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Novel Approach for Automatic Identification of Plant Disease using CNN

Aditya Shinde¹, Tejas Raykar², Prafulla Patil³, Harshvardhan Mali⁴

Students, Department of Information Technology^{1,2,3,4}
Zeal College of Engineering and Research, Pune, Maharashtra, India

Abstract: Each country's essential need is Agricultural items. Assuming that plants are tainted by sicknesses, this effects the country's agrarian creation and its financial assets. In farming for a productive harvest yield early discovery of illnesses is significant. Programmed strategies for arrangement of plant sicknesses likewise help making a move later distinguishing the side effects of leaf illnesses. In the farming area, recognizable proof of plant infections is incredibly vital as they hamper power and soundness of the plant which assume a crucial part in farming efficiency. These issues are normal in plants, in the event that legitimate avoidance techniques are not viewed it could in a serious way influence the development. The momentum strategy for distinguishing sickness is finished by a well-qualified's viewpoint and actual examination, which is tedious and expensive in reality. We are presenting the man-made consciousness based programmed plant leaf illness recognition and arrangement for speedy and simple location of infection and afterward grouping it. This primary point of our own framework is towards expanding the efficiency of yields in agribusiness. In this approach we have follow a few stages for example picture assortment, picture preprocessing, extraction of component and grouping.

Keywords: Convolutional Neural Network (CNN), Fertilizer, Leave Diseases, Agriculture.

REFERENCES

- [1]. Marwan Adnan Jasim and Jamal Mustafa AL-Tuwaijari, "Plant Leaf Diseases Detection and Classification Using Image Processing and Deep Learning Techniques", 2020 International Conference on Computer Science and Software Engineering, IEEE 2020.
- [2]. Poojan Panchal, Vignesh Charan Raman and Shamla Mantri, "Plant Diseases Detection and Classification using Machine Learning Models", IEEE 2019.
- [3]. Melike Sardogan, Adem Tuncer and Yunus Ozen, "Plant Leaf Disease Detection and Classification Based on CNN with LV Algorithm", IEEE 2018.
- [4]. Flora Zidane and Julien Marot,"Nondestructive Control of Fruit Quality via Millimeter Waves and Classification Techniques: Investigations in the Automated Health Monitoring of Fruits",IEEE Antennas and Propagation Magazine, Oct. 2020
- [5]. Hossein Azarmdela, Ahmad Jahanbakhshib." Evaluation of image processing technique as an expert system in mulberry fruit grading based on ripeness level using artificial neural networks (ANNs) and support vector machine (SVM)", Elsevier, 2020
- [6]. Harshita Nagar and R.S. Sharma,"A Comprehensive Survey on Pest Detection Techniques using Image Processing", IEEE, 2020
- [7]. Sharath DMand RohanMG "Disease Detection in Pomegranate using Image Processing", International Conference on Trends in Electronics and Informatics, 2020
- [8]. M. Pushpavalli, "Image Processing Technique for Fruit Grading", International Journal of Engineering and Advanced Technology (IJEAT) 2019.
- [9]. Dipali Dhanwate, "Features based Fruit gradation Using image Processing", International Journal of Recentb Technology and Engineering (IJRTE) 2019.
- [10]. Chinnaraj Velappan, and Subbulakshmi, "Analysis of fruits by image processing algorithms", IJAREEIE 2015.
- [11]. Mandeep Kaur and Reecha Sharma, "Quality detection of fruits by using ANN technique", IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) 2015

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[12]. Navid Razmjooy, Somayeh Mousavi and Soleymani, "A real-time mathematical computer method for potato inspection using machine vision", Elsevier Journal 2011.

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