Abstract

Classification is a supervised learning approach, which maps a data item into predefined classes. There are various classification algorithms proposed in the literature. In this paper authors have used four classification algorithms such as J48, Random Forest (RF), Reduce Error Pruning (REP) and Logistic Model Tree (LMT) to classify the "WEATHER NOMINAL" open source Data Set. Waikato Environment for Knowledge Analysis (WEKA) has been used in this paper for the experimental result and they found that Random Forest algorithm classify the given data set better than the other algorithms for this specific data set. In this paper, the performance of classifier algorithms is evaluated for 5 fold cross validation test.

References

- L. Breiman, "Random Forests. Machine Learning", vol. 45(1), pp. 5-32,
- J. Han and M. Kamber, &quot;Data Mining: Concept and Techniques&quot;, Morgan Kaufmann Publishers, 2004.

**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Decision Tree  J48  Random Forest  REP  LMT  Cross-Validation  Supervised Learning and Performance Measure