

LIST OF FIGURE

Figure 2.1 DESIGN CONCEPT SOLUTION	16
Figure 2.2 Quadcopter Movement [9].....	19
Figure 2.3 Haar like Features, (a) & (b) Edge Features, (c) &(d) Line Features, (e)Four-Rectangle-Features.....	22
Figure 2.4 Haar-like features application.....	23
Figure 2.5 Integral Image Pixel Calculation [18].....	24
Figure 2.6 4x4 Pixel of Grayscale Image.....	25
Figure 2.7 Schematic depiction of a detection cascade.....	26
Figure 2.8 LBP Procedure in a 3x3 neighbourhood.....	27
Figure 2.9 Circular Neighbourhood Bilinearly Interpolating.....	27
Figure 2.10 Grayscale Image Converted to LBP Coded Image.....	28
Figure 2.11 Forming Histogram from LBP Coded Image	28
Figure 3.1 System Overview.....	29
Figure 3.2 DJI Ryze Tello.....	30
Figure 3.3 Dataset Acquisition Flowchart	32
Figure 3.4 Images 60cm (a), 70cm (b), 80cm (c), 90cm (c), 100cm (d).....	33
Figure 3.5 Training Flowchart	33
Figure 3.6 face Recognition on Drone	34
Figure 3.7 Drone Movement Command	36
Figure 4.3 40cm Distance to Camera.....	42
Figure 4.4 70cm Distance to Camera.....	43
Figure 4.5 100cm Distance to Camera.....	43
Figure 4.6 130cm Distance to Camera.....	44
Figure 4.7 160cm Distance to Camera.....	44
Figure 4.8 190cm Distance to Camera.....	45
Figure 4.9 220cm Distance to Camera.....	45
Figure 4.10 250cm Distance to Camera.....	46
Figure 4.11 280cm Distance to Camera.....	46
Figure 4.12 310cm Distance to Camera.....	47
Figure 4.13 40cm To Camera Face Position.....	48
Figure 4.14 70cm To Camera Face Position.....	49
Figure 4.15 100cm To Camera Face Position.....	49
Figure 4.16 130cm To Camera Face Position.....	50
Figure 4.17 160cm To Camera Face Position.....	50
Figure 4.18 190cm To Camera Face Position.....	51
Figure 4.19 Bottom Left Face Position.....	52
Figure 4.20 Middle Left Face Position	53
Figure 4.21 Top Left Face Position.....	53
Figure 4.22 Top Middle Face Position.....	54
Figure 4.23 Centered Face Position	54
Figure 4.24 Bottom Middle.....	55
Figure 4.25 Bottom Right Face Position.....	55
Figure 4.26 Middle Right Face Position	56
Figure 4.27 Top Right Face Position	56