

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,  
BELAGAVI**



**A PROJECT REPORT ON  
DETECTION OF PLANT LEAF DISEASE USING CNN IN  
MACHINE LEARNING  
IN  
INFORMATION SCIENCE & ENGINEERING**

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**CERTIFICATE**

This is to certify that the Project entitled **"Detection of Plant Leaf Disease using CNN in Machine Learning"** has been successfully completed by

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the bonafide students of **Department of Information Science & Engineering, Alva's Institute of Engineering and Technology** in **DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2020–2021. 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

The major problem that the farmers around the world face is losses, because of pests, disease or a nutrient deficiency. They depend upon the information that they get from the agricultural departments for the diagnosis of plant leaf disease. This process is lengthy and complicated. Here comes a system to help farmers everywhere in the world by automatically detecting plant leaf diseases accurately and within no time. The proposed system is capable of identifying the disease of majorly 5 crops which are corn, sugarcane, wheat, and grape. In this paper, the proposed system uses the MobileNet model, a type of CNN for classification of leaf disease. The database obtained from the Internet is properly segregated and the different plant species are identified and are renamed to form a proper database then obtain test-database which consists of various plant diseases that are used for checking the accuracy and confidence level of the project. Several experiments are performed on the dataset to get the accurate output. This system ensures to give more accurate results than the previous systems.