In the paper we present an approach to introduce automation of brain CT image analysis. Because CT Scan method that used especially for the diagnosis of stroke and can detect bleeding in stroke due to a blocked artery, of course Images from a CT scan resolution is low relatively. Therefore, the grayscale images resolution is scant and makes detection difficult. We can use bioinformatics and artificial coloring techniques by image processing quality added and is more sensitive in outstanding. We have to identify and distinguish the areas of clustering artificial colors with Hopfield clustering that introduced as Pixel clustering based segmentation method and improve it by Hopfield neural network (HNN) based on spectral properties to show different region by artificial coloring and clustering. We want to improve the technique to use this rule by determining best cluster in neural network.

**Index Terms**

Computer Science  
Image Processing

**Keywords**
Hopfield, Clustering, CT scan, Brain