

# PLANT DISEASE DETECTION AND CLASSIFICATION

PROJECT REPORT

*Submitted by*

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COMPUTER SCIENCE AND ENGINEERING



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Certificate that this project report "PLANT DISEASE DETECTION AND CLASSIFICATION" bonafide work of the following students.

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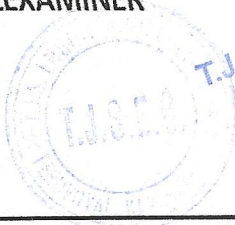
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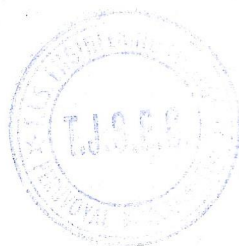
## ABSTRACT

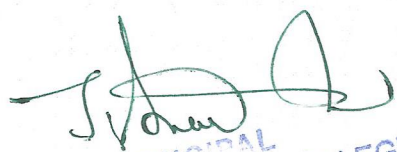
Crop diseases are a noteworthy risk to sustenance security, however their quick distinguishing proof stays troublesome in numerous parts of the world because of the non attendance of the important foundation. Emergence of accurate techniques in the field of leaf-based image classification has shown impressive results.

This paper makes use of Random Forest in identifying between healthy and diseased leaf from the data sets created. Our proposed paper includes various phases of implementation namely dataset creation, feature extraction, training the classifier and classification.

The created datasets of diseased and healthy leaves are collectively trained under Random Forest to classify the diseased and healthy images. For extracting features of an image we use Histogram of an Oriented Gradient (HOG).

Overall, using machine learning to train the large data sets available publicly gives us a clear way to detect the disease present in plants in a colossal scale.



  
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