

Call For Papers

Special Session: Autonomous Planning and Control of Unmanned System

Conference: The 2022 International Conference on Cyber-physical Social Intelligence (ICCSI)

Date: October 21-24, 2022

Meeting mode: Hybrid

Location: Nanjing, China

Web site: <https://iccsi2022.agist.org>

With the development of intelligent control method, planning algorithm and sensor & communication technology, large-scale unmanned systems composed of multiple individuals have been widely used in various fields. However, challenges still remain including unknown or time-varying environments, delayed or erroneous sensing information and limited computing or motion ability. All these problems have hindered the unmanned system from completing tasks more autonomously and effectively. In addition, special or heterogeneous devices like unmanned aircraft, ground robots, underwater explorers, satellites and other unconventional structures would make some existing solutions less robust and applicable. Consequently, more universal or specialized methods for the planning and control of unmanned systems in complex environments must be studied. The objective of this special issue is to promote and reflect on the recent advances of unmanned systems, and also to provide a platform for researchers and practitioners in related areas to exchange ideas and experiences. Original manuscripts covering theoretical researches, innovative applications and latest surveys of unmanned systems are all welcome.

Interested topics include (but not limited to):

- Path Planning and Motion Control
- Map-based or Map-less navigation
- Environment Perception and Modeling
- System Modeling and Control
- Sensor information processing and denoising
- Swarm Intelligence Optimization
- Communication Network and Technique
- Multi-agent Collaboration and Decision
- Unmanned Hardware & Software Platform
- Innovation Application Cases Review

Important Dates:

May 15, 2022,	Full paper submission
July 1, 2022,	Acceptance/Rejection notification
August 31, 2022,	Final camera-ready papers due

Special Session Co-chairs:

Associate Professor. Liang Shan (Nanjing University of Science and Technology, China), email shanliang@njust.edu.cn)

Associate Professor. Xiaofei Yang (Jiangsu University of Science and Technology, China), email yxfei_0809@just.edu.cn

All inquiries about the session, including the letter of intent, should be sent to any of the co-chairs above