

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama” Belagavi – 590018



Mini Project Report on

“BRAIN TUMOR DETECTION USING MATLAB”

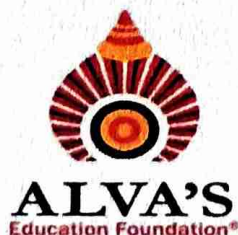
Submitted in partial fulfillment of the requirements for the award of degree

**BACHELOR OF ENGINEERING IN
ELECTRONICS & COMMUNICATION ENGINEERING**

Submitted By

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

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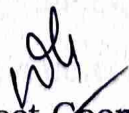
CERTIFICATE

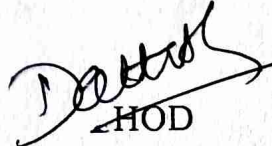
This is to certify that the following students,

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has submitted Project synopsis on **“BRAIN TUMOR DETECTION USING MATLAB ”** for VI Semester B.E. in Electronics & Communication Engineering during the academic year 20 23-24. The mini project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.


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ABSTRACT

Tumor detection and removal is one medical issue that still remains challenging in the field of biomedicine. Early imaging techniques such as pneumoencephalography and cerebral angiography had the drawback of being invasive and hence the CT and MRI imaging techniques help the surgeons in providing a better vision. In this paper, tumor image processing involves three stages namely pre-processing, segmentation and morphological operation. After the acquisition of the source image, it is pre-processed by converting the original image to gray scale in addition high pass filter for noise removal and median filter for quality enhancement is provided which is followed by enhancement stage resulting with histogram equivalent image. Finally segmentation is done by means of watershed algorithm. The above proposed methodology is helpful in generating the reports automatically in less span of time and advancement has resulted in extracting many inferior parameters of the tumor