CSE 573
Computer Vision and Image Processing

Programming Assignment 2
Report

Submitted By
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1. Stereo Vision

a. Disparity estimation using block matching

Disparity Map for view1 using Block size of 3

Disparity Map for view5 using Block size of 3

Disparity Map for view1 using Block size of 9

Disparity Map for view5 using Block size of 9

MSE for view1 using block size of 3 is 343.511342012
MSE for view5 using block size of 3 is 1303.54560738
MSE for view1 using block size of 9 is 329.381764053
MSE for view5 using block size of 9 is 402.296018913

b. Consistency check

Disparity Map for view1 using block size of 3 after consistency check

Disparity Map for view5 using Block size of 3 after consistency check

Disparity Map for view1 using Block size of 9 after consistency check

Disparity Map for view5 using Block size of 9 after consistency check

MSE for view1 after Consistency check using block size of 3 is 39.9168875139
MSE for view5 after Consistency check using block size of 3 is 41.2166131574
MSE for view1 after Consistency check using block size of 9 is 33.1342420174
MSE for view5 after Consistency check using block size of 9 is 34.0381180316

c. Disparity estimation using Dynamic Programming

View1 Disparity Map using Dynamic Programming

View5 Disparity Map using Dynamic Programming

d. View Synthesis

Synthesized view3

2. Image Segmentation