Leaf Disease Detection and Classification based on Machine Learning

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Abstract: *Plant disease identification by visual way is increasingly difficult and simultaneously less accurate. However in the event that disease detection technique is used, it will take less time and processing power and proves to be progressively exact. Some broad maladies in plants appear dark coloured, yellow spots, and some are infectious, viral and bacterial diseases. Image processing is being used for estimation of infected area. Image segmentation is the process of collecting images into different parts. Now a day there are various strategies used for preforming image segmentation, stretching out from the fundamental threshholding procedure to forefront concealing picture division systems. A computer does not any special technique for intelligent objects recognition, so a great number of techniques have been developed. The segmentation procedure relies upon various features found in the image. This might be shading data, limits or fragment of an image Plant disease identification by visual way is increasingly difficult and simultaneously less accurate. However in the event that disease detection technique is used, it will take less time and processing power and proves to be progressively exact. Some broad maladies in plants appear dark coloured, yellow spots, and some are infectious, viral and bacterial diseases. Image processing is being used for estimation of infected area. Image segmentation is the process of collecting images into different parts. Now a day there are various strategies used for preforming image segmentation, stretching out from the fundamental threshholding procedure to forefront concealing picture division systems. A computer does not any special technique for intelligent objects recognition, so a great number of techniques have been developed. The segmentation procedure relies upon various features found in the image. This might be shading data, limits or fragment of an image.*

Keywords: Multi Leaf Disease Detection, Pre-processing, Classification algorithms, Feature Extraction, Convolutional Neural Network (CNN) etc.

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