# **CS385 Computer Vision**

# **Lab-11: Motion Detection and Optical Flow**

# **100 points**

**Task :**

1. Consider the given videos, read the video and extract the different video frames into images. Apply frame differencing on the successive video frames using your “own” written function (You are not allowed to use the predefined libraries of differencing). Apply the differencing function on the successive frames of the video. Play the difference frames as a new video.

**(25 points)**

1. In this task you have to take your edge detection function that you implemented in the previous lab. It will be then used on the frames of a video. Apply the edge detection function on the successive frames of the video. Play the edge detected frames as a new video. (**35 points)**
2. In this Task, you will implement a version of the Lucas-Kanade optical flow algorithm. First apply on the given set of images and demonstrate.

**(40 points)**

**Submission:**

Demonstrate your work . Also submit as a single file the code and results.

<https://u.pcloud.com/#page=puplink&code=UOvkZtCE2uypAe00hb2K0n0blPYiM8Xq7>