

Computer Vision (CV)

Programming Assignment 2

Due Date: 16th March, 2020

Max Marks: TBA

Question 1: Camera Calibration

[30]

- a. Compute the intrinsic and distortion matrix of the camera using the images given in IMAGES folder.
- b. After computing the matrices, test on a distorted image(given as test_image) and show the undistorted image.

Question 2: Image Stitching

[30]

Capture at least 5 images of a scene with some overlap between consecutive ones and perform the image stitching operation. The blending operation should be using image pyramids. The final output should give a panoramic view of the whole area.

Question 3: Corner Detection

[20]

Using any corner detection technique to detect the corners in image_1 and image_2. Report the outputs and draw inferences.

[VIVA + REPORT : 20 + 30]

Submission Policy and Requirements

1. This is a graded assignment.
2. The report should be detailed and clearly explaining every step you have followed. All the intermediate outputs, their inferences should be present in the report.
3. If you are using any inbuilt function, you should know the working of it. Just using the function and not being able to explain the working during viva will reduce the marks of that question to half.
4. Recommended programming languages: python+opencv.