

CSE 573: Programming Assignment 2

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1 Solution 1

1.1 Part 1 & 2



(a) Left Image



(b) Right Image

Figure 1: Disparity Map using 3x3 block matching



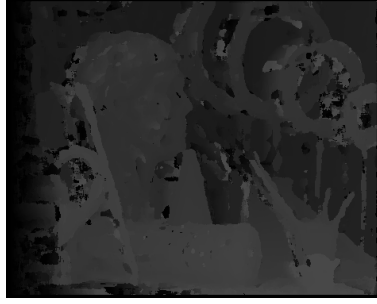
(a) Left Image



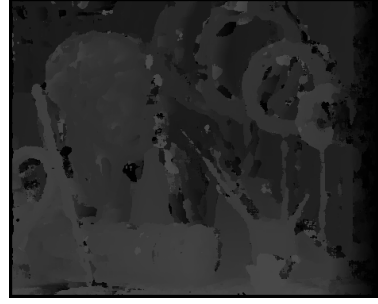
(b) Right Image

Figure 2: Consistency Check on 3x3 block matching

MSE 3x3 (Left)	372.9793
MSE 3x3 (Right)	252.8049
MSE 3x3 (Left) -Consistency Check	33.7245
MSE 3x3 (Right) -Consistency Check	25.9849



(a) Left Image



(b) Right Image

Figure 3: Disparity Map using 9x9 block matching



(a) Left Image

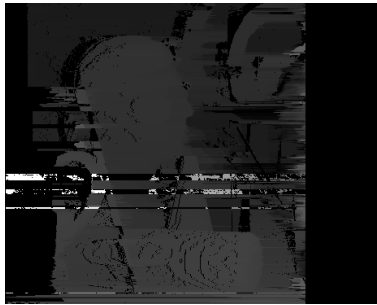


(b) Right Image

Figure 4: Consistency Check on 9x9 block matching

MSE 9x9 (Left)	292.4737
MSE 9x9 (Right)	292.4737
MSE 9x9 (Left) -Consistency Check	32.5168
MSE 9x9 (Right) -Consistency Check	25.0101

1.2 Part 3



(a) Left Image



(b) Right Image

Figure 5: Block Matching using Dynamic Programming

1.3 Part 4



(a) After View1



(b) Final Result

Figure 6: View Synthesis

2 Solution 2



(a) Original Image



(b) Result with $h=100$, iter = 30



(c) Result with $h=200$, iter = 15



(d) Result with $h=50$, iter = 60

Figure 7: Mean Shift, (b) $h = 100$, iteration = 30, (c) $h = 200$, iteration = 15, (d) $h = 50$, iteration = 60