



The 2nd International Symposium on Autonomous Systems 2018 ISAS

www.isas.cqu.edu.cn

May 19-21, 2018, Chongqing, China



The 2nd International Symposium on Autonomous Systems, 2018 ISAS, will be held in Chongqing, China, during May 19-21, 2018. The conference is organized by Chongqing University, Star Institute for Intelligent Systems, China, and technically co-sponsored by IEEE Robotics and Automation Society (to be approved) and Technical Committee on Reliable Control Systems, China Association of Automation.

ISAS focuses on both theory and applications mainly covering the topics of artificial intelligence, control, automation, robotics and autonomous systems. In addition to the technical sessions, there will be invited sessions, panel sessions and keynote speeches.

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Organizers

-Chongqing University, China
-Star Institute for Intelligent Systems, China

Technical Co-sponsors

-IEEE Robotics Automation Society
-Technical Committee on Reliable Control Systems, Chinese Association of Automation

The topics of interest include, but are not limited to:

- **Artificial Intelligence (AI):** Artificial intelligence and philosophy, Automated reasoning and inference, Case-based reasoning, Cognitive aspects of AI, Commonsense reasoning, Constraint processing, Heuristic search, High-level computer vision, Intelligent interfaces, Intelligent robotics, Knowledge representation, Machine learning, Multi-agent systems, Natural language processing, Planning and theories of action, Reasoning under uncertainty or imprecision
- **Autonomous Systems:** Unmanned system command and control, Cooperative control of unmanned systems, Unmanned system modeling and simulation, Unmanned system dynamics, New concept unmanned systems, Robotic systems, Unmanned aerial vehicles
- **Networked Control Systems:** Coordinated control and estimation over networks, Control and computation over sensor networks, Control under communication constraints, Control and performance analysis issues, Synchronization of activities across a controlled network, Stability analysis of controlled networks, Analysis of networks as hybrid dynamical systems
- **Intelligent Control:** Adaptive control, Co-operative control, Intelligent systems, Discrete event systems, Multi-agent systems, Neural networks, Fuzzy systems, Control of biological systems
- **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, Biomedical instrumentation and applications, Building energy efficiency
- **Robotics:** Modeling and identification, 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, Localization, navigation and mapping, Dexterous manipulation, Medical robots and bio-robotics, Human centered systems, Space and underwater robots, Tele-robotics, Mechanism design and applications.
- **Emerging Technologies:** Internet of things, Cyber-physical systems, Smart buildings, Smart grid, Energy management systems, Big data, Electric vehicles and intelligent transportation.

Registration fee: 2500 RMB/Person

Keynote Speeches

Professor Frank Allgower, University of Stuttgart

Professor Tamer Basar, University of Illinois at Urbana-Champaign

Professor Ben M. Chen, National University of Singapore

Professor Miroslav Krstic, University of California, San Diego

There will also be **Plenary Panel Sessions** for interaction and discussions with prominent researchers in the areas of the conference as well.

