

IEEE ICUS 2021

Invited Session Summary

Title of Session Information Fusion in Unmanned Systems
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Details of Session(including aim and scope) <p>Multi-source information fusion is an important technical means to improve the performance and intelligence of systems. Modern unmanned systems involve a large amount of sensor data, images, videos, remote sensing, intelligence, expert knowledge, prior rules and other information. It is very necessary and important to study relevant theories, models and methods of information fusion which can adapt to complex and dynamic environments, so as to achieve organic integration and synthesis of information that are multi-source, cross-domain, heterogeneous, correlative, further improving the performance and capabilities of unmanned systems in many aspects including target recognition, situation awareness, task planning, collaborative control, swarm optimization, etc.</p> <p>This session focuses on the latest advanced research results for key technologies and comprehensive applications of information fusion in unmanned systems. The topics of the session include but are not limited to:</p> <ol style="list-style-type: none">(1) Multi-sensor information fusion of unmanned systems(2) Information fusion synergically driven by knowledge and data(3) Uncertain information fusion and intelligent reasoning(4) Integration of multi-source or multi-domain information in unmanned systems(5) Demonstration, verification, and application of information fusion in unmanned systems