NATURE-INSPIRED COMPUTATION IN NAVIGATION AND VEHICLE ROUTING

Xin-She Yang, Yuxin Zhao and Eneko Osaba

Nature-inspired computation and its relevant algorithms, especially those based on swarm intelligence, have become effective in recent years in solving a diverse range of optimization problems in real-world applications, from engineering optimization to scheduling and from vehicle routing to asymmetric travelling salesman problems. This special session strives to provide a platform for presenting state-of-the-art developments in this area, with an emphasis on the applications in navigation and vehicle routing.

This intended CEC2017 Special Session will enable researchers to discuss theoretical analysis of nature-inspired optimization algorithms, algorithm implementation and case studies in navigation, robotics, vehicle routing, scheduling, engineering optimization and industrial applications.

Topics

• Nature-inspired algorithms
• Swarm Intelligence
• Algorithm analysis and implementation
• Algorithm improvement and hybridization
• Navigation and unmanned vehicle automation
• Vehicle routing and scheduling
• Travelling salesman problems
• Case studies in engineering and industrial applications