VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590018

Mini Project Report on

"LEAF DISEASE DETECTION WITH SMART SOLUTIONS"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE

This is to certify that the following students,

POOJA VENKATESH NAIK	4AL21EC059
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has submitted Project synopsis on **"LEAF DISEASE DETECTION WITH SMART SOLUTIONS"** for VI Semester B.E. in Electronics & Communication Engineering during the academic year 2023-24. The mini project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Mini Project Guide

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ABSTRACT

This project aims on developing a web app which is capable of detecting disease present on the plant leaves. The software of the model is trained using Keras and TensorFlow libraries, the images which is captured by the camera will be resized and their pixel values are normalized before being used to train a machine learning model. Training process of the model is conducted using two basic methodologies. First is by utilizing Train Test Split method and second method is CNN training. The model's validity is tested using model evaluation step where accuracy and loss is plotted. Finally, the developed streamlit web app is capable of detecting the disease present in the plant with high accuracy. The system is able to detect 28 different diseases of 11 common plants with 93% accuracy.