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论文

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累积量测序列的区间云变换及识别

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Interval cloud transform and recognition research of accumulative measurement sequence data

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摘要

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摘要

目标多属性序列类数据不能直接与数据库中的区间类数据融合识别, 对此, 提出一种基于云变换的序列-区间异类数据识别算法. 对目标多属性序列数据进行频数计算形成频率分布函数, 并进行虚警检测, 实施云变换形成云簇, 提取云簇特征, 再根据3-En 准则形成云滴区间, 实现了序列型数据的区间化表示. 进一步, 利用一种区间多属性识别判定准则进行识别判定, 得到识别结果, 解决了序列-区间异类数据的识别问题. 仿真实验结果验证了该算法对序列-区间异类数据识别的有效性.

关键词: 目标识别, 云变换, 序列数据, 区间数

Abstract:

An asynchronous data recognition algorithm for sequence and interval number based on cloud transform is proposed to solve the problem that the multi-attribute sequence data of the target can not be recognized with the interval number in the database directly. This algorithm counts the possible values in the multi-attribute sequence data approximately and forms the frequency distribution function firstly and then detects the possible values with the threshold. Afterwards, cloud groups are formed with back cloud transform and their the characteristics are extracted, the cloud interval number is got to represent the sequence data according to the 3En rule. The transformed interval recognition is made by using the multi-attribute interval recognition rule and the satisfied result is obtained, which solves the asynchronous data recognition for the sequence and interval number. Simulation experiment results show that the proposed algorithm can recognize the sequence and interval asynchronous data effectively.

Key words: target recognition cloud transform sequence data interval number

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