工程与应用

基于模糊控制的停车诱导信息板信息显示方法

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摘要 针对目前实施的多数停车诱导系统可变信息板动态车位信息显示较单调的现状,探讨了以模糊控制方法来进行信息警示。综合考虑各种因素(停车场当前空位数、当前驶入率与驶出率、信息板离目标停车场的远近等),由系统根据事先拟定的规则进行模糊推理决定合理信息显示(红、黄或绿),从而达到高效、准确与人性化的停车行为诱导,并从系统管理的角度平衡各停车场的负荷,做到停车场均衡利用。

关键词 停车诱导系统 可变信息板 显示 模糊控制 规则

分类号

Display method of guidance information on parking message sign boards based on fuzzy control theory

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Abstract

Aiming at the actuality that dynamic parking message signs on variable parking message sign boards of current most of Parking Guidance Information System (PGIS) are comparatively simplex, the method that information display is offered by fuzzy control theory is discussed. Synthetically considering all sorts of factors including current parking space in the park, current entrance rate and exit rate, the distance of parking message sign boads from the park, etc., the reasonable information display including the color of red, yellow and green is decided by fuzzy reasoning based on aforehand given rules, which will offer efficient, accurate and humanistic parking guidance, and also balance the load between the parks from the angle of systemic management.

Key words Parking Guidance Information System (PGIS) variable parking message sign boards display fuzzy control theory rule

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扩展功能

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