工程与应用

改进蚁群算法在旅游路线规划中的应用研究

徐 锋，杜军平

北京邮电大学 智能通信软件与多媒体北京市重点实验室，北京 100876

摘要　　在研究了基本蚁群算法后提出了偶遇算法，提高了蚁群算法蚂蚁一次周游的质量。针对旅游路线规划的问题，改进了路径的求法，使蚁群算法可以实现动态规划，从而实现旅游景区的负载均衡。提出一种基于改进蚁群算法的旅游路线规划问题求解的有效方法。实验结果表明该方法具有较好的有效性和实用性。
关键词　　蚁群算法　组合优化　路线规划　旅游
分类号　TP311

tudy on travel route planning based on improved ant colony algorithm

XU Feng，DU Jun-ping

Beijing Key Lab of Intelligent Telecommunication Software and Multimedia，School of Computer Science，Beijing University of Posts and Telecommunications，Beijing 100876，China

Abstract

This paper presents the casual meeting algorithm based on the basic ant colony algorithm and increases the quality for ant's each tour for ant colony algorithm.Facing to the issue of travel route planning，this paper improves the calculating method of distance，and realizes the dynamic route planning for this algorithm and achieve scenic spot load balancing.The effective method for travel route planning based on improved ant colony algorithm is put forward.The experimental results show that the method is effective and practical.

Key words　ant colony algorithm　combinational optimization　route planning　tourism

通讯作者　徐 锋 junpingdu@126.com

扩展功能

本文信息

- Supporting info
- PDF(430KB)
- [HTML全文](0KB)
- 参考文献

服务与反馈

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- 复制索引
- Email Alert
- 文章反馈
- 浏览反馈信息

相关信息

- 本刊中 包含"蚁群算法"的相关文章
- 本文作者相关文章
- 徐 锋
- 杜军平