README

Advanced Topics in Computer Vision. Action Recognition using Dilated Convolutions.

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############ NOTES ############

1. All the results(accuracy metrics) of experiments on individual data sets are displayed on to the terminal console; The reports also contains the final accuracy obtained for both the models.

Description:

The problem of Action Recognition has been tackled by Dilated Convolution and a newly devised loss function very similar to how humans learn. The whole code is written in Python. The Deep Learning framework used for my work is TensorFlow. The folder contains the train and testing video file names in their respective .txt files. The location of the dataset is to be added explicitly. The portion to add the path to the dataset folder, the testing and train splits can be found in the code. The dataset used is UCF50 Sports Action Recognition Dataset.

Files in the project folder:

model1.py - Contains the code for the first model talked about in the paper.
model2.py - Contains the code for the second model.
TrainSplit.txt - Contains the videos to be trained on. Contains names of 4406 videos and their class.
TestSplit.txt - Contains the videos to be tested on. Contains names of 1743 videos and their class.
Report.pdf - Contains the report in CVPR double column format.
README.pdf

Running the project:

1. Install python 3
2. Change to the project directory (AdvancedCVProject)
   $ cd AdvancedCVProject
3. Run the program(input examples):
   Python model1.py
   python model2.py