ABSTRACT

Indonesia's agricultural sector has many types of plants, this is supported by tropical climate conditions. The mission to increase the productivity of the agricultural sector in its implementation encountered many obstacles. One of these barriers comes from animal pests. The role of animals in the form of pest attacks is the most consistent obstacle in suppressing productivity levels in the agricultural sector each year, the biggest pest attack in season one of which is bird pests.

One solution that will be designed in this study to make it easier for farmers to deal with bird pests in rice fields ready to harvest is to make bird repellents automatically. Based on one of the existing problems in agriculture, this final project research aims to help solve these problems, namely by designing a system of "Classification of Bird Pests Using the Haar Cascade Classifier Method".

In this final project, the test will use a webcam and jetson nano using the Haar Cascade Classfier method. Haar cascade Classfier is one of the methods used to detect bird pests in this study. This research produces an average accuracy of 76% in sunny weather conditions while for cloudy conditions an accuracy of 48% is obtained, to calculate the accuracy using performance parameters such as Accuracy, Recall, Precision, F1 score.

Keywords: *Computer Vision*, *Haar Cascade Classifier*, *Object Detection.*