

Assignment-4

The fundamental matrix (fundamentalMatrix) is calculated by using the Normalized 8-point algorithm. Fundamental matrix is not singular. In order to solve this we have enforced the singularity by using a rank 2 approximation. From figure-1 and figure-2, it is visible that all the lines intersect at one point. Some of the lines don't move through the marked points correctly in figure-2.

The geometric error of the Fundamental Matrix was calculated by using Sampson distance formula: $3.4228e-10$. Although the formula only gives an approximate result, the geometric error of the Fundamental Matrix is small.



figure-1



figure-2