基于模糊聚类分析的车辆优化调度

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摘要 应用模糊聚类分析对物流配送需求点进行分类,建立了车辆调度问题的数学模型, 将标准遗传算法与爬山算法集成,构造了一种改进的混合遗传算法。试算结果表明,对需求点分类后, 应用遗传算法可有效解决联合物流模式的车辆调度问题。

关键词 交通运输工程 车辆调度 遗传算法 模糊聚类

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Optimal vehicle routing problem based on fuzzy clustering analysis

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Abstract The demand points for physical distribution were classified by the fuzzy clustering analysis, and a mathematical model for the vehicle routing problem was established. An improved hybrid genetic algorithm integrating the standard genetic algorithm and the climb up algorithm was constructed. The trial calculation results show that vehicle routing problem for logistics alliance model can be solved efficiently by the improved hybrid algorithm through the classification of the demand points.

Key words engineering of communications and transportation vehicle routing problem genetic algorithm fuzzy clustering

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