**APPENDIX 1**

**Human face detection.**

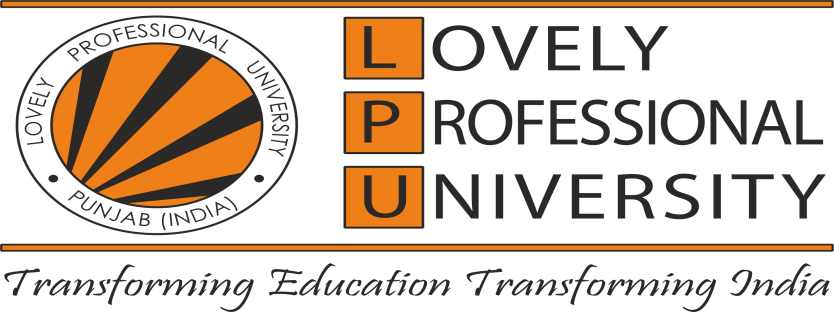
END TERM REPORT

***by***

**NAME OF THE CANDIDATE(S)**

*Rishabh kapoor, Abhinay kumar singh and Shaik shareef.*

(Section: K18PV) (Roll Number(s): B39, B38, B40)



**Department of Intelligent Systems**

**School of Computer Science Engineering**

**Lovely Professional University, Jalandhar**

April-2020

**APPENDIX 2**

**Student Declaration**

This is to declare that this report has been written by me/us. No part of the report is copied from other sources. All information included from other sources have been duly acknowledged. I/We aver that if any part of the report is found to be copied, I/we are shall take full responsibility for it.

Risahbh kapoor

11814153

Abhinay kumar singh

11812607

Shaik shareef

11813978

**APPENDIX 3**

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**Background and objectives of project assigned.**

* **BACKGROUND**

We all were very exited about the AI project so we kept on searching and searching a suitable project for us and then we stumbled upon the world of recognition and detection.

So we researched about that in depth and understood this was just perfect for us because it will allow us to see the results right away unlike many other projects which do not have impact in our day to day life.

* **Objectives**

We intend to detect a human face in live camera by using webcam of the lap top in real-time and make it as accurate as possible.

**Description of project**

The main objective of our program is to detect human faces in frame. So we implemented the functioning by detecting the human face and human eyes with a library “OpenCV” in python.

OpenCV allows us to use the results of pre trained neural network’s results in form of an “Haarcascade files” developed by intel and with which we can detect a number of different types of objects

e.g.:- human nose

human face

human smile

number plates, etc…

**Real life implementation**

It can give immense power to authorities to secure their security systems even more because we can make cameras that can become activated whenever they find a human around or any specific object in their vicinity. Which can further trigger an alarm on being engaged.

By this way we can keep 24x7 surveillance without additional cost of an guard which can save us many thousands of rupees if not lacs.

**APPENDIX 4**

BONAFIDE CERTIFICATE

Certified that this project report ”Gesture recognition ” is the bonafide work of “Rishabh kapoor, Abhinay kumar singh, Shaik shareef” who carried out the project work under my supervision.

<<Signature of the Supervisor>>

<<Name of supervisor>>

<<Academic Designation>>

<<ID of Supervisor>>

<<Department of Supervisor>>