

Assignment 3

Metric and Affine rectification of Images

A) Metric rectification:

Procedure:

- 1) We ask the user to select four points that map to a square in the real world.
- 2) We then make a transform that maps these four points to a square and apply that transform to the given image to metric rectify it.

B) Affine rectification:

Procedure:

- 1) We ask for four points that map to a rectangle in the real world
- 2) Next we find the point at infinity for the two sets of parallel lines
- 3) Then we find the line at infinity since we already know two points at infinity
- 4) We then find the projective transform that will map this line at infinity to the standard line at infinity form and apply that projective transform to the whole image.

Results:

