Lab2-Moving Object Detection in Video

CIS694/EEC693 Image Processing and Learning Methods-2021 Spring

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In this in-class lab, we will practice the Background Subtraction algorithm to detect the moving objects in the video.

A video can be thought as an image sequence. For example, a video with 30fps as the **frame rate** means that the video contains 30 frames (images) every one second. If the background is fixed (not moving), how to detect the moving objects in the video? We can use Background Subtraction algorithm to accomplish this task.

Steps:

1. Compute the background image B. (One simple way: averaging all the images in the image sequence)
2. FOR each frame Fi
   1. Compute Fi - B.
   2. Run special processing. (Brainstorm)
   3. Save the corresponding binary segmentation map Mi

End FOR

Excited to work on it?

Hold on! Let us take a close look at the Matlab code uploaded on the Blackboard system.

Have fun!