EE6222 Assignment-2

Fall, 2018

Take 2 snaps with the same camera of an outdoor scene, and find the fundamental matrix for these two images. Verify your results with the epipolar line.

1. 2 shots aiming at the same settings, turn off the "auto-focusing" on your camera; so that the 2 images have the same focal length.
2. Hand pick 8 or more pair of corresponding points, compute the fundamental matrix. (You may apply corner detection to detect feature points for matching).
3. Select a point in one image, plot the epipolar line on the other image and explain your finding.
4. Submit a short report by week 13, via email to me: hw@ntu.edu.sg

The report file name is your full name, if you have multiple files, submit a zip, and the zip file name is your full name, with surname first.

5. Do not use wide angle lens, got too much distortion. You need to fix the focal length, for example hand pick a region to focus at infinity.
6. The 8 pairs must not be coplanar. Or you will get singular results. (recall F-matrix is rank 2).