Methodology

In this research paper, we present a robust framework designed for the identification of diseases affecti

This study endeavors to develop a robust framework for disease recognition in potato leaves utilizing m

Data Gathering: The dataset consisting of potato leaf images is collected for training the model.

Preprocessing: A series of steps are employed to prepare the dataset for effective model training. This

a. Resizing and Rescaling: The images are resized to a standard size of 256x256 pixels and rescaled t

b. Data Augmentation: To enhance the robustness of the model and reduce overfitting, data augmentat

Model Configuration: The InceptionResNetV2, a pre-trained convolutional neural network (CNN) model

Custom Head Creation: A custom head is created on top of the base model consisting of the following l

a. Global Average Pooling: Reduces the spatial dimensions of the features extracted by the base mode

b. Dense Layers: Two dense layers comprising 64 units with Rectified Linear Unit (ReLU) activation foll

Training and Evaluation: The model is trained using the prepared dataset in batches of size 32 over 50

Algorithm: Potato Leaf Disease Classification using Modified Inception-ResNetV2

Input: Potato leaves images (Healthy and Diseased)Output: Classified Images as Ci