Abstract

Cancer is one of the dreadful diseases, which causes considerable death rate in humans. Cancer is featured by an irregular, unmanageable growth that may demolish and attack neighboring healthy body tissues or somewhere else in the body. There are dissimilar techniques lives for the naming of cancer but none of those techniques afford considerable
accuracy of detection. Therefore a new method is highly essential for the cancer classification with improved accuracy. Gene expression profiling by microarray method has been emerged as an efficient technique for classification and diagnostic prediction of cancer nodules. In recent times, DNA microarray technique has gained more attraction in both scientific and in industrial fields. The DNA microarrays are utilized in this paper for the purpose of identifying the presence of cancer. Statistical ranking has also been used for effective cancer classification. The most widely used ranking schemes are ANOVA, T-score and Enrichment Score. But, these existing techniques suffer from the drawbacks of less accuracy, complexity etc. This paper uses liver cancer data set for experimentation of the proposed technique. The classifier used here is SVM and FNN. The experimental results shows that the proposed technique has the ability to classify the cancer cells significantly when compared to the conventional methods of cancer classification.

Reference

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Human Liver Cancer Classification using Microarray Gene Expression Data

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**Index Terms**

Computer Science  
Bioinformatics

**Key words**

Microarray Dataset  
Enrichment Score  
Correlation Based Ranking  
MAPSTD  
SVM
FNN