VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANASANGAMA, BELAGAVI-590018

Mini Project Report on

"Brain Tumor Detection"

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

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

Submitted by:

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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CERTIFICATE

Certified that Mini Project Report entitled **"Brain Tumor Detection"** carried out by **Vishnu Kumar D S (1VJ21CS055)** is a bonafide student of **Vijaya Vittala Institute of Technology**, in partial fulfillment for the award of degree of **Bachelors of Engineering** in **Computer Science and Engineering** of **Visvesvaraya Technological University**, Belagavi during the year 2023-24. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the department library. The project Report has been approved as it satisfies the academic requirements in respect of technical prescribed for the side degree.

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Signature of Internal guide	**Signature of HOD**	**Signature of Principal**
Prof. Kusuma K **Dept. Of CSE**	**Dr. Loganathan R** **Head of Department** **Dept. Of CSE**	**Dr. Sanjeev C Lingareddy** **Principal** **VVIT**

Name of External Examiners	**Signature with Date**
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ABSTRACT

Now a day's tumor is second leading cause of cancer. Due to cancer large no of patients are in danger. The medical field needs fast, automated, efficient and reliable technique to detect tumor like brain tumor. Detection plays very important role in treatment. If proper detection of tumor is possible then doctors keep a patient out of danger. Various image processing techniques are used in this application. Using this application doctors provide proper treatment and save a number of tumor patients.

A tumor is nothing but excess cells growing in an uncontrolled manner. Brain tumor cells grow in a way that they eventually take up all the nutrients meant for the healthy cells and tissues, which results in brain failure. Currently, doctors locate the position and the area of brain tumor by looking at the MR Images of the brain of the patient manually. This results in inaccurate detection of the tumor and is considered very time consuming.

A tumor is a mass of tissue it grows out of control. We can use a Deep Learning architectures CNN (Convolution Neural Network) generally known as NN (Neural Network) and VGG 16(visual geometry group) Transfer learning for detect the brain tumor. The performance of model is predicting image tumor is present or not in image. If the tumor is present it return yes otherwise return no.

DECLARATION

I, **VISHNU KUMAR D S** bearing student of 6th semester B. Tech (Computer Science Engineering) at **Vijaya Vittala Institute of Technology**, hereby declare that the Mini Project report entitled **"Brain Tumor Detection"** embodies the work done by me and submitted in partial fulfillment of the requirements for the award of degree of **B. Eng** in **Computer Science Engineering** of the **Visvesvaraya Technological University, Belagavi** during the academic year of **2023-24.**

Date: **VISHNU KUMAR D S**
Place: Bengaluru **1VJ21CS055**

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