L-13 Understanding the arch. of Pre-trained Model

AIM: To understand the architecture of pre-trained model

Objective:

To learn the concept of transfer learning and how it reduces training time.

To explore the layer wise architecture of pretrained modules such as VGG16, AlexNet

To identify the role

To visualize, how these models extract features.

Pseudocode

Import libraries

Load a pre-trained model

Model display it

Observe: input and output shape layers names, types and no. of parameters

Visualize the architecture using:

Load a sample input image and preprocess it for model

Pass image through the model and get predicted

Optionaly visualize activation

Observation

The pre-trained model contains million of parameter spread across convolutional and dense layers

Early layer extract edges and texture while deeper layer captures high level features such as object parts.

The use of pre-trained weights drastically reduces training time and improves model accuracy for new tasks

Result

Successfully implimented pre-trained model.

Q.1