The Study of Dynamic Aggregation of Relational Attributes on Relational Data Mining.

Abstrak

Most aggregation functions are limited to either categorical or numerical values but not both values. In this paper, we define three concepts of aggregation function and introduce a novel method to aggregate multiple instances that consists of both the categorical and numerical values. We show how these concepts can be implemented using clustering techniques. In our experiment, we discretize continuous values before applying the aggregation function on relational datasets. With the empirical results obtained, we demonstrate that our transformation approach using clustering techniques, as a means of aggregating multiple instances of attribute's values, can compete with existing multi-relational techniques, such as Progol and Tilde. In addition, the effect of the number of interval for discretization on the classification performance is also evaluated.