



# SATHYABAMA UNIVERSITY

(Established under Section 3 of the UGC Act, 1956)

Accredited with B++ Grade by NAAC

(A CHRISTIAN MINORITY INSTITUTION)

Jeppiaar Nagar, Rajiv Gandhi Road, Chennai - 600 119, Tamilnadu, India



Office Number: 044-2450 3308 Fax Number: 044 2450 0646

E-mail: [deanresearch@sathyabamauniversity.ac.in](mailto:deanresearch@sathyabamauniversity.ac.in) Website: [www.sathyabamauniversity.ac.in](http://www.sathyabamauniversity.ac.in)

Date: 02<sup>nd</sup> December, 2016

Ref: Sathyabama/VC/Ph.D/January 2017

To

Dr. M. Vadivel,

Assistant Professor,  
Dept. of ETCE,  
Sathyabama University,  
Chennai - 600 119.

Sir / Madam,

Sub: Ph.D Programme - Provisional Registration - Orders - Issued.

I am directed to inform you that Ms. R. Sakshi Prabha is permitted to register provisionally for Ph.D Programme on Part-Time (Internal) basis under the Faculty of Electronics Engineering in this University under your guidance with effect from January 2017.

You are requested to convene a Doctoral Committee meeting in the University campus with the following two experts, strictly on or before 17<sup>th</sup> December, 2016 and submit the Minutes of the Doctoral Committee meeting, prescribing the course work to this office, which will facilitate the candidate to undergo course work at the earliest.

1. Dr. R. Amutha, Professor, Dept. of ECE, SSN College of Engineering, Kalavakkam - 603 110.
2. Dr. D. Lakshmi, Professor & Head, Dept. of ECE, Sakthi Mariamman Engg. College, Thandotam - 602 105.

The research scholar may also be directed to submit the Registration / Enrolment form (form 4 can be downloaded from the University website [www.sathyabamauniv.ac.in/phd](http://www.sathyabamauniv.ac.in/phd)) and the first semester fee of Rs. 10,000/- (Rupees Ten Thousand only) as a demand draft drawn in favour of Sathyabama University payable at Chennai on the day of Doctoral Committee meeting, failing which, it will be construed that the research scholar has not completed the Ph.D admission formalities in full and the provisional registration granted to him / her in this letter is likely to be cancelled.

The Registration Number of the research scholar is 2017192101. In all future correspondence please quote the Registration Number for reference. The Half yearly progress report in the prescribed format commencing from the date of provisional registration, should be obtained by the research scholar duly signed by you at the end of each semester and should be submitted on the day of review meeting conducted in July / January by the candidate.

Yours

Dr. B. Sheela Rani M.S (By Research), Ph.D  
Vice Chancellor  
Sathyabama University  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai - 600 119.

*B. Sheela Rani*  
Dr. B. Sheela Rani 2/12/16  
Vice Chancellor

Copy to

1. Dr. R. Amutha, Professor, Dept. of ECE, SSN College of Engineering, Kalavakkam - 603 110.
2. Dr. D. Lakshmi, Professor & Head, Dept. of ECE, Sakthi Mariamman Engg. College, Thandotam - 602 105.
3. Head, Dept. of ECE, Sathyabama University, Jeppiaar Nagar, Chennai - 119.
4. Ms. R. Sakshi Prabha, Ph.D. Scholar
5. Candidate file.

### \* KINDLY ADHERE TO THE FOLLOWING

The date of conducting the DC Meeting should be informed through an official letter duly signed in by the supervisor which should positively reach the Vice Chancellor's office, at least one week before the meeting either by Fax (044-24500646) or by post, failing which the meeting will be cancelled.

The meetings are to be held mostly on week days and under special circumstances during Week Ends (Saturdays only)  
Timings: 9:00 AM - 4:00 PM.

It is a first DC Meeting and hence requires completion in a short time period as mentioned in the order issued. Then they have to register for course work which commences from 8<sup>th</sup> January, 2017 onwards. Course work Registration form 2 (filled in all aspects) to be submitted on or before 4<sup>th</sup> January, 2017.

Under exceptional circumstances with prior intimation, conduct of First DC meeting will be permitted till 20<sup>th</sup> June, 2016. If still not conducted then candidates provisional registration will be cancelled and they have to do re-registration.

Encl: Circular

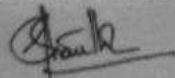
*A. K. S. Prasad*  
Principal  
Vidya Jyoti Institute of Technology  
Himayyancher (Vill), C. B. Puzh  
Hyderabad-75.

# Performance analysis of brain tumor segmentation for MRI images

## Abstract

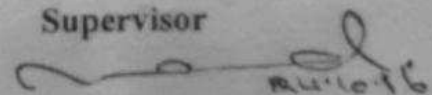
Image segmentation is the process of dividing or splitting a digital image into multiple regions with the identical properties like texture, gray level, color and contrast. Image segmentation plays a vital role in medical image processing. It is one of the most challenging problem in the research field of MRI image analysis. Even though manual segmentation is quite easy, it has many problems like time consumption and error sensitivity. In fully automated segmentation method, the execution speed is very fast with less error. But still the segmentation is a challenging one because of low contrast and undefined boundaries, reliability, sensitivity to noise, inhomogeneity and accuracy problem. Even though several techniques have been implemented for automated tumor segmentation, still there is no accurate solution for the image segmentation problems. Hence the main objective of this research work is to propose a computationally fully automated tumor segmentation method to overcome all these problems to attain a better accuracy rate with reduced computational speed and to achieve a high performance rate. The accuracy level can be also improved by making an acquisition of thinner MRI slices. Also different techniques are used to segment the entire tumor volume completely with accuracy to improve the tumor grading. The proposed method can be simulated and the performance can be systematically evaluated using sequence of MRI images and thereby finally to make a comparative analysis by directly and quantitatively with wide variety of various other methods, so that it will be helpful for the clinical applications.

### Research Scholar

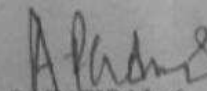


R. Sakthi Prabha,  
AP/ECE Dept.,  
Sathyabama University,  
Chennai- 600 119.

### Supervisor



Dr. M. Vadivel,  
AP/ETCE Dept.,  
Sathyabama University,  
Chennai- 600 119.

  
PRINCIPAL

Vidya Jyothi Institute of Technology  
Nimmayalnagar (Vijaya C. S. Road)  
Mysore-75.



# SATHYABAMA UNIVERSITY

(Established Under Section 3 of the UGC Act, 1956)

Jeppiaar Nagar, Rajiv Gandhi Road, Chennai - 600 119.



Date: 02-12-2016

## CIRCULAR

- Before the doctoral committee meeting, Research scholars are requested to visit and discuss with the concerned Head of the departments of Sathyabama University, regarding the subjects(which are related to your field of research) and syllabus which are available in PG Courses (weekend programmes) and submit it to the guide/supervisor. This will be helpful to the supervisor and Doctoral Committee members to decide the course work during the First Doctoral Committee Meeting.
- Doctoral Committee is empowered to allot the subjects to the research scholars both from Sathyabama University and from any other recognized Universities, National institutes, autonomous colleges and various private universities in India.
- All the research scholars are requested to submit their Post Graduate level subjects and syllabus to Doctoral Committee members which will be helpful to them for not repeating the same as a course work subject.
- "Research Methodology Tools and Techniques" is a compulsory regular course work to be taken by every research scholar.
- Only one subject may be prescribed as directed study out of 2 subjects (for M. Phil degree holders) / out of 4 subjects (for all Master degree holders). The syllabus for the direct study subject should be framed and forwarded to Vice Chancellor/Research Incharge for approval by the supervisor. Direct study subject should be taken up as a last subject by the research scholar after getting prior approval from Vice Chancellor/Research Incharge. All the remaining subjects should be allotted only from the Engineering/Technology discipline in PG level.
- The Research scholars are requested to submit form 2(Application for Course work permission for Research scholars) to Vice Chancellor/Research Incharge to attend the course work classes at Sathyabama University. **Last date for submitting the form 2(Application for Course work permission for Research Scholars) will be 04<sup>th</sup> January, 2017.** At the end of the semester based on the attendance certificate (minimum 80%) from the concerned Head of the Departments to Vice Chancellor/Research Incharge the research scholars will be permitted to attend the examination. **A minimum of 80% attendance is compulsory to appear for the examination.** In the case of Directed Study, the attendance certificate should be obtained from the Supervisor.
- A Ph.D scholar will have to necessary complete all his/her course work subjects (including Directed Study) within three years from the date of registration of Ph.D, failing which he/she will have to apply for re-registration of Ph.D
- A candidate cannot appear for a course work subject for a third time if he/she fails to pass in more than two successive attempts.
- Research scholars can log on to <http://sathyabamauniversity.ac.in/phd/login.php> by entering their 10 digit register number and verify their details in website. Any discrepancies can be mailed to [deanresearch@sathyabamauniversity.ac.in](mailto:deanresearch@sathyabamauniversity.ac.in).
- Visit our website [www.sathyabamauniversity.ac.in/phd](http://www.sathyabamauniversity.ac.in/phd) for regular updates and information.
- Note: DC Meetings are not to be conducted from 21<sup>st</sup> December 2016 - 03<sup>rd</sup> January 2017.

*B. Sheela Rani*  
Dr. B. Sheela Rani  
Vice Chancellor

Dr. B. Sheela Rani M.S (By Research), Ph.D  
Vice Chancellor  
Sathyabama University  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai- 600 119

*A. Lakshmi*  
Principal  
Vidya Jyothi Institute of Technology  
Himayyanchavari,  
Mylapore-73.