

PROBLEM STATEMENT

The most important problem in agriculture is that the disease that affects the plants, trees and crops. The disease can be found easily in the early stage by looking at changes of colour of the leaves. So, without knowing about the correct disease they use some fertilizers and it doesn't cure the disease properly. This fertilizer recommendation system helps to find the accurate disease and helps them to cure the disease and increase in the growth of plants. Machine learning is particularly effective in detecting and recognising plant illnesses, and it can provide early disease signs identification. Plant disease specialists can examine the digital photos processed with digital image processing to identify blights on plants. computer vision and image processing applications Processing methods merely help farmers throughout all regions. plant diseases are brought on by plant physiological functions that are aberrant. as a result, the generation of distinctive symptoms is based on the distinguishing between typical physiological functions and abnormalities in the way that plants function physiologically. Typically, the pathogens that cause plant leaf diseases are put in place on the plants' stems. These are distinct Different factors can predict the signs and diseases of leaves processing methods for images. These many approaches make use of various core techniques like segmentation, feature extraction, and classification, among others. Most often, segmentation is used to distinguish between healthy and diseased tissues of leaves in order to forecast and diagnose leaf diseases. An automated technique is now available to recognise many plant diseases by examining the symptoms seen on the plant's leaves. In order to identify diseases and provide preventative measures, deep learning algorithms are applied. The farmers can take picture of diseased leaves and upload in the app. Then it will scan the leaves with the help of convolution neural network (CNN), it is an algorithm which is used for image recognizing. Deep neural networks is like a human brain that is made of neurons and it helps to detects the disease and provide the accurate recommended fertilizer to be used. Then the farmers can get those details quickly and with the help of the fertilizer the disease can be cured easily.