Abstract

Abnormal growth of the cell in the brain is the brain tumor. Brain tumor is common and serious disease. The proposed method for tumor classification in magnetic resonance brain image is the human inspection. Magnetic Resonance Imaging (MRI) plays an intrinsic role in the brain tumor disease diagnostic application. Various types of tumor that leads decision complicated. So that correct classification of brain tumor is important to detect the types of tumor. In this paper, Probabilistic Neural network (PNN) is used for brain tumor classification. Decision making was performed in two steps: 1) Feature extraction using Principal Component Analysis (PCA). And 2) Classification is done by Probabilistic neural network (PNN). Brain tumor is classified into three classes: Normal, Benign and Malignant. Again malignant tumor is classified as Glioma and Meningioma. PNN is faster and provide good classification accuracy.

References


Index Terms

Computer Science

Networks

Keywords

Brain Tumor Classification  Principle Component Analysis (PCA)  Probabilistic Neural Network (PNN)

MRI.