AIM

To make an intelligent program to suggest the best tourist destination for a person based on images from their instagram.

Abstract:

Used cnn to differentiate images of cities or urban types and the natural destination like hills ,beaches forest,wildlife,flowers gareden etc. The program is intend to train the datasets to accurately predict the type of destination present in each instagram post. The category of which destination predominatesin a person points to the real interest of that person.by knowing this, it would be easier to suggest a destination based on the category they prefers.

API used:

Instaloader exposes its internally used methods and structures as a Python module, making it a powerful and intuitive Python API for Instagram, allowing to further customize obtaining media and metadata.

Libraries used

os
Keras
sklearn

Program details:

It contains three modules:

Tourist_destination_suggestor.py
cnn_NatureCities.py
datascrape.py

data_scrape contains functions download_datafromprofile and data_separate. The former function is meant to load a userprofile from the value passed through the username_targetprofile argument.‘loader ‘is an instance of instaloader library which is the API used for scraping the data from the Instagram profile. The data_separate () function splits the files downloaded into image and other type of data.

Convolutional Neural network is used with tensor flow backend, and keras. The CNN is meant to differentiate the images of Cities or Urban types and the Natural

destinations like hills, beaches, forests, wildlife, flowers and garden etc… The program is intended to train the data sets to accurately predict the type of destination present in each post. The category of which destination predominates in a person points to the real interest of that person. Knowing this it would be easier to suggest a destination based on the category he/she prefers. The training_cnn() class is used to train the model and cnn_test_image() is used to check a random image for its probability to belong to the Nature category or Cities Category. The prediction is returned

Tourist_destination_suggestor.py contains the main function for executing the other modules. query to enter a username is asked and required to be inputted.

Program run

- Run the main function for executing the rest of the codes.
- Open tourist_destination_suggestor to execute the main function.
- The query to enter a username is asked and required to be inputted.
- The dataset used to train the model both training and test are included in the folder