

## SMART GLASSES



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## **ABSTRACT**

Security is one of the major threats from a past few years. To protect the sensitive areas, the steps which has been taken in the past are not effective, especially facial recognition by using CCTV Cameras. It is time to reconsider that what measures should be taken to make the security of sensitive areas more secure? One of the challenges for the facial recognition is that while running on CCTV cameras it struggles a lot due to blurriness of the picture and by the time target will be identified as, the suspect might already move on. What if we have Smart Glasses which are capable of detecting unauthorized entries in the sensitive area? The Smart glasses will be given to these security person so they have the ability to check anyone on the spot. With Machine Learning at the back end to identify the suspect, you will get accurate and instant feedback on the Android Application so that the security person can decide immediately what the next interaction is going to be. Smart Glasses will have the IP Camera attached at the front for capturing the live video stream. The live video stream will be further sent to the back end system. Facial Detection and Recognition algorithms is used to identify the unauthorized entries. The security person will get instant alerts on the Android Application including the suspect image.

Keywords:

IP, Android Application, Firebase, Python, Machine learning, Facial recognition, SVM, OpenCV

# TABLE OF CONTENTS

UNDERTAKING .....	i
DEDICATION .....	ii
ACKNOWLEDGMENT.....	iii
ABSTRACT.....	iv
LIST OF FIGURES .....	viii
LIST OF TABLES.....	x
<b>CHAPTER 1 INTRODUCTION .....</b>	<b>1</b>
1.1 Machine learning .....	1
1.2 Necessity of Machine Learning.....	1
1.3 Types of Machine Learning.....	2
1.3.1 Supervised Learning .....	2
1.3.2 Unsupervised Learning.....	4
1.3.3 Reinforcement Learning .....	7
1.4 The Math of Intelligence .....	7
1.5 Main Idea and the Solution.....	8
<b>CHAPTER 2 LITERATURE REVIEW .....</b>	<b>10</b>
2.1 Techniques for Face Acquisition.....	10
2.1.1 Traditional.....	11
2.1.2 Dimensional recognition.....	11
2.1.3 Skin texture analysis .....	12
2.1.4 Thermal cameras.....	12
2.2 Face Recognition Tasks.....	12
2.2.1 Authentication (Verification).....	12
2.2.2 Recognition (Identification).....	13
2.2.3 Watch list .....	13
2.3 The Process of Face Recognition .....	14
2.3.1 Face Detection .....	14
2.3.2 Preprocessing .....	14
2.3.3 Feature Extraction.....	15

2.3.4	Feature Matching .....	15
2.4	Face Recognition Considerations .....	15
2.4.1	Variation in the Facial Appearance.....	15
2.4.2	Facial Sub manifolds.....	16
2.5	Algorithms and Techniques.....	17
2.6	Face Detection in OpenCV.....	21
2.7	Viola Jones Face Detection Algorithm.....	22
2.7.1	Haar Features .....	22
2.7.2	Integral Image .....	23
2.7.3	Adaboost .....	24
2.7.4	Cascading.....	25
2.8	Mass Surveillance Industry .....	25
<b>CHAPTER 3 DESIGN AND IMPLEMENTATION .....</b>		<b>26</b>
3.1	Setting up the Environment .....	26
3.1.1	Installation of Ubuntu .....	26
3.1.2	Setting up Python Libraries .....	26
3.2	IP Camera .....	27
3.2.1	Requirements .....	27
3.2.2	Steps.....	27
3.3	Facial Detection and Recognition Algorithm.....	28
3.4	Algorithm.....	29
3.4.1	HOG .....	29
3.4.2	Face Land Marks Estimation .....	31
3.4.3	Convolutional Neural Network.....	32
3.4.4	SVM.....	33
3.5	Explanation.....	34
3.6	Firestore Database.....	34
3.7	Firestore with Android and Python .....	35
3.7.1	Python .....	35
3.7.2	Android Application .....	35
3.8	Base64 Encoding .....	36

3.8.1	Hexadecimal .....	37
3.8.2	Base64 Encoding .....	37
<b>CHAPTER 4</b>	<b>RESULTS .....</b>	<b>40</b>
<b>CHAPTER 5</b>	<b>CONCLUSION .....</b>	<b>43</b>
<b>CHAPTER 6</b>	<b>FUTURE WORK.....</b>	<b>45</b>
ABBREVIATIONS.....		49
APPENDIX.....		50