Abstract

Machine learning is the one of the branch in Artificial Intelligence to work automatically or give the instructions to a particular system to perform a action. The goal of machine Learning is to understand the structure of the data and fit that data into models that can be understood and utilized by the people. The proposed research work is for analysis of various machine algorithms applying on plant disease prediction. A plant shows some visible effects of disease, as a response to the pathogen. The visible features such as shape, size, dryness, wilting, are very helpful to recognize the plant condition. The research paper deals with all such features and apply various machine learning technologies to find out the output. The research work deals with decision tree, Naive Bayes theorem, artificial neural network and k-mean clustering and random forest algorithms. Disease development depends on three conditions-host plants susceptible to disease, favorable environment and viable pathogen. The presence of all three conditions is must for a disease to occur.
References


2. Savita N. Ghaiwat, Parul Arora. 2014. Detection and Classification of Plant Leaf Diseases Using Image processing Techniques:


5. Online reference- Wikipedia wiki/ID3_algorithm, wiki/K-means_clustering,

6. Online reference- Wikipedia wiki/Perceptron


Index Terms

Computer Science

Algorithms

Keywords

Naive Bayes, Artificial neural network, random forest, k-means clustering