VISVESVARAYA TECHNOLOGICAL UNIVERSITY
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A PROJECT REPORT

On

CLASSIFICATION OF MAGNETIC RESONANCE IMAGES

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ABSTRACT

The aim of the project is to classify magnetic resonance images as benign and malignant tumors. We used Support Vector Machine(SVM)techniques for classification of Magnetic ResonanceImages. Segmentation of the MRI is done with the aid of K-means algorithm. Feature extraction of the images is done based on texture and shape. The dataset used for classification contains magnetic resonance images and are classified into two classes.

The goal of this project is to automatically find the parameters and detect the edges of the tumor byusing MATLAB Tool Box. This project is built by using K-means clustering for segmentation and Support Vector Machine for classification. The GUI is built to help the users to interact with the applications. The experimental results show that, the method successfully detects and distinguish the tumor into benign or malignant.