**ABSTRACT**

A human brain is centre of the nervous system; it is a collection of white mass of cells. A tumor of brain is collection of uncontrolled increasing of these cells abnormally found in different part of the brain namely Glial cells, neurons, lymphatic tissues, blood vessels, pituitary glands and other part of brain which lead to the cancer. Cancer of Brain is of two types. Benign which is not cancerous no danger at all, other one is Malignant which is cancerous tumor; it grows abnormally by multiplying the cells rapidly, which leads to the death of the person if not detected. Manually it is not so easily possible to detect and identify the tumor. Programming division method by MRI is way to detect and identify the tumor. In order to give precise output a strong segmentation method is needed.

Brain tumor identification is really challenging task in early stages of life. But now it became advanced with various machine learning and deep learning algorithms. Now a day’s issue of brain tumor automatic identification is of great interest. In Order to detect the brain tumor of a patient we consider the data of patients like MRI images of a patient’s brain. Here our problem is to identify whether tumor is present in patient’s brain or not. It is very important to detect the tumors at starting level for a healthy life of a patient. There are many literatures on detecting these kinds of brain tumors and improving the detection accuracies.

The segmentation, detection, and extraction of infected tumor area from magnetic resonance (MR) images are a primary concern but a tedious and time taking task performed by radiologists or clinical experts, and their accuracy depends on their experience only. So, the use of computer aided technology becomes very necessary to overcome these limitations.

We estimate the brain tumor severity using Convolutional Neural Network algorithm which gives us accurate results.

**Keywords:**

Tumor Detection, Convolutional Neural Network, Gaussian Filters, MRI Images, Brain.

**Introduction:**