Ahmedabad University

CSE541 Computer Vision

Weekly Report - 5

Section - 1

Submitted to faculty: Prof. Mehul Raval

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Tasks Performed:

- We have main researched about the implementation of inception model for our project.
- The Inception model achieves this efficiency by using a combination of small convolutional filters and pooling layers to capture features at different scales.
- The Inception-v1 model is implemented using several convolutional and pooling layers, followed by multiple inception modules. The model uses batch normalization and a global average pooling layer to reduce overfitting and improve accuracy.
- Inception-v2 and Inception-v3, these versions of the model include improvements to the inception module, such as the use of 1x1 convolutions to reduce computation and the use of factorized convolutions to reduce the number of parameters. Inception-v3 also introduced the use of auxiliary classifiers during training to improve the gradient flow and reduce overfitting.
- Inception-v4 is the latest version of the Inception model, includes improvements to the inception module, such as the use of residual connections and a reduction block to improve the flow of information and reduce computation.
- We also researched about the different layers like Flatten, Dense, Dropout etc. which could be helpful in increasing the accuracy of our project.