

Supplementary Materials

Table S1. PSNR comparison data from different algorithms processing Lena with increasing noise density.

Noise density	PDBTMF	MDBMF	ADTMF	Proposed
5%	38.79	38.96	26.94	29.14
10%	36.11	36	26.79	28.73
15%	34.19	33.69	26.54	28.4
20%	32.27	32.36	26.01	28.11
25%	31.16	31.31	25	27.77
30%	30.56	30.56	23.42	27.41
35%	29.91	29.57	21.78	27.2
40%	29.2	29.19	19.91	26.99
45%	28.19	28.62	18.09	26.67
50%	27.54	27.87	16.46	26.48
55%	26.15	27.27	14.84	26.27
60%	24.74	26.85	13.46	26.05
65%	22.96	26.18	12.12	25.89
70%	21.06	25.55	10.87	25.72
75%	18.96	24.93	9.8	25.58
80%	16.81	23.65	8.74	25.37
85%	14.78	22.6	7.8	25.27
90%	12.7	20.76	6.95	25.02
95%	10.63	18.11	6.17	24.97

Table S2. SSIM comparison data from different algorithms processing Lena with increasing noise density.

Noise density	PDBTMF	MDBMF	ADTMF	Proposed
5%	0.9883	0.9883	0.9616	0.8321
10%	0.9784	0.9773	0.9547	0.8255
15%	0.9675	0.9671	0.942	0.8215
20%	0.9578	0.9576	0.9186	0.8181
25%	0.9485	0.9488	0.8713	0.8145
30%	0.9403	0.9493	0.7886	0.8124
35%	0.9307	0.9405	0.6985	0.8112
40%	0.9191	0.9225	0.569	0.8106
45%	0.9037	0.9128	0.4419	0.8093
50%	0.8807	0.9008	0.3229	0.8088
55%	0.8401	0.8894	0.2207	0.8081
60%	0.7757	0.8748	0.1527	0.8072
65%	0.6805	0.8587	0.1062	0.8068
70%	0.5657	0.8391	0.071	0.8065
75%	0.415	0.8131	0.0486	0.8062

80%	0.2804	0.7742	0.0335	0.8058
85%	0.1731	0.7243	0.0227	0.8057
90%	0.0927	0.6457	0.0149	0.8052
95%	0.0418	0.5039	0.009	0.8051

Table S3. PSNR comparison data from different algorithms processing Cameraman with increasing noise density.

Noise density	PDBTMF	MDBMF	ADTMF	Proposed
5%	33.95	34.81	22.96	23.1
10%	29.72	31.15	22.78	22.92
15%	27.98	29.41	22.46	22.78
20%	26.34	28.22	22.12	22.62
25%	24.26	26.91	21.51	22.38
30%	23.15	26.54	20.58	22.27
35%	21.93	25.52	19.41	22.13
40%	20.84	24.61	18.22	21.89
45%	19.88	24.06	17.03	21.82
50%	19.3	23.44	15.42	21.76
55%	18.68	22.91	13.8	21.59
60%	17.71	22.3	12.79	21.45
65%	16.89	21.85	11.37	21.29
70%	16.41	21.14	10.21	21.19
75%	15.38	20.33	9.07	21.04
80%	13.99	19.52	8.32	21.02
85%	12.85	18.5	7.38	20.81
90%	11.19	17.15	6.5	20.77
95%	9.64	15.02	5.77	20.61

Table S4. SSIM comparison data from different algorithms processing Cameraman with increasing noise density.

Noise density	PDBTMF	MDBMF	ADTMF	Proposed
5%	0.9775	0.9802	0.9296	0.7549
10%	0.9553	0.9612	0.9209	0.7477
15%	0.9331	0.9453	0.9044	0.7413
20%	0.9114	0.9301	0.883	0.7362
25%	0.8779	0.9167	0.8382	0.7301
30%	0.8524	0.9048	0.7651	0.7292
35%	0.8288	0.8913	0.6729	0.7256
40%	0.7999	0.8786	0.575	0.7234
45%	0.7729	0.8636	0.4617	0.7224
50%	0.7422	0.8481	0.3421	0.7217
55%	0.7036	0.8331	0.2431	0.7202
60%	0.6358	0.8126	0.1847	0.7193

65%	0.565	0.7936	0.1291	0.7178
70%	0.4685	0.7703	0.0894	0.7174
75%	0.3453	0.7403	0.0631	0.7165
80%	0.2388	0.7034	0.0491	0.7165
85%	0.1524	0.6604	0.0328	0.7152
90%	0.0878	0.5938	0.0212	0.7158
95%	0.0445	0.4825	0.0111	0.7145

Table S5. PSNR comparison data from different algorithms processing Covid with increasing noise density.

Noise density	PDBTMF	MDBMF	ADTMF	Proposed
5%	38.07	39.8	27.76	26.22
10%	35.01	36.44	27.54	26.16
15%	33.12	34.65	27.18	26.05
20%	31.42	33.25	26.45	25.97
25%	30.18	32.29	25.28	25.86
30%	29.06	31.37	23.7	25.8
35%	28.2	30.48	21.93	25.72
40%	27.47	29.88	20.06	25.63
45%	26.54	29.18	18.19	25.57
50%	25.83	28.62	16.5	25.44
55%	24.86	27.99	14.93	25.38
60%	23.86	27.42	13.46	25.33
65%	22.32	26.78	12.15	25.24
70%	20.71	26.13	10.95	25.15
75%	18.84	25.49	9.82	25.11
80%	16.81	24.66	8.81	25.01
85%	14.83	23.61	7.86	24.95
90%	12.76	22.38	7.02	24.87
95%	10.84	20.44	6.24	24.78

Table S6. SSIM comparison data from different algorithms processing Covid with increasing noise density.

Noise density	PDBTMF	MDBMF	ADTMF	Proposed
5%	0.9872	0.9887	0.9751	0.5171
10%	0.9744	0.9769	0.9626	0.516
15%	0.9612	0.9649	0.9458	0.5145
20%	0.9463	0.9522	0.9177	0.5133
25%	0.9319	0.9392	0.874	0.5123
30%	0.9161	0.9247	0.8083	0.5118
35%	0.8992	0.9089	0.7186	0.5113

40%	0.8807	0.8927	0.6094	0.5109
45%	0.8581	0.874	0.4869	0.5105
50%	0.8311	0.854	0.3668	0.51
55%	0.7909	0.831	0.2645	0.5097
60%	0.7388	0.8067	0.1808	0.5095
65%	0.6599	0.7757	0.12	0.5093
70%	0.5616	0.7398	0.0797	0.5091
75%	0.4384	0.6979	0.0517	0.5091
80%	0.3067	0.6429	0.0338	0.5089
85%	0.1901	0.5692	0.0225	0.5087
90%	0.0991	0.4717	0.0141	0.5086
95%	0.0424	0.3371	0.0076	0.5085
