



SMART ANTENNA FOR BRAIN TUMOUR APPLICATIONS

A PROJECT REPORT

Submitted by

BALAJI R	211715106018
BALAJI V	211715106019
BUVANESH G	211715106022

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ANNA UNIVERSITY CHENNAI: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this Report “**SMART ANTENNA FOR BRAIN TUMOR APPLICATION**” is the bonafidework of **Balaji R (211715106018)**, **Balaji V (211715106019)** and **Buvanesh G (211715106022)** who carried out the work under my supervision

SIGNATURE

**Dr. R. RAJESWARI, M.E., Ph.D.,
HEAD OF THE DEPARTMENT**

Professor
Department of Electronics and
Communication Engineering
Rajalakshmi Institute of Technology
Kuthambakkam Post
Chennai-600124

SIGNATURE

**S.Kalaivani, M.E.,
SUPERVISOR**

Professor
Department of Electronics and
Communication Engineering
Rajalakshmi Institute of Technology
Kuthambakkam Post
Chennai-600124

CERTIFICATE OF EVALUTION

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NAME OF THE STUDENT:

BALAJI.R	211715106018
BALAJI.V	211715106019
BUVANESH.G	211715106022

The report on the project work submitted by the above students in partial fulfilment for the award of the degree of Bachelor of Engineering in ELECTRONICS AND COMMUNICATION ENGINEERING of Anna University, reported the work done by the above students and then evaluated.

The University Viva-voice was held on_____

INTERNAL EXAMINER

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ABSTRACT

In this method of detection of Brain Tumour using Smart Antenna, a 3D model of the human brain is taken as the input so that the exact shape of the tumour can be identified. This detection in Tumour is very important in many diagnostic and therapeutic applications. Because of high quantity data in MRI images and blurred boundaries, tumour identification, segmentation and classification are very hard. This model proposes a brain tumour detection method to increase the accuracy and decrease the diagnosis time as well as reducing the side effects of radiation. Accurate detection of brain tumour is done by Specific Absorption Rate of the normal cells and tumour cells plays a vital role in the diagnosis of tumour. The diagnosis method consists of three stages, Antenna testing and error calculation, Sam Phantom without tumour, Sam Phantom with tumour.

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LIST OF ABBREVIATIONS

ABBREVIATION	EXPANSION
1D	One Dimensions
2D	Two Dimensions
RMS	Root Mean Square
dB	Decibel
dBi	Decibel Isotropic
ISM	Industrial Scientific Medical
MHz	Mega Hertz
GHz	Giga Hertz
CST	Computer Stimulation Technology
SAR	Specific Absorption Rate
MRI	Magnetic Resonance Imaging
W	Weber
Kg	Kilogram
XML	Extensive Mark up Language
XPS	XML Paper Specification
PDF	Portable Document Format