

Table 1: Comparison of relative error and speed up of our algorithm with optimum k -rank approximation algorithm

Data sets	Speed up	Re. ratio
Cameraman(256×256), $k = 80$	1.145	1.083
Liftingbody (512×512), $k = 100$	8	1.08
Map image(627×865) $k = 200$	3.33	1.067
Random matrix(8000×200) $k = 100$	42	1.1