TASK 2 : DISPARITY MAP

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Abstract—
¡The program could not be run properly as the images could not be rectified¿ The task is generating a disparity map from two unrectified stereo images provided. Generating disparity map is essentialfor 3D visualisation.

I. INTRODUCTION

II. PROBLEM STATEMENT

The problem statement was to rectify a pair of stereo images and compute the disparity map.

III. FINAL APPROACH

For both left and right images 41 important points were identified manually and stored into separate arrays. Both arrays were passed into a predefined function findHomography() to find the homography matrix by matrix calculations. warpPerspective function was used to rectify both images using the homography matrix formed. The rectified outputs were passed on to function computeDisparityMap() that uses template matching to find the depth map.

IV. RESULTS AND OBSERVATION

Noisy output obtained due to wrong implementation of rectification functions.

REFERENCES

[1] https://github.com/sourishg/disparity-map/blob/master/disparity.cpp
[2] OpenCV documentation