Location

We have to find the location of the theft! We are given a dataset of images (cats and dogs). The test dataset consists of 2 images which we need to decode. We have 4 locations (00, 01, 10 & 11) and the theft will occur in one of these places. Use a CNN model to analyse the dataset and feed the test data to receive your final answer- 00, 01, 10 or 11.

00- The Chamber of Secrets

01- Shibuya City

10- Vice City

11- Arkham Asylum

**References:**

* <https://www.geeksforgeeks.org/introduction-convolution-neural-network/>

The link gives information about convolutional neural network (CNN)

* <https://www.tensorflow.org/tutorials/images/cnn>

Tensorflow documentation for CNN’s

* <https://www.geeksforgeeks.org/activation-functions-neural-networks/>

Activation functions in Neural Networks

* <https://www.kaggle.com/code/prashant111/comprehensive-guide-to-cnn-with-keras>

Comprehensive Guide to CNN with Keras

* <https://vovkos.github.io/doxyrest-showcase/opencv/sphinx_rtd_theme/index.html>

OpenCV(cv2) documentation

* <https://docs.python.org/3.11/library/imghdr.html>

Documentation for imghdr(Used to determine type of an image)