

Klasifikasi Gambar dari Prototipe Camera Trap Menggunakan Model ResNet-50 untuk Mendeteksi Satwa Dilindungi

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Abstract

Indonesia is one of the countries with a diversity of flora and fauna spread in various regions. In this diversity there are several animals that require special attention because of their rare status. The technological approach using camera traps is one of the efforts that have been made to monitor these endangered animals. This final project aims to classify images captured by a camera trap prototype using one of the Convolutional Neural Network (CNN) architectural models, namely Residual Network-50 (ResNet-50). Convolutional Neural Network is one of the methods that is widely used in deep learning methods which works by imitating the neural network of the human brain. In this final project, experiments are carried out in the form of several datasets with different features in each scenario. The experiment resulted in the most optimal model with training accuracy of 99.34% and testing accuracy of 90.43%.

Keywords : deep learning, camera trap, ResNet-50, CNN, animals.