

SAPTHAGIRICOLLEGE OF ENGINEERING


14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore-560057

Department of Computer Science and Engineering

Certificate

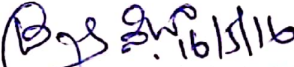


Certified that the project work entitled "Identification of Artificially Ripened fruits using Support Vector Machine" carried out by Archana S (1SG12CS011), Kavya R(1SG12CS043), Nalinakshi K (1SG12CS059), bonafide students of this institute, in partial fulfillment for the award of **Bachelor of Engineering in Computer Science and Engineering** of Visvesvaraya Technological University, Belgaum during the academic year **2015-16**. 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 Project Work(10CS85) prescribed for the said degree.


Signature of the Guide

Mrs. Kamalakshi Naganna

Associate Professor


Signature of the HOD

Dr. Prashanth C.M

Professor & Head


Signature of the Principal

Dr. Aswatha Kumar M

Principal
Dr. Aswatha Kumar. M
Principal
Sapthagiri College of Engineering
No. 14/5, Chikkasandra,
Hesaraghatta Main Road,
Bangalore-560 057

Signature with date

Name of the Examiners

1.....

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2.....

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Karnataka State Council for Science and Technology
Indian Institute of Science Campus, Bangalore - 560 012

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Dr. S. G. Sreekanteswara Swamy
Executive Secretary

Ref: 7.1.03/SPP/ 1148

23rd March 2016

The Principal,
Sapthagiri College of Engineering
14/5, Chickasandra,
Hesaraghatta Main Road
Bengaluru - 560 057

Dear Sir,

Sub : Sanction of Student Project - 39th Series: Year 2015-2016
Your Project Proposal Reference No. : 39S_BE_1916

Ref : Your Project Proposal entitled: **IDENTIFICATION OF ARTIFICIALLY RIPENED FRUITS
USING PROBABILISTIC NEURAL NETWORK**

I am happy to inform that your project proposal referred above, has been approved by the Secretary, KSCST for "Student Project Programme - 39th Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Ms.Nalinakshi K and others	Budget	Amount (Rs)
		Materials/Consumables	2,000.00
Guide/s	Prof.Kamalakshi Naganna	Labor	-
		Travel	-
Department	Computer Science And Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	3,000.00
Rupees	THREE	ZERO	
	THOUSAND	HUNDRED	

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report (including coverpages, abstract and preliminary pages) and in a CD (.pdf format) should be submitted to KSCST.
- Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.
- Please quote your **project proposal reference number printed above** in all your future correspondences.
- Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords

5) Introduction / background

(with specific reference to the project, work done earlier, etc) - about 20 lines

6) Objectives (about 10 lines)

7) Methodology (about 20 lines)

(materials, methods, details of work carried out, including drawings, diagrams etc)

8) Results and Conclusions

(about 20 lines with specific reference to work carried out)

9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

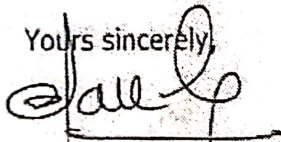
The sanctioned amount will be sent separately by our Accounts Department.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,



(SGS Swamy)

Copy to:

- 1) The Head of the Department of
Computer Science And Engineering
Sapthagiri College Of Engineering
14/5, Chickasandra,
Hesaraghatta Main Road
Bengaluru - 560 057

- 2) *Prof. Kamalakshi Naganna*
Department of Computer Science And Engineering
Sapthagiri College Of Engineering
14/5, Chickasandra,
Hesaraghatta Main Road
Bengaluru - 560 057

- 3) The Finance Officer, KSCST, Bangalore

ABSTRACT

Ripening is a natural process by which fruits attain the desirable flavor, quality, color, palatable nature and other textural properties. The need of artificial fruit ripening is often encountered when the fruit-sellers offer fruits to the customers before due season. It is easier to identify artificially-ripened fruit during off season. However, it is harder to find physical differences between artificially ripened fruits and naturally ripened fruits during the actual season of ripening. It is important to perform qualitative and quantitative analysis of the presence of ripening agents within the fruit-skin to understand the relevant health hazard caused by artificial ripening. The proposed work implements a technique to distinguish between artificially and naturally ripened fruits by considering the texture features and classifying them using Support Vector Machine.