Abstract

The probabilistic decision tree to an actual diagnosis database is in progress, where the performance of the probabilistic decision tree is tested in view of the size of the databases and the difficulties is that it implies for processing them. Here proposed an algorithm Advance Probabilistic Binary Decision Tree (APBDT) using SVM for solving large class problem and it performs better when increase the size of the database. APBDT-SVM combines Binary Decision Tree (BDT) and Probabilistic SVM is an effective way for solving multiclass problem. Probabilistic SVM uses standard SVM’s output and sigmoid function to map the SVM output into probabilities. Using APBDT-SVM classification accuracy can be improved and training-testing time can be reduced.

References

- V. N. Vapnik; the nature of statistical learning theory; Springer, Newyork, 1995.
- C. W. Hsu, C. J. Lin; “A comparison methods for multiclass support vector
Index Terms

Computer Science

Algorithms
Keywords

SVM  Probabilistic SVM  Binary decision tree  separability measures