Semi-Automatic Method to Assist Expert for Association Rules Validation

Authors : Amdouni Hamida, Gammoudi Mohamed Mohsen

Abstract : In order to help the expert to validate association rules extracted from data, some quality measures are proposed in the literature. We distinguish two categories: objective and subjective measures. The first one depends on a fixed threshold and on data quality from which the rules are extracted. The second one consists on providing to the expert some tools in the objective to explore and visualize rules during the evaluation step. However, the number of extracted rules to validate remains high. Thus, the manually mining rules task is very hard. To solve this problem, we propose, in this paper, a semi-automatic method to assist the expert during the association rule's validation. Our method uses rule-based classification as follow: (i) We transform association rules into classification rules (classifiers), (ii) We use the generated classifiers for data classification. (iii) We visualize association rules with their quality classification to give an idea to the expert and to assist him during validation process.

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