BRAIN TUMOR DETECTION USING DISCRETE WAVELET TRANSFORM AND SUPPORT VECTOR MACHINE

A Project report submitted in partial fulfillment of the requirements for the award of degree of

BACHELOR OF TECHNOLOGY IN

"ELECTRONICS AND COMMUNICATION ENGINEERING"

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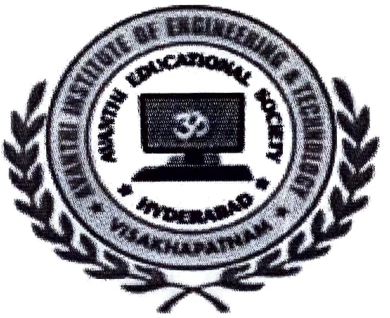

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY
(NAAC Accredited, Accredited by NBA, Approved by A.I.C.T.E,
Permanently Affiliated to J.N.T.U. KAKINADA)
TAMARAM (P.O), MAKAVARAPALEM (M.O), NARSIPATNAM (R.D)
VISAKHAPATNAM DISTRICT-531113

2018-2022

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BONAFIDE CERTIFICATE

This is to certify that the project entitled "**BRAIN TUMOR DETECTION USING DISCRETE WAVELET TRANSFORM AND SUPPORT VECTOR MACHINE**" in partial fulfillment for the of degree of Bachelor of Technology in **ELECTRONICS AND COMMUNICATION ENGINEERING** at Makavarapalem, VISAKHAPATNAM is a Bonafide work carried out by **K.INDIRA(18811A0416), M.MAMATHA LAKSHMI(19815A0416), P AJAY (19815A0419), CH.DIVAKAR(18811A0407) under the guiance and supervision** during 2018-2022.

PROJECT GUIDE
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ABSTRACT

Brain tumor is a life-threatening disease, and its early detection is very important to save life. Detection of tumor in a human brain is a challenging problem, due to the arrangement of tumor cells in the brain. The tumor region can be detected by segmentation of the brain's Magnetic Resonance Image (MRI). This project presents an analytical method that improves the detection of the samples in the Support Vector Machine. The support vector machine is used to train and classify the stage of brain tumor that would be benign or malignant and classifies the tumor for 80%. The automatic support intelligent system is proposed to detect the brain tumor through the combination of discrete wavelet transform and support vector machine.