URN etd-0407109-183706-417
Author SHUN-PO YANG
Author's Email Address No Public.
Statistics This thesis had been viewed 38 times. Download 35 times.
Department
Year 2006
Semester 1
Degree Master
Type of Document Master's Thesis
Language zh-TW.Big5 Chinese
Title A Gradational Reduction and Filtering Algorithm for Data Mining and Applications
Date of Defense 0000-00-00
Page Count 133

Keyword
Fuzzy Theory
Asynchronous
Data Mining
Association Rule
Calendar Pattern

Abstract
Due to transactions, documents and data are transformed into electronic types. The large number of data has been accumulated. Today, the science and technology make a great progress. Therefore, data mining technology becomes more important than before in recent years. It is generally applied in commerce and the decisions making. In data mining territory, mining association rules plays a quite important position.
We propose two new algorithms－GOT (Generate candidate using Order Table)and COT(Combine itemsets using Order Table) for mining association rules. GOT basically use the Order table to generate the candidates. It also utilizes the concept of gradational scanning and the filtration mechanisms to reduce the number of candidates. GOT uses filtration mechanisms to reduce a great number of candidates which are very possible to be frequent itemsets and improves the performance of the GOT. The COT algorithm will get the maximal frequent itemset length first, and generate all candidate using Order Table which saving L2. finally, we scan DB once to get all frequent itemsets. However, the GOT algorithm and COT algorithm is the same as general association mining algorithms which will often generate rules thate don’t real match people behaviors. the reason of why the rules don’t match people behavior is we would not only buy something on the specific day. We propose new algorithms－GOT_FC and COT_FC to mining fuzzy periodical association rules for solving the traditional association mining problem. These algorithms use the concept of fuzzy calendar pattern which is proposed by Lee, S.J. and also utilizes the advantages of GOT and COT algorithm, so we can get the Asynchronous Periodical Association Rules.
Advisory Committee Jen-peng Huang - advisor

Files etd-0407109-183706-417-002.pdf
etd-0407109-183706-417-001.pdf

indicate access worldwide
Date of Submission 2007-08-16