## **Call For Papers**

Special Session: Building a Modern Fire Rescue System with Intelligent Fire Fighting

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

Building a national emergency rescue system in the new era and building a modern national comprehensive fire rescue team is a strategic decision made by the Party Central Committee to adapt to the modernization of the national governance system and governance capacity. The characteristics of China's fire rescue work are wide geographical scope, various scenes, and large demand for personnel. These characteristics determine that we must build a modern fire rescue system based on intelligent fire fighting technology, therefore to improve the ability of fire prevention, disaster reduction and relief.

Intelligent fire fighting should take the demand of fire safety and build an intelligent fire fighting platform based on fire fighting data, supported by IoT technology and combined with mobile positioning, map, and communication technology. The platform should carry out intelligent collection, data cleaning, treatment, analysis, and assistant decision-making for information such as monitoring equipment, fire-fighting equipment, protective equipment, emergency plan, fire water source, and automatic fire-fighting facilities, so as to realize the functions of fire safety monitoring, early warning, disposal, command and dispatching, which puts forward new challenges to the application of the existing intelligent technology.

Inspired by that, we host a special session to bring together the research accomplishments provided by researchers from academia and the industry. The other goal is to discuss the new era issue of building a modern fire rescue system with intelligent fire fighting, together to help realize the vision of new era intelligent fire fighting. We encourage prospective authors to submit related distinguished research papers on the subject of both: theoretical approaches and practical case reviews.

## Interested topics include (but not limited to):

- Comprehensive prediction of security risks based on historical records and big data
- Fire force distribution based on location technology
- Monitoring and prediction of physical and psychological status of firefighters
- Deep learning methods on accurate fire monitoring in large areas such as forests and grasslands
- Joint operation of fire fighting equipment based on AI
- Unmanned fire fighting technologies such as UAV, robot and bomb dropping
- Intelligent protection and support technology

## **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:**

Senior Engineer, Haiping Liu (Beijing Institute of Mechanical Equipment), email 471238380@qq.com

Senior Engineer, Weiwei Bian (Beijing Institute of Mechanical Equipment), email <a href="mailto:karovie@163.com">karovie@163.com</a>

Senior Engineer,Qifu Huang (Beijing Institute of Mechanical Equipment),email <a href="mailto:gifu@outlook.com">gifu@outlook.com</a>

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