Mobile Robotics

Assignment -2

Camera Calibration

Report

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20161236

The 20161236 folder consists of 2 sub folders 'images' and 'codes'. The codes folder consists of two codes 'main_script.m' and 'solve_h'.

Assumption: The world coordinate system origin lies at the bottom left corner.

main_script.m: The code reads points from the 4 images and then finds the homography for each image. Then 3 of the 4 homographies are used to compute the 'K' matrix. The homographies are solved by calling the solve_h function.

solve_h.m: This code solves for the H matrix for a particular image by taking the image coordinates and the world coordinates as input.

The K matrix:

624.9796	-15.5879	276.9282
0	623.6111	173.3374
0	0	1.0000