A Project Report On

Brain Tumor Detection

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Under the guidance of Prof. Uday Kumar Mandal

A Project Report

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Department of Computer Science and Engineering, Academy of Technology

Affiliated to



Maulana Abul Kalam Azad University of Technology, West Bengal

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This is to certify that the project entitled: Brain Tumor Detection submitted to MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY in the partial fulfillment of the requirement for the award of the B.TECH degree in COMPUTER SCIENCE AND ENGINEERING of

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under my guidance. The matter embodied in this project is genuine work done by the students and has not been submitted whether to this University or to any other University/Institute for the fulfillment of the requirement of any course of study.

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We hereby state that the Project Report entitled Brain Tumor Detection has been prepared by us to fulfill the requirements of Project-II (PROJ- CS781) during the period August 2022 to November 2022.

Signature of the students

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Abstract

A tumor is an uncontrolled growth of tissues in any part of the body. Tumors are of different types and characteristics and have different treatments. Brain tumors are the most known and aggressive disorder, leading to a poor lifetime at the highest level. Treatment is one of the main benefits of development that saves a life. Magnetic resonance imaging (MRI) is the imaging technique used to diagnose brain tumor disease. Early diagnosis of brain tumors is an essential task in medical work to find out whether the tumor can potentially become cancerous. Deep learning is a handy and efficient method for image classification. Deep learning has been widely applied in various fields including medical imaging, because its application does not require the reliability of an expert in the related field, but requires the amount of data and diverse data to produce good classification results. Convolutional Neural Network (CNN) is the deep learning technique to perform image classification. CNN is able to extract features without removing the spatial information from the input data. CNN is a machine learning method to process two-dimensional data.