

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

JNANA SANGAMA CAMPUS, BELGAVI-590018



**PROJECT REPORT**

**On**

**“A NEW AUTOMATED MEDICINE PRESCRIPTION  
SYSTEM FOR PLANT DISEASES”**

**Submitted by**

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**In partial fulfilment of the requirements for the degree of  
BACHELOR OF ENGINEERING**

**In**

**INFORMATION SCIENCE AND ENGINEERING**

**Under the Guidance of**

**Mr. SUDARSHANA K**

**Senior Assistant Professor**



**DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING  
ALVAS INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**Moodbidri-574225, Karnataka**

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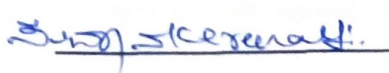


**DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING**  
**CERTIFICATE**

*Certified that the project work entitled "A NEW AUTOMATED MEDICINE PRESCRIPTION SYSTEM FOR PLANT DISEASES" is a bonafide work carried out by*

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in partial fulfilment for the award of BACHELOR OF ENGINEERING in **INFORMATION SCIENCE AND ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM** during the year 2017-2018. 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.



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## ABSTRACT

Agriculture struggles to support the rapidly growing global population in one hand, whereas plant diseases reduce the production and quality of food, fiber and biofuel crops on the other hand. Specifically, plant disease severity identification is the most important problem in the agricultural field which can avoid the excess use of pesticides and minimize the yield loss. In the existing systems, no methodology exists to identify the disease severity and to prescribe the required quantity of medicines to be sprayed. In order to solve this problem, an automated medicine prescription system is proposed in this paper, which takes the images from the uncontrolled environment, enhances and preprocesses the images received for the identification of disease. Precisely, in the proposed framework K-means and SVM algorithms are used for clustering and disease identification tasks respectively. Experimental setup and snapshots of results demonstrate the performance of the proposed system, by means of indicating the Severity of the identified disease.