

Computer Vision: Assignment 5

Introduction:

To be honest, I didn't do this homework to get point, I done this homework to see the result –and maybe in order to escape studying other lectures finals 😊 - but both due to the lack of motivation for the homework and time, I couldn't complete it fully.

Part1:

In this part, we had implemented Lucas-Kanade method to estimate motion. Basically, this method assumes local optical flow is constant for a point. In order to avoid blank-wall problem and aperture problem, high texture regions must be used to estimate motion, which are corner points. Thus, I get corner point (the point has maximum cornerness) via Harris corner detection and construct a least-squares problem via its local points, then take normal equation of this and get $V = [u, v]$ vector. Then draw arrow according to this V vector.

Link: <https://www.dropbox.com/s/hcvrga7tto76ka8/OP.mp4?dl=0>