

Forman Christian College, Lahore

(A Chartered University)

Assignment 3

Due: 15/4/2015 at 5 pm

Task 1 Write a detailed derivation/explanation of the Harris corner detector starting from the Moravec corner detector. Implement a simple Harris corner detector using the rule $\lambda_{\text{small}} > T$ and test it on some sample real-world image. Experiment with other corner measures:

- Harris & Stephens
- Shi-Tomasi
- Nobel

Task 2 Write a matlab program named prog2.m which will take as input the names of two images image and n, the number of clicks the user has to make. Then the program should first display the first image and ask the user to click n points followed by displaying image 2 and asking the user to click n corresponding points. It should then find out the affine parameters that perform this transformation. Figure out a transformation such that transformed m06.pgm looks identical (or as close as you can get) to m06t.pgm?

Submission instructions

You need to email prog2.m and any other files to to vision.fall2013@gmail.com with the subject as “Assignment 2 Roll number ##-#####”