Report

What problem were you trying to solve?

In this project, the aim is to try to classify an image given, whether it contains tiger or lion.

What data did you collect?

The data collected include 40 images of lions and 40 images of tigers. The images consist of many variations such as different size, posture of the animal. For lion category, curb lions and female lions are included in the training data. As for tiger, images of white tiger and curb tiger are included as well.

The classifier used is the K-Nearest Neighbour which is incorporated in the plugin in the course.

The below is the accuracy of the testing, which is considered to be high.

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface, application

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Graphical user interface, application

Description automatically generated

A screenshot of a video game

Description automatically generated

Graphical user interface, application

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Graphical user interface, application

Description automatically generated

My classifier seems to perform very well as it classify tiger and lion for ten examples without any error. However, this could be due to the fact that the image is lack of noise like it contains only single animal per image, etc. In general, I am satisfied with the result.

The images that may be wrongly classified include cartoon images, or images containing both tiger and lion at the same time. The reason for this is that there is no training data on this category. The problems above is solved however, larger training dataset with even more variations should be included to make the model more robust and reliable.

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https://www.coursera.org/learn/uol-machine-learning-for-all/peer/xkKne/reflecting-on-your-machine-learning-project/review/SSendU\_1EeyPyA5PteY9OQ