CASE STUDY 03

Computer Vision

Classifying Fruits and Vegetables Using Image Classification

The given dataset contains images of a variety of fruits and vegetables, offering a rich source for developing and testing image recognition algorithms. The food items are categorized as follows:

Fruits:

Banana, Apple, Pear, Grapes, Orange, Kiwi, Watermelon, Pomegranate, Pineapple, Mango

Vegetables:

Cucumber, Carrot, Capsicum, Onion, Potato, Lemon, Tomato, Radish, Beetroot, Cabbage, Lettuce, Spinach, Soybean, Cauliflower, Bell Pepper, Chilly, Pepper, Turnip, Corn, Sweetcorn, Sweet Potato, Paprika, Jalapeño, Ginger, Garlic, Peas, Eggplant

Given this dataset, your task is to create a machine learning model that can classify the images into two main categories: Fruits and Vegetables.

Dataset : Click here

As the size of the dataset is around 2GB hosted on Kaggle, you can directly load it into your Python environment using the Kaggle API or by downloading the dataset manually. Make sure to follow the appropriate steps to access and load the data.

Please note the following:

- Give headings to each step you are doing.
- Do the case study in Python.
- Create a repository in GitHub account as "Public".
- Upload the notebook file (. ipynb) to the repository.
- Please make sure that you are uploading the notebook file including the outputs as well.
- Share the link of this notebook from GitHub in the online text editor provided in aatshala.