**Predicting plant leaf diseases using CNN with python.**

**Abstract**

The main aim of this deep learning model is to find the Leaf diseases using Convolutional neural network and Python language. Leaf diseases in leaf is hard to find manually. Now a days farmers are not aware of some harmful diseases in leaf. This study is to finding the leaf diseases using deep learning algorithm (CNN) and with the python language. CNN is a type of artificial neural network used in image recognition and processing that is specifically designed to process pixel data. CNNs are powerful image processing, artificial intelligence ([AI](https://searchenterpriseai.techtarget.com/definition/image-recognition)) that use deep learning to perform both generative and descriptive tasks. Python’s extensive selection of deep learning-specific libraries and frameworks simplify the predicting process and cut development times. Different leaf diseases image (40,000) is collected from a Kaggle and created the model with CNN algorithm. CNN model is compared with the leaf diseases with the image and predicting the leaf diseases. This study shows that the model provides a 60% of accuracy and finding the given leaf diseases with the high probability.