

INDEX

	Page No
ABSTRACT	I
CHAPTER-1 INTRODUCTION OF THE PROJECT	01-02
1.1 Introduction	01
1.2 Hardware and Software Requirements	02
CHAPTER-2 IMAGE COMPRESSION	03-07
2.1 Introduction	04
2.2 Color Specification	04
2.3 Spatial Sampling of color component	05
2.4 The Flow of Image Compression Coding	05
2.5 Reduce Correlation between Pixels	07
2.6 Quantization	07
CHAPTER-3 IMAGE COMPRESSION METHODS	08-35
3.1 LOSSLESS IMAGE COMPRESSION	07
3.1.1 HUFFMAN CODING	09
3.1.2 RUN LENGTH CODING	11
3.1.3 ARITHMETIC CODING	13
3.1.4 LZ77	15
3.1.5 LZ78	18
3.2 LOSSY IMAGE COMPRESSION	23
3.2.1 BETTER PORTABLE GRAPHICS	23
3.2.2 CARTESIAN PERCEPTUAL COMPRESSION	24
3.2.3 DjVu	24
3.2.4 FRACTAL COMPRESSION	26
3.2.5 PROGRESSIVE GRAPHIC FILE	32

3.2.6 S3 TEXTURE COMPRESSION	33
3.2.7 WebP	34
CHAPTER 4 IMAGE COMPRESSION USING DCT	36-44
4.1 APPLICATION OF DCT	38
4.2 JPEG	38
4.3 JPEG PROCESS	40
4.4 QUANTIZATION	41
4.5 ENTROPY ENCODING	42
4.6 RESULTS AND DISCUSSIONS	43
4.7 DCT RESULTS	44
CHAPTER 5 IMAGE COMPRESSION USING DWT	46-53
5.1 SUBBAND CODING	46
5.2 COMPRESSION STEPS	49
5.3 DIGITATION	49
5.4 THRESHOLDING	49
5.5 QUANTIZATION	49
5.6 ENTROPY ENCODING	49
5.7 DWT RESULTS	50
5.8 COMPARISION OF DWT AND DCT	53
CHAPTER 6 MATLAB AND GUIDE	55-57
GUIDE AND MATLAB VISUALS	55-57
CONCLUSION	58
CODE	59-70
BIBLOGRAPHY	72-73

