

Autonomous Control Based on Intelligent Computing

Organizers:

Dr. Bing Hua, Academy of Astronautics, Nanjing University of Aeronautics and Astronautics, China, huabing@nuaa.edu.cn

Dr. Youmin Zhang, Concordia University, Canada, ymzhang@encs.concordia.ca

Dr. Haibin Duan, School of Automation Science and Electrical Engineering, Beihang University, China, hbduan@buaa.edu.cn

Autonomous control based on intelligent computing is the deep integration of artificial intelligence and autonomous control. Its application in aircraft, robot, vehicle, ship and other systems has become a research hotspot. In recent years, with the support of many national projects, Chinese scholars have made a lot of high-level achievements in the theory, experiment and application of autonomous control based on Intelligent Computing. The purpose of this topic is to show and share the new ideas and achievements of intelligent computing application in autonomous control system together with relevant experts, scholars and engineers around the world. This topic includes but not limited to: pigeon swarm algorithm, particle swarm algorithm, genetic algorithm, bee colony algorithm, autonomous control and other related theories, models, system design and other innovative applications and research trends.

基于智能计算的自主控制

组织者:

华冰, 副研究员, 南京航空航天大学航天学院, huabing@nuaa.edu.cn

张友民, 教授, 加拿大康考迪亚大学, ymzhang@encs.concordia.ca

段海滨, 教授, 北京航空航天大学自动化科学与电气工程学院, hbduan@buaa.edu.cn

基于智能计算的自主控制是人工智能和自主控制的深度融合, 其在飞行器、机器人、车辆、船只等系统的应用已成为当今研究热点。近年来, 在多个国家项目的支持下, 我国学者在基于智能计算的自主控制理论、试验、应用等方面取得了很高水平成果。本专题旨在与世界范围内相关专家、学者、工程师一道, 共同展示和分享智能计算在自主控制系统中相关应用的新思路和新成果。本专题论文主题包含但不限于: 鸽群算法、粒子群算法、遗传算法、蜂群算法、自主控制等相关的理论、模型、系统设计等相关创新应用及研究新趋势。