

IEEE CASE 2017

13th IEEE International Conference on Automation Science and Engineering

August 20 – 23, 2017, Xi'an, China

<http://www.case2017.org>

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Automation for next industry revolution

The advances in information science and technology such as Internet Plus allow us to make many industrial systems smarter and more creative particularly: Smart Manufacturing Systems, Smart Buildings, Smart Cities, Smart Transportation Systems, Smart Energy Systems, etc.

CALL FOR PAPERS

The 13th IEEE International Conference on Automation Science and Engineering (IEEE CASE2017), sponsored by the IEEE Robotics and Automation Society (RAS), will be held in Xi'an, China, August 20 to 23, 2017. IEEE CASE is a flagship automation conference of the IEEE RAS and constitutes the primary forum for cross-industry and multi-disciplinary research in automation. Its goal is to provide a broad coverage and dissemination of foundational research in automation among researchers, academics, and practitioners.

The technical program of IEEE CASE 2017 will consist of tutorials/workshops, keynote/plenary speeches, automation forums, and oral presentations. Papers describing original work on abstractions, algorithms, theories, methodologies, and case studies are invited. Accepted and presented papers will be published in the conference proceedings, and submitted for inclusion into IEEEXplore as well as other Abstracting and Indexing (A&I) databases. IEEE CASE is an offspring of the journal IEEE Transactions on Automation Science and Engineering. The journal will publish a Special CASE Issue of top-rated papers. **IEEE Robotics and Automation Letters** (RA-L) will also accept journal quality publications in conjunction to CASE 2017.

Regular papers and special session proposals and papers should be submitted online at the conference website at www.case2017.org. **One new feature** of CASE 2017 is that the authors of the papers published or accepted in and after 2016 by IEEE Transactions on Automation Science and Engineering or IEEE Transactions on Robotics can request presentation of their papers at the conference in the newly organized "transaction paper sessions". General inquiries should be addressed via Email to the Program Chair, Prof. Qing-Shan JIA at jiaqs@mail.tsinghua.edu.cn. The best conference paper award, the best application paper award, and the best student paper award will be selected.

The organizing committee of CASE 2017 cordially invite you to submit full paper contributions and hope to see you in Xi'an, China in August 2017!

STEERING COMMITTEE

Mengchu Zhou (chair), New Jersey Inst. Tech.

Fan-Tien Cheng, Nat. Cheng Kung Univ.

Hyoun Ryeol Choi, Sungkyunkwan Univ.

Nak Young Chong, Japan Advanced Inst. of Sci. and Tech.

Maria Pia Fanti, Politecnico di Bari

Ken Goldberg, UC Berkeley

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Martin Fabian, Chalmers University of Tech.

Peter B. Luh, Univ. of Connecticut

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Spyros Reveliotis, Georgia Tech.

Kazuhiro Saitou, Univ. of Michigan

Leyuan Shi, Univ. of Wisconsin at Madison

Yu Sun, Univ. of Toronto

Michael Wang, Chinese U of Hong Kong

John Wen, Rensselaer Poly. Institute

Dan O. Popa, University of Louisville

IMPORTANT DATES

Jan. 11, 2017	Special session proposal submission
Jan. 29, 2017	Special session acceptance notification Tutorial/workshop proposal submission
Feb. 15, 2017	Contributed paper submission
Feb. 15, 2017	RA-L submission
Feb. 26, 2017	Tutorial/workshop acceptance notification
May 20, 2017	Paper acceptance notification
May 27, 2017	Conference registration opens
June 12, 2017	Final paper submission
July 15, 2017	RA-L notification

CONFERENCE TRACKS

Next Generation Automation

- Industry 4.0, AI and beyond
- Industrial robotics
- Reconfigurable manufacturing systems
- Coordination and scheduling
- CPS and industrial Internet

Foundation of Automation

- Discrete event systems
- Hybrid systems
- Fault analysis and recovery
- System modelling and simulation
- Monitoring and control

Life Sciences and Healthcare

- Lab automation
- Automation in treatment diagnosis and disease
- Hospital and medical robotics
- Healthcare management systems

Automation in Meso, Micro and Nano-scale

- Cluster tool scheduling
- Fab modelling and analysis
- Metrology
- Nano-manufacturing

Big Data for Automation

- Web, Data and Text Mining
- Web services and service oriented architectures
- Machine learning
- Software engineering in automation
- Workflow management systems

Automation in Logistics and Supply Chain Management

- Material handling and assembly
- IT-enabled Planning, coordination and scheduling
- Resource allocation and management
- Automation in remanufacturing and reverse logistics

Networked and Control Systems

- Distributed control systems
- Multiagent planning and control
- Sensor/actuator networks
- Wireless communication and control

Cyber Physical Energy Systems

- Smart buildings
- Intelligent transportation systems
- Smart Cities
- Micro and smart grids

XI'AN

Xi'an is a famous historical and cultural city in China. It is the cradle of the Chinese nationality, the birthplace of the Chinese civilization and the representative of the Chinese culture. The city was first established more than 3100 years ago and it has been taken as a capital for 1129 years for 13 dynasties. It is one of the most ancient capitals of the world, in the company of Athens, Rome and Cairo. The city once functioned as the political, economic and cultural center of China and as the starting point of the renowned Silk Road. Due to its long history and rich culture, the city is reputed to be the natural history museum.



City Wall of Ming Dynasty



Guest Room



Terra Cotta Warriors and Horses



Hotel Hallway



Qujiang District