**Extended Abstract**

The paper titled "Multi-Class Classification of Plant Leaf Diseases Using Feature Fusion of Deep Convolutional Neural Network and Local Binary Pattern" proposes a novel lightweight deep convolutional neural network (CNN) model for obtaining high-level hidden feature representations. The deep features are then fused with traditional handcrafted local binary pattern (LBP) features to capture local texture information in plant leaf images. The proposed model is trained and tested on three publicly available datasets, namely Apple Leaf, Tomato Leaf, and Grape Leaf. The approach achieves validation accuracies of 99%, 96.6%, and 98.5% respectively, and test accuracies of 98.8%, 96.5%, and 98.3% respectively. The results demonstrate that the proposed approach can provide a better control solution for plant diseases.

The paper aims to address the issue of decreased agricultural production quality and quantity due to plant diseases. With ongoing changes in plant structure and cultivation techniques, new diseases are constantly arising on plant leaves. Thus, accurate classification and detection of plant leaf diseases in their early stages will limit the spread of the infection and support the healthy development of plant production.

The proposed approach is a significant contribution to the field of computer vision and machine learning. It provides a novel solution for detecting and classifying multiple leaf diseases of plants and fruits during the feature extraction step. The proposed model is lightweight, efficient, and can be used for real-time applications. The results of the experiments show that the proposed approach can provide a better control solution for plant diseases.