UNIVERSITY OF MALTA
DEPARTMENT OF COMMUNICATIONS AND COMPUTER ENGINEERING

Lab #5: Stereo Vision

Course: *Computer Vision (CCE5205)* – Lecturer: *Dr. Reuben Farrugia*

The aim of this laboratory session is to implement a simple depth estimation algorithm. Download the Data/ folder from the VLE. This folder contains two images `img1.ppm` and `img2.ppm` that will be used in this evaluation.

Question 1: Use the `opencv` library to read the the two rectified stereo images and display them next to each other using the `matlibplot` library.

Question 2: Compute the disparity map using 32 depth levels and the sum of squared difference as the distance measure.

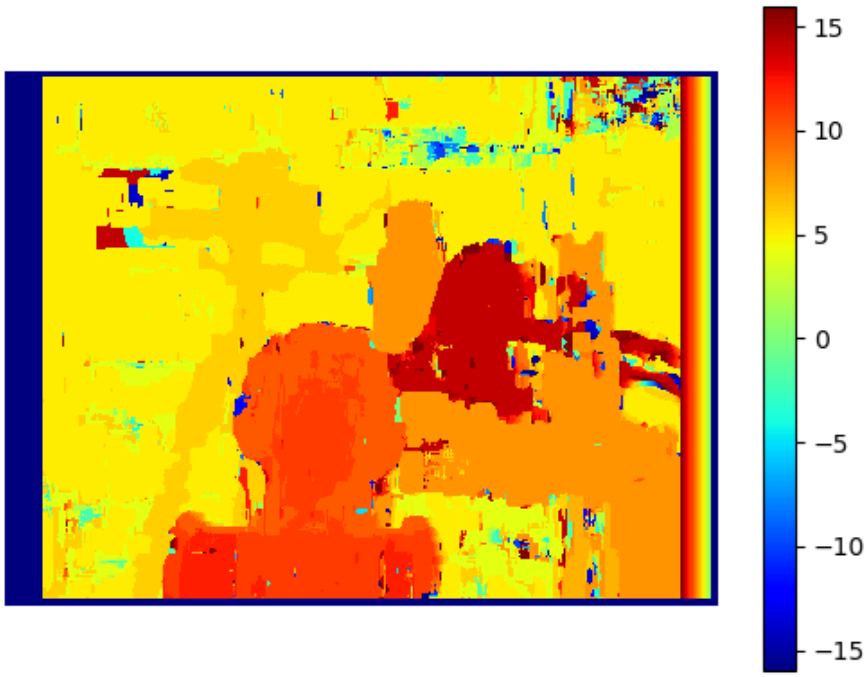

Figure 1: Depth computed using the normalized correlation coefficient.

Question 3: Compute the disparity map using 32 depth levels and the normalized correlation coefficient as the distance measure.

Question 4: Comment on the results obtained.

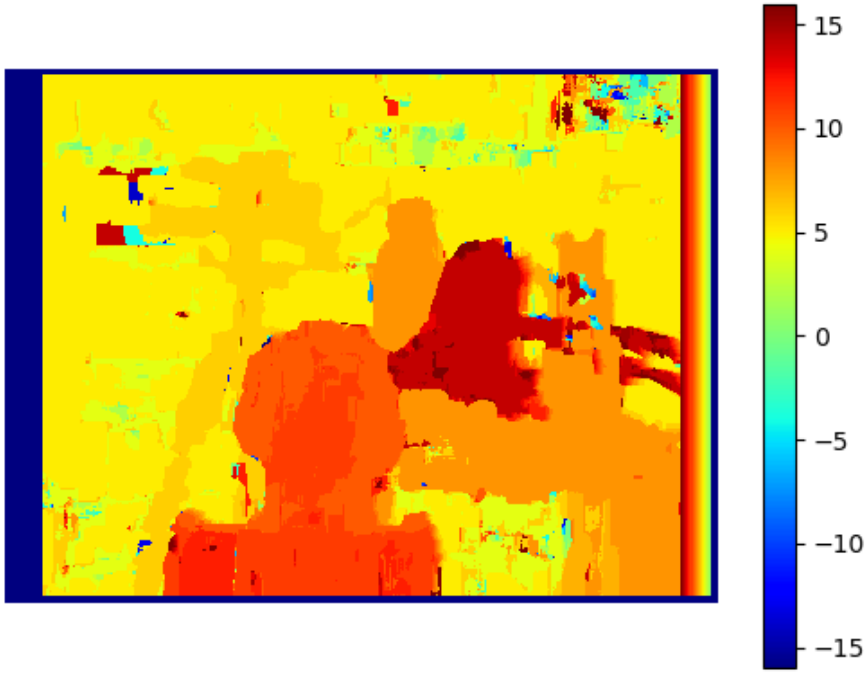

Figure 2: Depth computed using the sum of squared difference.