Pruned Fuzzy Hypersphere Neural Network (PFHSNN) for Lung Cancer Classification

Abstract

In this paper Pruned Fuzzy Hypersphere Neural Network (PFHSNN) is proposed which is an extension of Fuzzy Hypersphere Neural Network (FHSNN). A pruning procedure is incorporated into FHSNN after its leaning phase to reduce the network size. The experimental results for JSRT database show that PFHSNN is considerably superior in terms of training and recall time. It yields 91.66% recognition rate.

References

neural networks.


**Index Terms**

Computer Science Fuzzy Systems

**Keywords**

Artificial Neural Network, Lung Nodule, Fuzzy Hypersphere Neural Network (FHSNN), Pattern Classification