCDCPS), Chinese Association of Automation, China

Technical Co-Sponsors

-IEEE Control Systems Society (CSS)
 -Chinese Association for Artificial Intelligence (CAAI)
 -Technical Committee on Control Theory (TCCT), Chinese Association of Automation
 -State Key Lab. of Synthetical Automation for Process Industries, Northeastern University

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 Hill, David J.; The Univ. of Hong Kong, Hong Kong, China
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 Huang, Lin; Peking Univ., China
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 Lewis, Frank; The Univ. of Texas at Arlington, USA and Northeastern Univ., China
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 Morse, A. Stephen; Yale Univ., USA
 Sun, Youxian; Zhejiang Univ., China
 Tao, Gang; Univ. of Virginia, USA
 Teel, Andrew; Univ. of California, USA
 Wang, Guodong; Northeastern Univ., China
 Wang, Tianran; Shenyang Inst. of Automation, CAS, China
 Wang, Zicai; Harbin Institute of Tech., China
 Wang, Zhongtuo; Dalian Univ. of Tech., China
 Yin, Gang George; Wayne State Univ., USA

Organizing Committee

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 Special Session Co-Chairs: Xue, Dingyu ; China
 Zhao, Yong ; China
 Interactive Session Chair: Jing, Yuanwei; China

Chinese Control and Decision Conference (CCDC) is an annual international conference. The 30th Chinese Control and Decision Conference (2018 CCDC) will be held in **Shenyang, China, during June 9–11, 2018**. Its purpose is to create a forum for scientists, engineers and practitioners from all over the world to present the latest developments in Control, Decision, Automation, Robotics including Emerging Technologies.

Conference papers written in English will be submitted for inclusion into IEEE Xplore as well as other Abstracting and Indexing (A&I) databases.

The 30th CCDC covers both theory and applications in all the areas of systems, control and decision. **The topics of interest include, but are not limited to:**

Control and Decision: Adaptive control; Robust and H-infinity control; Process control; Variable structure control; Optimal control and optimization; Complex networks and systems; Cooperative control; Signal processing; Data processing; Data-driven control; Identification and estimation; Nonlinear systems; Intelligent systems; Discrete event systems; Game theory; Decision-making theory and method; Decision supporting system and production planning and scheduling; Supervisory control; Hybrid systems; Distributed parameter systems; Stochastic systems; Distributed control systems; Networked control systems; Sensor network systems; Fault diagnosis and fault-tolerant control; Delay systems; Neural networks; Fuzzy systems; Motion control; Signal processing ; Control applications; Control engineering education.

Automation: Man-machine interactions; Process automation; Intelligent automation; Factory modeling and simulation; Home, laboratory and service automation; Network-based systems; Planning, scheduling and coordination; Nano-scale automation and assembly; Instrumentation systems; CIMS and manufacturing systems

Robotics: Robot control; Mobile robotics; Mobile sensor networks; Perception systems; Micro robots and micro-manipulation; Visual servoing; Search, rescue and field robotics; Robot sensing and data fusion; Medical robots and bio-robotics; Human robot interaction; Space and underwater robots; Tele-robotics; Multirobot systems

Emerging Technologies: Cyber-physical systems; Smart grids; Renewable energies; Energy management systems; Modeling, control and simulations of biological systems; Micro-electromechanical systems, Electric vehicles and intelligent transportation; Traffic control; Optimization and control of HVAC systems; Integrated systems and processes.

Invited Session: Prospective organizers are invited to directly submit proposals to the Special and Invited Session Chair, Prof. Zongli Lin (zlsy@virginia.edu).

Three Special Sessions:

- **Control and Management of Smart City.** For more details about it, please contact the Special Session Co-chair, Professor Yahui Wang (yahui-wang@vip.sina.com).
- **Fractional Calculus and Fractional-order Systems.** For more details about it, please contact the Special Session Co-chair, Professor Dingyu Xue (xuedingyu@mail.neu.edu.cn).
- **IntelliSense and Advanced Sensing, Detection Technology.** For more details about it, please contact the Special Session Co-chair, Professor Yong Zhao (zhaoyong@ise.neu.edu.cn).

Zhang Si-Ying (CCDC) Outstanding Youth Paper Award: Authors under the age of 35 are eligible for the award. Selection of the award-winning paper will be made by the Award Evaluation Committee, based on both the technical contents and presentation.

There will be **KEYNOTE ADDRESSES** and **DISTINGUISHED LECTURES** covering the **State-of-the-Art** in both theory and applications of **Systems, Control and Decision**

Invited Keynote Addresses will be delivered by

- Prof. Alessandro Astolfi, Imperial College London, UK;
- Prof. Francesco Bullo, University of California, Santa Barbara, USA;
- Prof. Anders Lindquist, Shanghai Jiaotong University, China;
- Prof. Nanning Zheng, Xi'an Jiaotong University, China.

Invited Distinguished Lectures will be delivered by

- Prof. Francesco Borrelli, University of California at Berkeley, USA;
- Prof. Warren Dixon, University of Florida, USA;
- Prof. Daniel Ho, City University of Hong Kong, Hong Kong, China;
- Prof. Shoudong Huang, University of Technology Sydney, Australia;
- Prof. Tingwen Huang, Texas A&M University at Qatar, Qatar;
- Prof. Shaocheng Tong, Liaoning University of Technology, China;
- Prof. Zidong Wang, Brunel University, UK;
- Prof. Yong Zhao, Northeastern University, China.

Submission Notices for Authors:

Full papers describing original work and special/invited session proposals should be submitted by **31 October, 2017**. Upon acceptance, authors will be required to register and present their papers at 2018 CCDC. **For further information, please refer to**

Website - <http://www.ccdc.neu.edu.cn>; Email - secretary_ccdc@ise.neu.edu.cn

Authors of strong papers will be invited to submit an expanded version for possible publication in Journal of Control and Decision (JCD).

The primary aim of the JCD is to provide a platform for scientists, engineers and practitioners throughout the world to present the latest developments in Control, Decision, Automation, Robotics including Emerging Technologies.

For full Aims and Scope, please visit the journal's homepage: www.tandfonline.com/tjcd

Important Dates:

Deadline for Full Paper submission	31 October	2017
Deadline for Invited Session Proposals	31 October	2017
Notification of Acceptance/Rejection	10 February	2018
Deadline for Camera Ready Manuscript Submission	10 March	2018
Deadline for Advance Registration	10 March	2018

