Assignment 5: Optical Flow

Due: 23:55, 13th April, 2019

Problem statement

- In this assignment, you will be implementing Lucas-Kanade optical flow algorithm.
- You need to submit your code and a report pdf. Your report should contain the analysis of various components of the algorithm with sufficient visual results.
- We will be using this optical flow dataset: http://vision.middlebury.edu/flow/data/
    - You need to present the results on at least 5 image pairs of your choice from this: http://vision.middlebury.edu/flow/data/comp/zip/eval-gray-twoframes.zip
    - Optionally, you are free to explore other images/sequences from dataset to make your report persuasive.
- Use optical flow to do the following,
    - Detection and segmentation of moving objects in a video
    - Tracking of objects in a video sequence
- Analyze how does your algorithm work when camera is moving.

Submission

- Submit a zip file with fliename <roll_numer>.zip containing your code in src directory and a report pdf. Submit your visualization codes also.
- Report contains significant weightage.
- Since end-sems are approaching, there will be no deadline extension.