## LIST OF TABLES

Table 2.1. Typical values of SFCW Radar parameters 33
Table 3.1. Details of target samples considered 53
Table 3.2. No. of target pixels in thresholded 2D C-Scan through-the-wall radar image of the considered target using different imaging algorithm
Table 3.3. KS statistics and fitting parameter for distributions of target image in 2D C-Scan through-the-wall radar image for targets S1, S2, S3, and S4 for different imaging algorithm.

Table 3.4. PSNR (dB) value of imaging algorithm for target id $\mathrm{S} 1, \mathrm{~S} 2, \mathrm{~S} 3$, and S 4
Table 4.1. Details about list of target samples considered.
Table 4.2. 2D C-Scan through-the-wall radar image obtained using delay and sum beamforming method on imaging plane along X and Y axis with its actual shape of target id (a) T1 (b) T2 (c) T3(d) T4
Table 4.3. PSNR (dB) value of enhanced 2D C-scan through-the-wall radar image of target $\mathrm{T} 1, \mathrm{~T} 2, \mathrm{~T} 3, \mathrm{~T} 4$ after applying various spatial filtering techniques
Table 4.4. Constant value of TP and FP with its R2 for considered targets
Table 4.5. Comparison of thresholding techniques based on TP and FP for target Id T1, T2, T3, T4.

Table 4.6. Details about list of independent test target samples considered.
Table 4.7. Values of scaling parameter " $n$ " for targets T11,T12,T13 and T14 with TP and FP

Table 5.1 Details about list of target samples considered
Table 5.2. PSNR (dB) value of enhanced 2D C-scan through-the-wall radar image of target MRR1, WRR1, MSR1, WSR1 after applying various spatial filtering techniques
Table 5.3. List of target samples used for purpose of training and validation of neural network.

Table 5.4. Results of image reconstructed for training data samples
Table 5.5. List of independent target samples used for validation of artificial
neural network.
Table 5.6. Result of the image reconstructed for an independent test data samples $\mathbf{1 0 6}$

