APPENDIX

A.1 Analysis of ripplet transform based compression in terms of PSNR

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI – MRI brain

(e) Coronal section of T1 WI- MRI leg

(f) Coronal section of T1WI- MRI chest
(g) Sagittal section of MRI cerebral.

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
(m) Axial section of CT abdomen with oral contrast

(n) CT scan of brain CV junction

(o) CT scan of chest (left side) pulmonary arteries

Fig. A.1 PSNR (dB) achieved for medical images using ripplet transform based compression method and existing methods
A.2 Analysis of ripplet transform based compression in terms of SSIM

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI – MRI brain

(e) Coronal section of T1 WI- MRI leg

(f) Coronal section of T1WI- MRI chest
(g) Sagittal section of MRI cerebral

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
(m) Axial section of CT abdomen with oral contrast

(n) CT scan of brain CV junction

(o) CT scan of chest (left side) pulmonary arteries

Fig. A.2 SSIM values for medical images using ripplet transform based compression method and existing methods
A.3 Analysis of bandelet transform based compression in terms of PSNR

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI – MRI brain

(e) Coronal section of T1 WI- MRI leg

(f) Coronal section of T1WI- MRI chest
(g) Sagittal section of MRI cerebral

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
Fig. A.3 PSNR (dB) achieved for medical images using bandelet transform based compression method and existing methods
A.4 Analysis of bandelet transform based compression in terms of SSIM

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI – MRI brain

(e) Coronal section of T1 WI - MRI leg

(f) Coronal section of T1WI - MRI chest
(g) Sagittal section of MRI cerebral

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
(m) Axial section of CT abdomen with oral contrast

(n) CT scan of brain CV junction

(o) CT scan of chest (left side) pulmonary arteries

Fig. A.4 SSIM values for medical images using bandelet transform based compression method and existing methods
A.5 Analysis of radon transform based compression in terms of PSNR

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI – MRI brain

(e) Coronal section of T1 WI- MRI leg

(f) Coronal section of T1WI- MRI chest
(g) Sagittal section of MRI cerebral

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
Fig. A.5 PSNR (dB) achieved for medical images using radon transform based compression method and existing methods

(m) Axial section of CT abdomen with oral contrast

(n) CT scan of brain CV junction

(o) CT scan of chest (left side) pulmonary arteries
A.6 Analysis of radon transform based compression in terms of SSIM

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI – MRI brain

(e) Coronal section of T1 WI - MRI leg

(f) Coronal section of T1WI- MRI chest
(g) Sagittal section of MRI cerebral

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
Fig. A.6 SSIM values for medical images using radon transform based compression method and existing methods
A.7 Analysis of geometric (RST) transform based compression in terms of PSNR

(a) Axial section of MRI brain

(b) Axial section Haste-T2WI MRI abdomen

(c) Axial section of T2 Weighted MRI brain
(d) Axial section of T2 WI - MRI brain

(e) Coronal section of T1 WI - MRI leg

(f) Coronal section of T1WI - MRI chest
(g) Sagittal section of MRI cerebral

(h) Sagittal section of MRI knee

(i) Sagittal section of T1 WI MRI brain
(j) Sagittal section of T1 WI-MRI Lumbar spine

(k) Axial section of CT abdomen

(l) Axial section of CT skull
Fig. A.7 PSNR (dB) achieved for medical images using geometric (RST) transform based compression method and existing methods