ABSTRACT

Agriculture automation has been on the rise leveraging. It is the process of using various technological equipment which automates and enhances agricultural businesses. This practice results in increased production strength, quality of agricultural merchandise and it also leads to reduced labor-intensive chores. Nowadays, one of the main concerns for farmers is protecting their crops from wild animal attacks. We should examine alternatives to conventional solutions likea brick wall, manual supervision, and electric fences when ensuring the safety of both people and animals. The objective of our work is to detect animals that are trying to enter the crop field using some deep learning techniques. The system we utilize here combines AI Computer Vision using FRCNN. Here Faster R-Convolutional neural network helps to detect and recognize animal species, and ultrasound emission for repelling them. The FRCNN model identifies the different animals provided in the dataset. Finally, train and test the FRCNN model and visualize the results by plottingthe confusion matrix. The confusion matrix determines the performance of the classification models and forecasts it on the test data and tells how good the model is. If the intruded animal image matches the trained dataset, we can alert the farmer by sending an SMS to the registered number. In this work Problem solving in python programming is used for implementation. Python is an interpreter, high-level, general-purpose programming language.