



VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

**DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING**

A Project Report On

**“BRAIN TUMOUR SEGMENTATION USING
LABVIEW-SIMULATION”**

(SPONSERED BY KSCST)

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ABSTRACT

The most important aim of medical image analysis in general, and brain magnetic resonance image (MRI) analysis in particular, is to extract clinical information that would improve diagnosis and treatment of disease. Brain tumours are one of the most common brain disease, so detection and segmentation of brain tumours in MRI are important in medical diagnosis. The aim is to provide information associated to anatomical structures as well as potential abnormal tissues necessary to treatment planning and patient follow-up. The segmentation of brain tumours can also be helpful for general modeling of pathological brains and the construction of pathological brain atlases. The brain tumour segmentation is purely based on the shape detection and intensity detection method.

In this work, an image analysis approach for automated detection, segmentation, find their position with image processing. The results of this analysis are useable in designing a neural network for more accurate analysis. Using the **LabVIEW (Laboratory Virtual Instrumentation Engineering Workbench)** Software gave practical usages to this image processing system because it can communicate with other equipments used in this system and controls them.