Intelligent Perception, Control, and Decision-Making for Unmanned Systems in Complex Environments

CALL FOR PAPERS

With the rapid advancement of autonomous navigation technologies, unmanned systems are evolving into more intelligent, efficient, and adaptive systems, suitable for a wide range of complex applications. Researchers are increasingly leveraging smart technologies to address real-world challenges characterized by high uncertainty and variability, such as environmental awareness, mission planning, and real-time decision-making. The integration of these smart technologies with unmanned systems offers numerous advantages, including adaptive learning, optimized control strategies, and enhanced autonomy. This has spurred significant interest in research areas such as advanced sensor fusion, robust control algorithms, real-time data analysis, and multi-agent cooperation strategies. The goal of smart technologies is to enhance the functionality and accuracy of unmanned systems, endowing them with adaptive and intelligent decision-making capabilities, and facilitating their applications.

This special issue is intended to expedite the publication of novel and significant research results, technological advancements, and conceptual breakthroughs in the emerging field of Intelligent Perception, Control, and Decision-Making for unmanned systems in complex environments. We invite the submission of high-quality papers related to recent advances in these emerging topics, including but not limited to the following:

❊Advanced sensing techniques

❊Obstacle avoidance and path planning algorithms for agents

❊Decision-making frameworks for complex environments

❊Gaming and merging techniques for multi-intelligentsia

❊Machine learning and artificial intelligence applications for unmanned systems

❊Adaptive learning methods for unmanned systems

❊Real-time control and adaptive methods for unmanned systems

❊Multi-agent systems and cooperative control

❊Simulation and modeling of multi-intelligentsia

If you would like to know more about the topic, please contact Prof. Zhengrong Xiang by email: **xiangzr@njust.edu.cn**