



# The 3rd International Symposium on Autonomous Systems ISAS 2019

[www.isas.cqu.edu.cn](http://www.isas.cqu.edu.cn)

May 17-19, 2019, Shanghai, PR China

## Organizers

- Chongqing University, China  
- Shanghai Jiao Tong University, China  
- Star Institute for Intelligent Systems, China

## Technical Co-sponsors

- IEEE Computational Intelligence Society (ICIS)  
- Technical Committee on Reliable Control Systems, Chinese Association of Automation

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The 3rd International Symposium on Autonomous Systems, ISAS 2019, will be held in Shanghai, China, during May 17-19, 2019. The conference is organized by Chongqing University, Shanghai Jiao Tong University, Star Institute for Intelligent Systems, China, and technically co-sponsored by IEEE Computational Intelligence Society, Technical Committee on Reliable Control Systems, Chinese Association of Automation.

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

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 addresses.

**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.

**ISAS 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.

## Keynote Speeches

- 🌟 Professor Jie Chen, Beijing Institute of Technology
- 🌟 Professor Jie Huang, The Chinese University of Hong Kong
- 🌟 Professor Marios Polycarpou, University of Cyprus
- 🌟 Professor Jose Principe, University of Florida

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

## Important Dates

Deadline for Invited Session Proposals	February 15	2019
Deadline for Full Paper Submission	February 15	2019
Notification of Acceptance/Rejection	March 28	2019
Deadline for Camera Ready Manuscript Submission	April 20	2019
Deadline for Advance Registration	April 20	2019

