

Lab 7 Report

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1 Minimum Mean Square Error (MMSE) Linear Filters

1.



Figure 1. img14bl



Figure 2. img14g

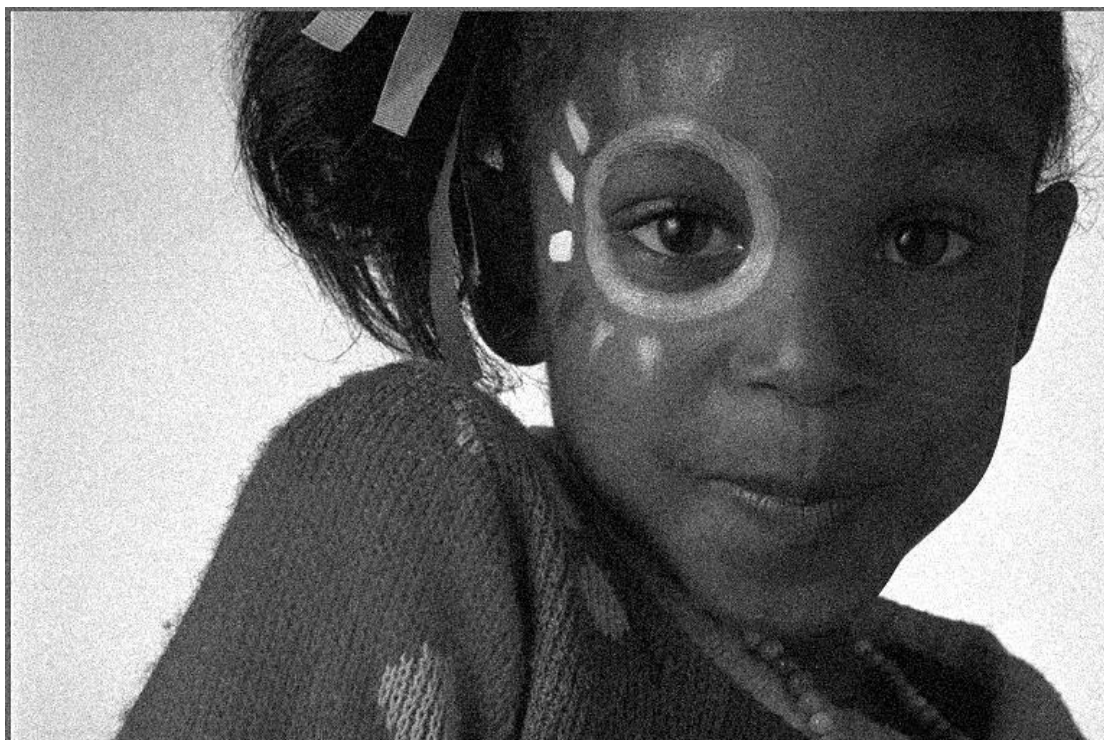


Figure 3. img14gn

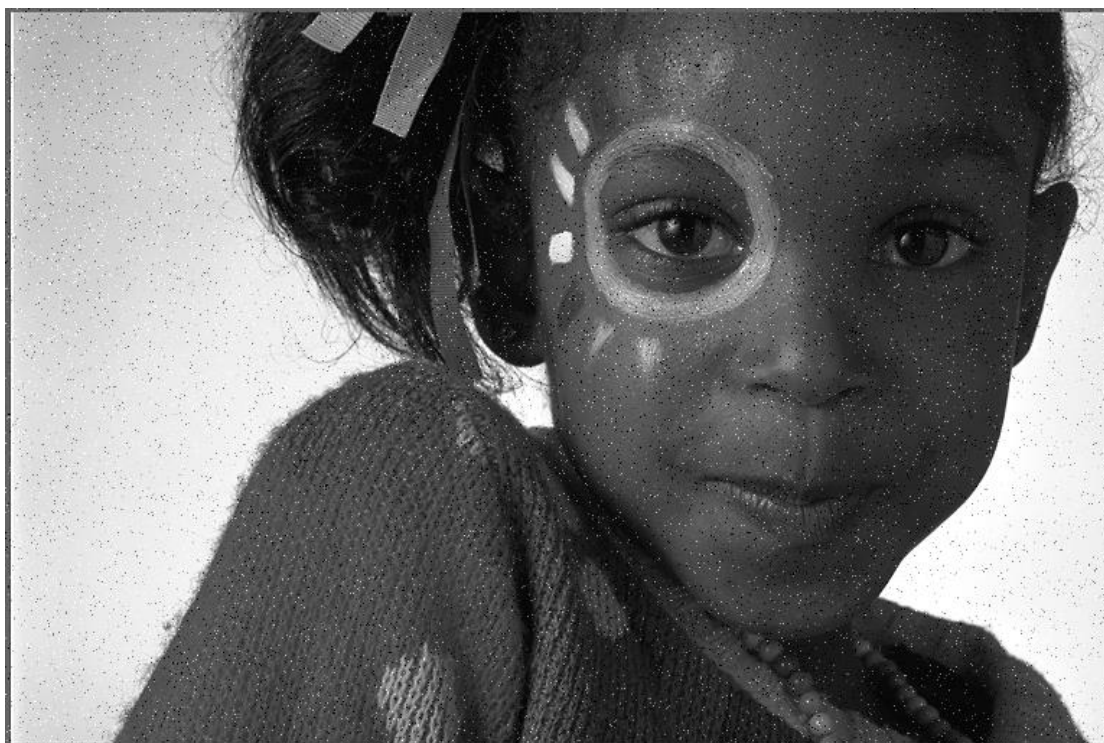


Figure 4. img14sp

2.



Figure 5. output for the blurred image



Figure 6. output from img14gn



Figure 7. output from img14sp

3.

-0.2238	-0.0481	-0.8803	1.5824	-0.0223	-1.0231	0.7140
1.4622	1.3026	-1.6030	0.4277	-0.9096	-1.2325	0.1544
-1.5240	-0.3205	-1.8417	0.3442	0.6119	-1.2780	0.7424
0.9781	-2.4388	2.3202	4.2414	2.3817	-0.8995	0.2587
0.7760	-0.6760	-1.3455	1.4239	1.4107	-0.2431	0.0724
-1.5503	0.4792	-0.6271	0.4669	-2.3104	-2.4858	-0.2879
1.1180	1.0782	-2.3796	1.3472	0.2899	-0.0413	1.2129

Figure 8. theta from bl

0.0288	0.0344	0.0228	0.0189	-0.0380	0.0359	-0.0327
-0.0169	0.0142	0.0261	0.0454	0.0406	0.0049	0.0220
-0.0146	-0.0142	0.0648	0.0683	0.0274	0.0242	-0.0071
-0.0188	-0.0453	0.0487	0.2368	0.0925	-0.0036	0.0124
0.0087	-0.0439	0.0214	0.1212	0.0566	-0.0114	-0.0048
0.0285	9.2028e-04	0.0362	0.0305	9.3343e-04	-0.0072	0.0108
-0.0085	3.7111e-04	0.0160	0.0124	0.0151	0.0185	0.0278

Figure 9. theta from gn

0.0061	0.0082	0.0163	0.0085	0.0391	-0.0206	-0.0314
0.0074	-0.0077	0.0220	0.0440	-8.0247e-...	0.0037	0.0223
-0.0102	0.0076	0.0443	0.1101	0.0384	-0.0161	0.0338
6.8148e-04	-0.0221	0.0288	0.3299	0.1336	-0.0215	0.0131
0.0236	-0.0375	0.0368	0.0871	-0.0032	-0.0387	0.0248
-0.0108	-0.0179	0.0209	0.0583	0.0264	0.0030	0.0013
2.5705e-04	0.0272	-0.0022	0.0106	-2.8555e-...	0.0129	-0.0073

Figure 10. theta from sp

2 Weighted Median Filtering



Figure 11. results from gn



Figure 12. results from sp