



*The 16th International Conference on Intelligent  
Robotics and Applications (ICIRA 2023)*

*July 5-7, 2023 in Hangzhou, China*

## **ICIRA 2023 Special Session Proposal**

### **Title of the Proposal: Multi-robot Systems for Real World Applications**

#### **Technical Outline of the Session and Topics:**

Outline of the Session: Work on multi-robot systems for real world applications is nascent. Deploying multiple robots to solve practical problems in the real world is a major challenge and opportunity in robotics field. There are many technical difficulties in the research of multi-robot or multi-agent, including the perception, path planning, unknown environment exploration, human multi-robot interaction, and system design, which are the main topics to be discussed in this session. We aim to bring together multi-robot, multi-agent, and robotics and machine intelligence researchers who are deploying multi-robot to solve theoretical and practical problems toward to the real world.

#### Topics of the Session:

- *Intelligent robotics and multi-agent systems*
- *Aerial swarms*
- *Multi-robot learning*
- *Multi-robot autonomous exploration*
- *Multi-robot perception and path planning*
- *Human & multi-robot interaction*

#### **Contact details of the Session Organizers**

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