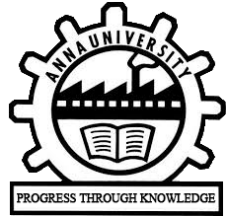
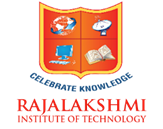
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**SMART ANTENNA FOR BRAIN TUMOUR APPLICATIONS**

**A PROJECT REPORT**

***Submitted by***

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***In partial fulfilment for the award of the degree of***

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**IN**

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**RAJALAKSHMI INSTITUTE OF TECHNOLOGY**

**CHENNAI**

**ANNA UNIVERSITY: CHENNAI 600 025**

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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

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**Subject : EC6811 PROJECT WORK**

**TITLE OF THE PROJECT:**

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**The University Viva-voice was held on\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**INTERNAL EXAMINER EXTERNAL 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 ABBREVIATONS**

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