# GLOSSARY

$MRI$ - Magnetic resonance imaging.

$RF$ - Radio frequency.

$NMR$ - Nuclear magnetic resonance.

$CT$ - Computed tomography.

$2D$ - Two-dimensional.

$1D$ - One-dimensional.

$MR$ - Magnetic resonance.

$2DFT$ - Two-dimensional Fourier transform.

$f$ - Resonant frequency.

$\gamma$ - Gyromagnetic ratio.

$B$ - Applied magnetic field strength.

$FID$ - Free induction decay.

$T_1$ - Spin-lattice relaxation time.

$T_2$ - Spin-spin relaxation time.

$PS$ - Partial saturation.

$SE$ - Spin echo.

$TE$ - Echo time.

$IR$ - Inversion recovery.

$TI$ - Inversion time.

$SSFP$ - Steady state free precession.

$EPI$ - Echo planar imaging.

$G_z(t)$ - Slice selection gradient field.

$G_x(t)$ - Frequency encoding gradient field.

$G_y(t)$ - Phase encoding gradient field.

$k-space$ - $MR$ signal space.

$k_x$ - Frequency encoded direction.

$k_y$ - Phase encoded direction.

$m(x,y)$ - Imaged object/ Transverse magnetization of the object.

$S(k_x,k_y)$ - Acquired MR signal.

$FFT$ - Fast Fourier transform.

$SNR$ - Signal to noise ratio.

$FOV$ - Field of view.

$S'(k_x,k_y)$ - Motion affected MR signal.

$\hat{m}(x,y,k_y)$ - Moving object/ Transverse magnetization of the moving object.

$m'(x, y)$ - Motion affected, reconstructed MR image of the moving object.

$y_G$ - Separation in pixels between the ghost artifacts produced by periodic motion.

$f_t$ - Temporal frequency of the motion.

$T_R$ - Repetition time.

$N$ - Total number of phase encoding steps.

$FLASH$ - Fast low angle shot imaging.

$FSE$ - Fast spin echo imaging.

$SEPI$ - Spiral scan echo planar imaging.

$QUEST$ - Quick echo split imaging.

$RARE$ - Rapid acquisition with relaxation enhancement.

$T_{acq}$ - Data acquisition time.

$ECG$ - Electrocardiograph.

$DVA$ - Diminishing variance algorithm.

$ROPE$ - Respiratory ordered phase encoding.

$COPE$ - Centrally ordered phase encoding.

$Mohicon$ - Moderate speed high contrast.

$Falcon$ - Fast, low contrast.

$STIR$ - Short-Tau inversion recovery.

$MAST$ - Motion artifact suppression technique.

$\psi(k_x, k_y)$ - Phase error.

$DC$ - Direct current.

$POCS$ - Projection onto convex sets.

$P$ - Probability.

$RMSD$ - Root mean squared distance.

$SVD$ - Singular value decomposition.

$ROI$ - Region of interest.

$\mathcal{H}$ - Hilbert space.

$\mu_A(x)$ - Membership of the element $x$ in fuzzy set $A$.

$X$ - A universal set.

$A^\alpha$ - $\alpha$-cut of fuzzy set $A$.

$A^{\alpha-strong}$ - Strong $\alpha$-cut of fuzzy set $A$.

$IFT$ - Inverse Fourier transform.

$MAS$ - Maximum angular span.

$PSNR$ - Peak signal to noise ratio.

$E_{ksp}$ - Measure of data error in $k$-space.

$\theta$ - rotation angle.

$\omega_c$ - constant angular velocity.