SYNOPSIS

ON

“Face Detection”

Submitted in

Partial Fulfillment of requirements for the Award of Degree

*of*

Bachelor of Technology

*In*

Computer Science and Engineering

By

**(Project Id: 2A05 )**

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**Synopsis**

Introduction

Face recognition has been one of the most interesting and important research fields in the past two decades. The reasons come from the need of automatic recognitions and surveillance systems, the interest in human visual system on face recognition, and the design of human-computer interface, etc. These researches involve knowledge and researchers from disciplines such as neuroscience, psychology, computer vision, pattern recognition, image processing, and machine learning, etc.

The goal of this effort is to develop new algorithms

for a robust pose-invariant face recognition that overcome many of the limitations found in existing facial recognition systems. Specifically, we are interested in addressing the problem of detecting faces in color images in the presence of various lighting conditions and complex backgrounds as well as recognizing faces under variations in pose, lighting, and expression. This work is separated into two major components (i) Face detection and (ii) Face recognition. Specific tasks include developing modules for face detection, pose estimation, face modeling, face matching, and a user interface.

Project Objective

There are few objectives to design face detection system. The objective of face detection are :

* To design real time face detection system.
* To utilize the face detection system based on Haar Classifier

Feasibility Study

The study determines if the new proposed system is useful to the organization or not. The system does not count if it’s not useful to the organization. In parallel, the study also determines if the system can be built correctly and precisely on time with available resources meeting all the constraints.

Face Detection:

Is technically feasible since user only require web camera to use the system. Similarly, it is operationally feasible because this system is easy to use. And the system is economically feasible because we don’t require money to use it since it can be downloaded free of cost on mobile and used.

Methodology

Facilities required for proposed work

Hardware Requirements

1.Web camera

Software Requirements

1. Opencv 2.0

2. Python 2.7

References

Here specify the description of the study material referred for the development of the project. (List all research papers mentioned in literature review & other resources).

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