

Theory, technology and application of Cross-domain cooperation in Unmanned Systems

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Cross-domain cooperation between Unmanned Aerial Vehicle (UAV) and Unmanned Ground Vehicle (UGV) (Unmanned Surface Vehicle (USV), Unmanned Underwater Vehicle (UUV) and so on) can improve the capability and efficiency with complementary perception and behavior, which is a new trend and research focus of unmanned system. The purpose of this session is to bring the expert of this research focus to discuss and share the key issue and application for developing the idea of cross-domain cooperation. The topics of paper include, but are not limited to fundamental theory, key technology, the latest advances and application research of data fusion, cooperative behavior and intelligent learning in cross-domain cooperation.

无人系统跨域协同：理论、技术与应用

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将空中和地面（水面，水下等）无人系统组成跨域协同系统，并充分利用二者的功能互补性，实现信息共享和行为协同，可从本质上提升其面对复杂环境和使命的执行能力和运行效率。这已经成为无人系统领域发展的一个新趋势。本专题旨在与世界范围内相关研究方向的学者共同探讨和分享无人系统跨域协同中的关键问题和应用方向，拓展研究思路。本专题论文主题包含但不限于围绕无人系统跨域协同的信息融合，行为协作，智能学习的基础理论，关键技术，最新进展和应用研究。