Abstract

Classification and association rule mining are the two important tasks addressed in the data mining literature. Associative classification method applies association rule mining technique in classification and achieves higher classification accuracy. Associative classification method typically yields a large number of rules, from which a set of high quality rules are chosen to
construct an efficient classifier. Hence generating a small subset of high-quality rules without jeopardizing the classification accuracy is of prime importance but indeed a challenging task. This paper proposes an efficient information gain based associative classification method using genetic network programming, which generates sufficient number of rules to construct the accurate classifier. Experimental results show that, the proposed method outperforms the existing genetic network based associative classification method and traditional decision tree classification algorithm.

Reference

- Yin, X and Han, J (2003), “CPAR: Classification Based on Predictive Association Rules,” in the proceedings of Third SIAM International Conference on Data Mining (SDM’03).

Index Terms

Computer Science  Data Mining

Key words

Evolutionary computation  data mining  Genetic network programming

Associative Classification