Preliminary Evaluation of Discovered-Rule-Filtering Methods

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Data mining systems semi-automatically discover knowledge by examining large volumes of data, but the knowledge so discovered is not always novel to users. We introduce a discovered-rule-filtering approach that uses information retrival results from the Internet to assess rules discovered by data mining and find those that are novel to the user. To implement this approach, we care 2 methods: the micro view method and the macro view method. In the micro view method, we extract keywords from a discovered rule and rank referring to the number of hits returned when the keywords are submitted to an appropriate database. In the macro view method, we first retrieve documents by submitting every pair extracted keywords and then form keyword clusters according to the results. We evaluated the methods by sending out a questionnaire to medical students and using the MEDLINE database as our Internet source. The evaluation indicates that the macro view method is promising.