Recognize basic human activity   Name : Sasidhar Evuru   Net ID: sxe140630

Abstract - The main aim of the project is to recognize the basic human activity from live capture.

Implementation – The sequence of steps followed are:

1. The first step is generating the train Motion History Images from the given Video. The images generated are SAMHI Images. For each video SAMHI4 images are calculated and stored. These images are stored in separated folders for feeding into the machine learning algorithm.

   The images look like.
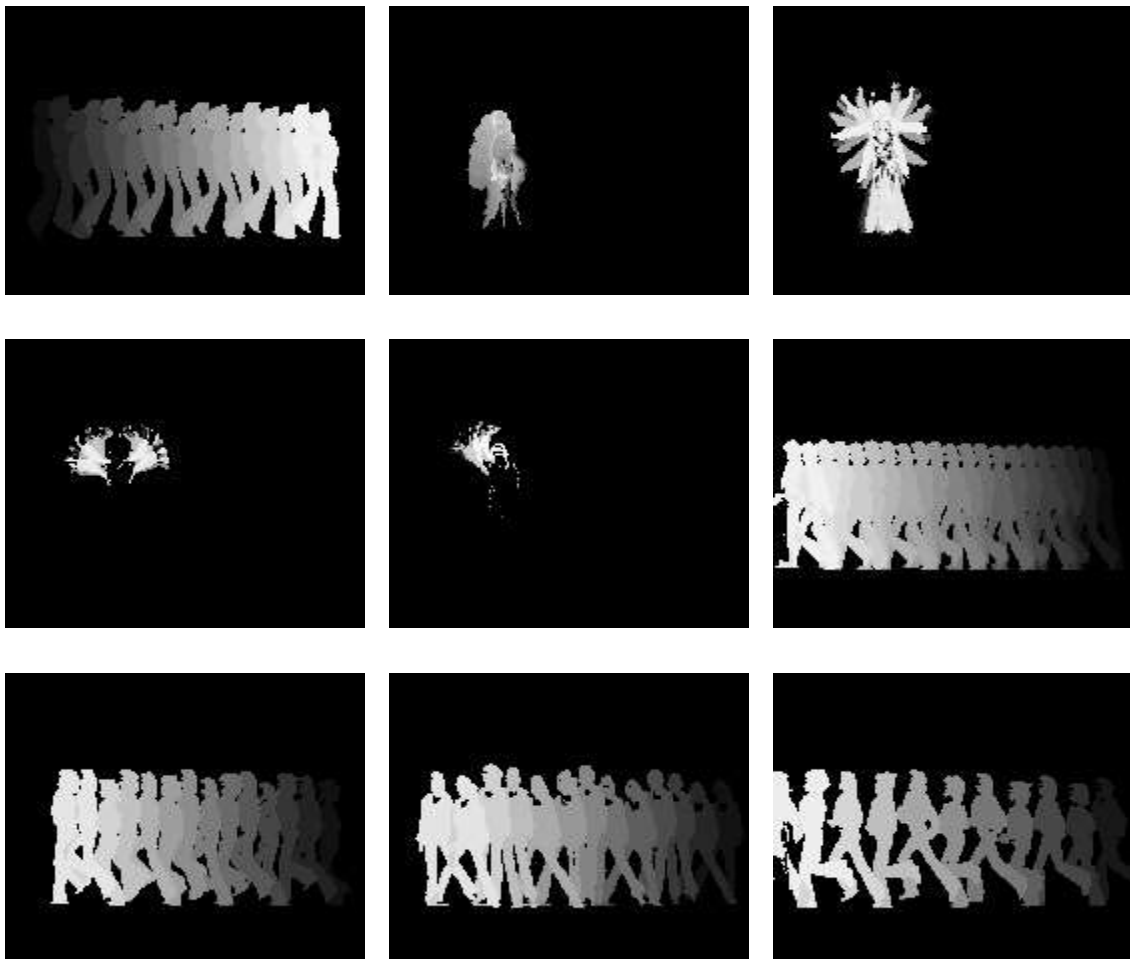
2. The similar procedure is performed for the test videos. Their different SAMHI4 images are collected into testing folder.

3. From the SAMHI4 images generated in step1 we need to extract the local features and the corresponding feature descriptors. We use Speeded Up Robust Features (SURF) method for this feature extraction.

4. Similarly from the SAMHI4 images for the test videos we will extract the local features and the corresponding feature descriptors. We use Speeded Up Robust Features (SURF) method for this feature extraction as well.

5. The feature descriptor is used as an input for the machine learning algorithm and the algorithm is trained using these features.

6. For every test video since we have different SHAMI images, we use these different SHAMI images to classify a video label and take the majority label as the classifying label.

Output

No of Train Files	No of Test files	Correlation of test and train	Accuarcy Percent
9	2	One file is common between test and train	85%
8	2	No files are common in test and train	70%
10	10	All files are common between test and train	100%
7	3	No files are common in test and train	65.50%