Animal Classification Using Pretrained ResNet in PyTorch

Student Name: Vansh Datta
Student Number:1303819

Proposal

For this project, I will work with an image classification model using PyTorch and a pre-trained ResNet-50 convolution neural network. I will train the model on the Animals-10 Dataset on Kaggle, which contains about 28,000 images for 10 animal classes like cat, dog, elephant, butterfly, and others.

This data set is well-suited for fast training and testing with its compact but reasonable size and high-quality diverse images.

I am utilizing ResNet-50 because it is a powerful and widely adopted architecture that utilizes residual connections to effectively learn deep networks. Through the use of transfer learning using ResNet, I can achieve good performance under limited computational resources and training time.

https://www.kaggle.com/datasets/alessiocorrado99/animals10

this is my Kaggle dataset.