

Computer Vision (CSE/ECE 578)
Spring-2020
Assignment-5 (Optical Flow)
Posted on: 12 April 2020
Due on: 19 April 2020

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.

1 Submission

- Submit a zip file with code and the report with proper explanations. Submit your visualization codes also.
- Report contains significant weightage.
- There is only 1 week to complete the assignment. So start early.