# LITERATURE SURVEY

Team id : **PNT2022TMID07943**

Project title : **FERTILIZERS RECOMMENDATION FOR DISEASE PREDICTION**

College name : **Adhiyamaan College Of Engineering(Autonomous) , Hosur**

Department : **Computer Science And Engineering**

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| SNO | TITLE | PROPOSED WORK | TOOLS USED / ALGORITHM | TECHNOLOGY | ADVANTAGES / DISADVANTAGES |
|---|---|---|---|---|---|
| 1 | Plant Disease Detection using Deep Learning | Proposed model has achieved 98.3% testing accuracy. | Convolutional Neural Network | Deep learning | Though this system is trained on Plant Village dataset with only 38 classes it could tell if the plant has a disease or not as somehow symptoms are same in all kinds of plants. |
| 2 | PlantBuddy: An Android Based Mobile Application for Plant Disease Detection using Deep Convolutional Neural Network | an android based mobile application has been developed to detect and identify plant diseases using deep CNN | • Convolutional Neural Network<br>• Image Preprocessing | Deep learning | The dataset images used in the study are captured in indoor lighting and environment. |

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| 3 | Some Plant Disease Identification and Prevention using Machine Learning | Identification of plant diseases and what kind of prevention and remedies they should take to prevent their crops from the disease | • Image Processing<br>• Plant Disease Identification<br>• Machine Learning | Image Processing Machine Learning | The farmers will be able to accurately detect the type of disease a particular plant is having using the image of the plant the proposed system is based on these modules |
| 4 | Plant Disease Detection and Suggestions using Mobile Application | The system proposed is a web and mobile portal that aims to improve the overall productivity and efficiency of the agriculture industry. | • RGB image acquisition<br>• Support Vector Machine<br>• KNN algorithm | Machine Learning | The system achieved an accuracy rate of 96.77 % . The training model was saved for further use using pickle. |

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| 5 | Smart Plant Disease Detection System | Mobile based design for leaf disease detection using Gabor wavelet transom (GWT). In this system firstly color conversion from the device dependent to color space model. | • Data Preprocessing<br>• CNN Algorithm | Deep learning Image Processing | With very less computational efforts the optimum results were obtained which also shows the efficiency of algorithm in recognition and classification of the leaf diseases. |
| 6 | Crop and Fertilizer Recommendation System using Machine Learning | The system comes with a model to be precise and accurate in predicting crop yield and deliver the end user with proper recommendations | • Pre-processing<br>• Support Vector Machine | Machine Learning | The Support Vector Machine Used in this project gives the accuracy over 90.01%, Besides the accuracy of the SVM is (mean accuracy=0.950; mean AUC=0.934; mean F1 score=0.903) |

# THANK YOU…