

Content

S.No	DESCRIPTION	PAGE No.
CHAPTER 1	INTRODUCTION	1
CHAPTER 2	ABSTRACT	2
CHAPTER 3	OBJECTIVE	3
CHAPTER 4	EXISTING SYSTEM BEFORE USING FACE RECOGNITION	4-5
CHAPTER 5	REQUIRED TECHNOLOGIES	6
CHAPTER 6	WHAT IS COMPUTER VISION?	7
6.1	HISTORY OF COMPUTER VISION	7-8
6.2	HOW DOES COMPUTER VISION WORK?	8
6.3	COMPUTER VISION AT WORK	9
6.4	EXAMPLES OF COMPUTER VISION	9-11
6.5	THE CHALLENGES OF COMPUTER VISION	11-12
CHAPTER 7	WHAT IS OPENCV?	13
CHAPTER 8	ARCHITECTURE OF FACIAL RECOGNITION:	14
8.1	IMAGE OF FACE CAPTURED:	14-15
8.2	DETECTION:	15
8.3	FACE LOCALIZATION:	15
8.4	FEATURE EXTRACTION:	15-16
CHAPTER 9	DIFFERENT APPROACHES OF FACE RECOGNITION	17
9.1	OPENCV:	17
9.2	DLIB:	17
9.3	FACE RECOGNITION:	17
9.4	TENSORFLOW:	18
CHAPTER 10	INSTALLING FACE RECOGNITION ON WINDOWS	19
10.1	FACE RECOGNITION USING FACE RECOGNITION LIBRARY	20
CHAPTER 11	IMPLEMENTATION OF THE CODE	21
11.1	EXPLANATION FOR CODE	22
11.2	CONVOLUTION NEURAL NETWORK (CNN) ALGORITHM:	23

11.3	ARCHITECTURE OF ARTIFICIAL NERUAL NETWORK	24-30
CHAPTER 12	APPLICATIONS OF FACE RECOGNITION	31-33
12.1	ADVANTAGES OF FACE RECOGNITION USING OPENCV	34-35
CHAPTER 13	LIBRARIES USED	36
13.1	CV2	36
13.2	FACE_RECOGNITION	37
13.3	OS	38
13.4	GLOB	39
13.5	NUMPY	40
13.6	MATPLOTLIB	41
13.7	SEABORN	42
13.8	PERFORMANCE MEASURES	43-45
CHAPTER 14	SOURCE CODE	46-47
14.1	SOURCE FILE	48-52
CHAPTER 15	CONCLUSION	53
CHAPTER 16	REFERENCE	54