2022第十一届中国指挥控制大会

特邀专题论坛简介

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| **特邀专题名称**智能信息融合 |
| **召集人的姓名、职称、单位和邮箱**曹江、研究员、军事科学院、caojiangjk@outlook.com蒋雯、教授、西北工业大学、jiangwen@nwpu.edu.cn张熙、教授、北京邮电大学、zhangx@bupt.edu.cn高阳、教授、南京大学、gaoy@nju.edu.cn程光权、教授、国防科大、cgq299@nudt.edu.cn |
| **特邀专题简介（背景、目的、意见和内容）**随着信息技术迅猛发展，多源、多模态数据的融合检测与处理成为学术界和工业界关注的热点研究问题。面向海量数据，如何进行高效的采集、处理、关联融合分析，从而实现目标数据的检测和处理，充分挖掘数据价值，并确保整个流程的安全可信，涉及多个方面的技术挑战。针对复杂不确定环境下的态势感知问题，研究基于不确定信息融合的目标检测、识别与推理决策技术，实现多平台跨结构异源数据动态融合，降低态势认知结果的不确定性，提升态势一致性和准确性。针对时间序列数据的复杂模式和动态变化性使得多信息源的数据融合问题，研究智能融合与异常发展方法，推动数据分析与发掘技术的发展，提升多源信息融合能力，保障数据安全和质量，为事前预警和后续决策提供依据。本特邀专题邀请以下与“智能多源信息融合”主题相关的包含创新思想、概念、新发现、改进以及新应用的原创论文。* 复杂态势不确定信息融合与推理决策
* 多信源时序数据异常检测
* 智能信息融合检测与处理
* 信息融合智能算法与模型安全
* 目标融合分析与战场信息融合
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**C2-China 2022**

**Invited Session Summary**

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| **Title of Session**Intelligent Information Fusion |
| **Name, Salutation, Affiliation and Email of Organizers**Jiang Cao, Researcher, Academy of Military Sciences, caojiangjk@outlook.comWen Jiang, Professor, Northwestern Polytechnical University, jiangwen@nwpu.edu.cnXi Zhang, Professor, Beijing University of Posts and Telecommunications, zhangx@bupt.edu.cnYang Gao, Professor, Nanjing University, gaoy@nju.edu.cnGuangquan Cheng, Professor, National University of Defence Technology, cgq299@nudt.edu.cn |
| **Details of Session (background, purpose, significance and scope)**With the rapid development of information technology, the fusion detection and processing of multi-source and multi-mode data has become a hot research issue in academia and industry. Facing the mass data, how to conduct efficient collection, processing, correlation and fusion analysis, involves many aspects of technical challenges. In order to complete the detection and processing of target data (Facing mass data, how to conduct efficient collection, processing, correlation and fusion analysis, fully mining the value of data, and ensure the safety and trust of the whole process), involves many aspects of technical challenges.Aiming at the situation awareness problem in complex uncertain environment, study the object detection, recognition and reasoning decision technology based on uncertain information fusion, realize the dynamic fusion of multi-platform and cross-structure heterogeneous data, reduce the uncertainty of situation cognition results and improve the consistency and accuracy of situation. Aiming at the problem of data fusion of multiple information sources caused by complex patterns and dynamic changes of time series data, study intelligent fusion and abnormal development methods , promote the development of data analysis and mining technology, improve the ability of multi-source information fusion, ensure data safety and quality, and provide basis for advance warning and subsequent decision-making.This special topic invites the following original papers containing innovative ideas, concepts, discoveries, improvements, and applications related to the theme of "Intelligent multi-source Information Fusion":* Complex situation uncertainty information fusion and reasoning decision
* Anomaly detection of multi-source timing data
* Intelligent information fusion detection and processing
* Information fusion intelligent algorithm and model security
* Target fusion analysis and battlefield information fusion

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