

Abstract

A real -word animal biometric system which detects and describes animal life in image and video is an emerging subject in machine vision. These systems are providing computer vision approaches for the classification of animals. The existing system for animal face classification is based on the popular deep learning technique called Probabilistic neural networks (PNN) features. The proposed system uses the footprint images of animals and classify them using deep learning technique CNN. The footprint images are pre-processed and are converted to gray scale boundaries by using canny algorithm. Gabor filter are used to extract features of segmented image. The dimensionality reduction is carried out based on unsupervised model, Principal Component Analysis (PCA). Then reduced feature vectors are inputted into the classification model. Convolutional Neural Network (CNN) is used for classification and identifying the animal class. Footprints 0 dataset of five different animal categories of 100 images is to be used for classification. The performance analysis of the system is evaluated using the measures accuracy, precision, recall and f1-measure.