ABSTRACT

Data mining refers to extracting or "mining" knowledge from large amount of data. One kind of data that can be mined by data mining is spatial database. General data mining methods alone are not sufficient for spatial data mining. Spatial data mining is the process of discovering interesting and potential pattern , therefore it can gather information based on pattern from spatial dataset. Spatial data mining have many feature distinguishing such as data type complexities, spatial relationship, and spatian autocorrelation.

Spatial data mining needs neighbour object to find relationship with other object which influence on the object itself. After neighbour object identified, association rule can be found.

Buffering is needed to search neighbour object, this techniques can give return value of which object in certain area are found. Neighbour objects are used as data input while generating association rule. Finally association rule can be mined using Apriori method.

This project is implemented using Visual Basic 6.0, MapInfo 7.5 SCP, MapBasic 6.5, and Microsoft Access 2003.

The parameters of an object can be neighbour of other object are define by distance of radius or based on numbers of neighbour object. Greater neighbour object can generate much more frequent item so association rule which generated are greater.

Key word: neighbour object, spatial association rule, spatial data mining.