

CHAPTER- 7

CONCLUSION AND DISCUSSION

AUTOMATED ATTENDANCE SYSTEM THROUGH FACIAL RECOGNITION AND DETECTION IN MACHINE LEARNING

7. LIMITATIONS OF THE PROJECT:

- 1.The system currently recognizes all the objects including the face.
- 2.The speed is less.
- 3.It has some accuracy issues due to difference in the pixel size of the sample images which are used to train the model and the pixel size of the frame initially captured by the camera.
- 4.The distance from the camera upto which the system is able to recognise faces is 5 feet. The software is not Portable. To run efficiently , it currently requires a high configuration computer.

7.1 DIFFICULTIES ENCOUNTERED:

There are two main problems that occurred throughout this project:

- 1.The changes in environment lighting mentioned do not allow the program to be usable in all environments. In low light areas, the webcam cannot receive enough reflected light from face marker. By combining all the algorithms the problem still persists.
2. While detecting the faces it also detects other objects which results in decreasing the accuracy of the model.

7.2 FUTURE ENHANCEMENT SUGGESTIONS:

1. The speed can be further enhanced .
2. The distance limit upto which the camera would be able to recognize faces can be increased.

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3. The data set used to train the model can be further improvised by adding more samples corresponding to each face. This would increase the accuracy.
4. Can be extended to support multiple faces and generate attendance.