

## ABSTRACT

In recent decade human brain tumor has become one of the most challenging issue in medical science. Brain tumor is the collection of abnormal cells that can be seen inside the brain or near the skull. Brain tumor can be analyzed in CT scan, MRI, Angiography, Biopsy. Treatment of brain tumor is based on type of tumor, size of the tumor, location of the tumor and general health. The segmentation detection and extraction of infected tumor area from a MRI image are a primary concern but a time taking task performed by radiologists or clinical experts. This experimental work in the diagnosis of brain tumors using Magnetic Resonance Imaging (MRI) involves detecting the tumor, classifying the tumor in terms of grade, type, and identification of tumor location.

we are using GLCM for feature extraction grey level co-occurrence matrices (GLCM) introduced by Haralick attempt to describe texture by statistically sampling how certain gray level occur in relation to other gray level co-occurrence feature contrast, energy, correlation and homogeneity are considered as significant feature.

PNN is applied and parameter like Peak Signal to noise ratio(PSNR), Standard Deviation(STD), Mean square Error (MSE) and Inverse Difference Moment Normalised (IDMN) were determined. The objective of this project is to deliver a comprehensive literature on brain tumor detection through magnetic resonance imaging to help the researchers.