Abstract

Microarray technology can be used for learning number of genes expressions at one time. In recent years, DNA microarray method has a large influence in deciding the informative genes which originates cancer. The important step is the extraction of relevant genes in analyzing microarray cancer data. In this paper, microarray classification is done in two phases. In the first phase, a hybrid approach of principle component analysis is and genetic algorithm is applied on leukemia microarray dataset for extracting relevant features. Feed forward back propagation neural network is used and support vector machine for the classification purpose in the second phase and finally their results are compared.

References

B-cell and T-cell Leukemia Classification using Genetic Algorithm, PCA, SVM and ANN


Index Terms

Computer Science  Artificial Intelligence

Keywords

Feature extraction, micro array gene expression, principle component analysis, genetic algorithms, feed forward back propagation neural network, support vector machine.