2022 第十届中国指挥控制大会 特邀专题论坛简介

特邀专题名称

智能指挥控制理论与应用

召集人的姓名、职称、单位和邮箱

刘忠, 教授, 国防科技大学, liuzhong@nudt.edu.cn

黄金才,教授,国防科技大学,huangjincai@nudt.edu.cn

特邀专题简介(背景、目的、意见和内容)

近年来,随着数据采集、计算能力和智能算法的快速发展,人工智能技术 在众多产业领域取得了瞩目成就。指挥控制是复杂环境下提高决策效率的关键 环节,人工智能技术必将深刻影响传统指挥控制的运行方式,大幅提高决策的 速度和精度,指挥控制智能化是时代发展的必然趋势和紧迫需求,也是人工智 能技术辅助各类决策的核心所在。

为进一步促进人工智能技术在指挥控制领域的应用,加强广大研究人员的 交流,本专题特邀与"智能指挥控制理论与应用"主题相关的包含新思想、新 概念、新发现、新改进以及新应用的原创论文,包括但不限于以下内容:

- 指挥与控制
- 博弈论
- 情报处理
- 态势认知
- 任务规划
- 数字孪生
- 平行仿真
- 知识推理

- 因果推断
- 数据挖掘
- 学习表示
- 软计算
- 近似推理
- 决策科学
- 优化方法

C2-China 2022

Invited Session Summary

Title of Session

Intelligent Command and Control Theory and Applications

Name, Salutation, Affiliation and Email of Organizers

Liu Zhong, Professor, National University of Defense Technology, phillipliu@263.net

Huang Jincai, Professor, National University of Defense Technology, huangjincai@nudt.edu.cn

Details of Session (background, purpose, significance and scope)

In recent years, with the rapid development of data collection, computing power, and intelligent algorithms, artificial intelligence technology has made remarkable achievements in many industrial fields. Command & control is crucial to improving decision-making efficiency in complex environments. Artificial intelligence technology will profoundly affect the operation mode of traditional command and control and greatly enhance the speed and accuracy of decision-making. Intelligent command and control is an inevitable trend and an urgent need for the development of the times. The core of artificial intelligence technology is to assist all kinds of decision-making.

To further promote the application of artificial intelligence technology in command & control and strengthen the exchange of researchers. This topic invites the following issues related to the theme of Intelligent Command and Control Theory and Applications, including new ideas, original concepts, discoveries, novel improvements for new applications. The scope of the call for papers includes but is not limited to the following:

- Command and control
- Game Theory
- Intelligence processing
- Situational awareness
- Task Planning
- Digital twin

- Parallel simulation
- Knowledge reasoning
- Causal inference
- Data mining
- Representation learning
- Soft computing
- Approximate reasoning
- Decision Science
- Optimization method