VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JNANA SANGAMA CAMPUS, BELGAVI-590018

PROJECT REPORT

On

"PREDICTING THE RIPENING TIME OF BLACK PEPPER USING ANDROID APPLICATION"

Submitted by

MYTHRI K J	4AL15IS016
PAVAN KUMAR M R	4AL15IS020
POOJITHA	4AL15IS026
PRAJNA M	4AL15IS027

In partial fulfilment of the requirements for the degree of

BACHELOR OF ENGINEERING

In

INFORMATION SCIENCE AND ENGINEERING

Under the Guidance of

Mrs. DIVYA RAVI N

Assistant Professor

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

Moodbidri-574225, Karnataka

2018 – 2019

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY
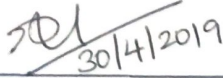## MIJAR, MOODBIDRI D.K. -574225
KARNATAKA

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

CERTIFICATE

Certified that the project work entitled "PREDICTING THE RIPENING TIME OF BLACK PEPPER USING ANDROID APPLICATION" is a bonafide work carried out by

MYTHRI K J	**4AL15IS016**
PAVAN KUMAR M R	**4AL15IS020**
POOJITHA	**4AL15IS026**
PRAJNA M	**4AL15IS027**

in partial fulfilment for the award of BACHELOR OF ENGINEERING in **INFORMATION SCIENCE AND ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM** during the year 2018–2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

30/4/2019

Mrs. DIVYA RAVI. N

Project Guide

H.O.D.
Dept. of Information & Engineering
Alva's Institute of Technology
Head of the Department
Mijar, MOODBIDRI - 574 225

Dr. PETER FERNANDES

PRINCIPAL
Principal
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K

Name of the Examiners

Signature with Date

1.

2.

ABSTRACT

India is an agricultural country and over 58% of income comes through agro-based environment. Out of all the major crops produced in India, the Black pepper production has played a very important role in economic growth of our country. To help improve the production and export of black pepper in India, this study proposes a method to detect the ripening stages of peppercorns. An android application is developed to predict the maturity and ripeness of the peppercorns. This will help the cultivators to produce peppercorns as per global market requirement.

The pepper images, representing various stages of maturity are collected from various agricultural resources. These images are trained and classified by extracting the colour features like RGB value. The training and classification are done using the average RGB and the distance formula and this helps to classify the images into three classes. The images in these classes are used as the dataset to further identify the maturity or ripen stage of the peppercorns in the input image captured by the android application.