

Plant Disease Detection using Machine Learning

Prof. Vrushali Paithankar

Assistant Professor

Department of Computer Engg.
SKNCOE, Pune, India

Ajinkya Awari

Student

Department of Computer Engg.
SKNCOE, Pune, India

Akash Raskar

Student

Department of Computer Engg.
SKNCOE, Pune, India

Shrirameshwar Patil

Student

Department of Computer Engg.
SKNCOE, Pune, India

Namrata Jamdar

Student

Department of Computer Engg.
SKNCOE, Pune, India

Abstract: *Plant diseases are a major threat to agricultural production and food security worldwide. Early detection and accurate diagnosis of plant diseases are crucial for effective disease management. Machine learning techniques, particularly deep learning algorithms such as convolutional neural networks (CNNs), have shown great potential for plant disease detection. In this study, we propose a plant disease detection system that utilizes image processing and CNNs for real-time detection of plant diseases. The system takes an image of the diseased plant as input and uses image processing techniques to extract relevant features from the image. These features are then fed into a CNN model, which is trained on a large dataset of plant disease images, to classify the disease. The proposed system can help farmers detect and manage plant diseases early, thereby reducing crop losses and improving agricultural productivity.*

Keywords: Agriculture, Plant diseases, Prediction, Machine Learning, CNN.

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