TITLE
FACE RECOGNITION

LOVELY PROFESSIONAL UNIVERSITY

Name of Students

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Subject – Artificial Intelligence(INT404)
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TEAM WORK

Priyanka :- She has done the planning and step by step process of project also help to write content.
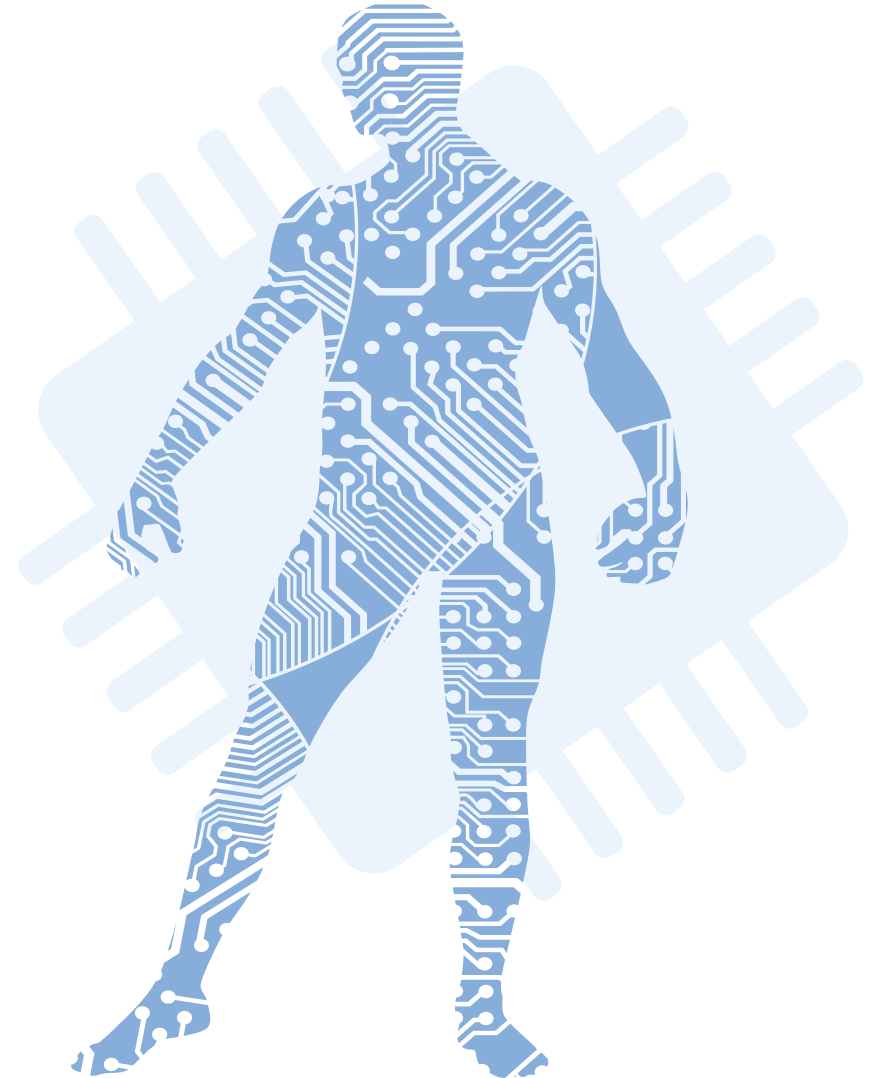
Aditya :- He helps in coding part and also made synopsis.

Eshita :- She helps in selecting the project and divide work of team, she also doing coding part.

Aman :- He is doing the major coding portion of project and done the logical part of project to make good as

possible.

Contents of The Report

Abstract

In Our Project The Face Recognition Will Directly Capture The Information About The Shapes of Face and it Identifies Each Individuals Skin Tone of a Human Faces Surfaces Like The Curves of the Eye Hole , Nose and Chin , etc.

Face Recognition System is one of the Biometric Information Processes. Its applicability is easier And working Range is Larger then others Fingerprint, Iris scanning, signature , Etc.

Human are very good at recognizing faces and if computers complex Pattern. Even a Passage of time doesn't effect this capability and therefore It would help become as robust as humans in face recognition. Machine Recognition of human faces from still or video images as attracted aa great deal of attention in psychology, image processing, pattern recognition neural science, computer security and computer vision communities. Face is an Important part of who we and how people identify us. It is mainly used in security systems.

INTRODUCTION

Everyday Actions are increasing being handled electronically Instead of Pencil and Paper or face to face This Growth in Electronic transactions results in great demand for fast and Accurate user identification and authentication . Access Codes for building , Banks Accounts and computer system Often use pins for identification security clearance . Using The proper Pin Gains access but the use of the pin is not Verified . When Credit and ATM Card are lost or stolen an Unauthorized user can often come up with correct personal Codes . Face Recognition technology May solve this Problem Since a Face is un deniably connected to its owner expect in The case of identical twins . Face Recognition is biometric technique For automatic identification . It make use the most usual Human Identifier , Face and Unique Facial Characteristics .

LITERATURE REVIEW

The Approach For the Face Recognition Involves
Sensitivity to size variation that can be use a purely
Curvature based representation and handle size
Change between faces but run into problems with
Change of facial expression between the enrollment
Image and the image to be recognized .
1)   Required unique id and biometric sample .
     it will compare the biometric template with the
     one it as and records "Match" or "Not-Match" .
2) Required only biometric sample – it will compare
     the biometric template (sample) using a smart algorithm
     with each one of the records in a file . Positive id of specific
     Identity given by its unique user id .
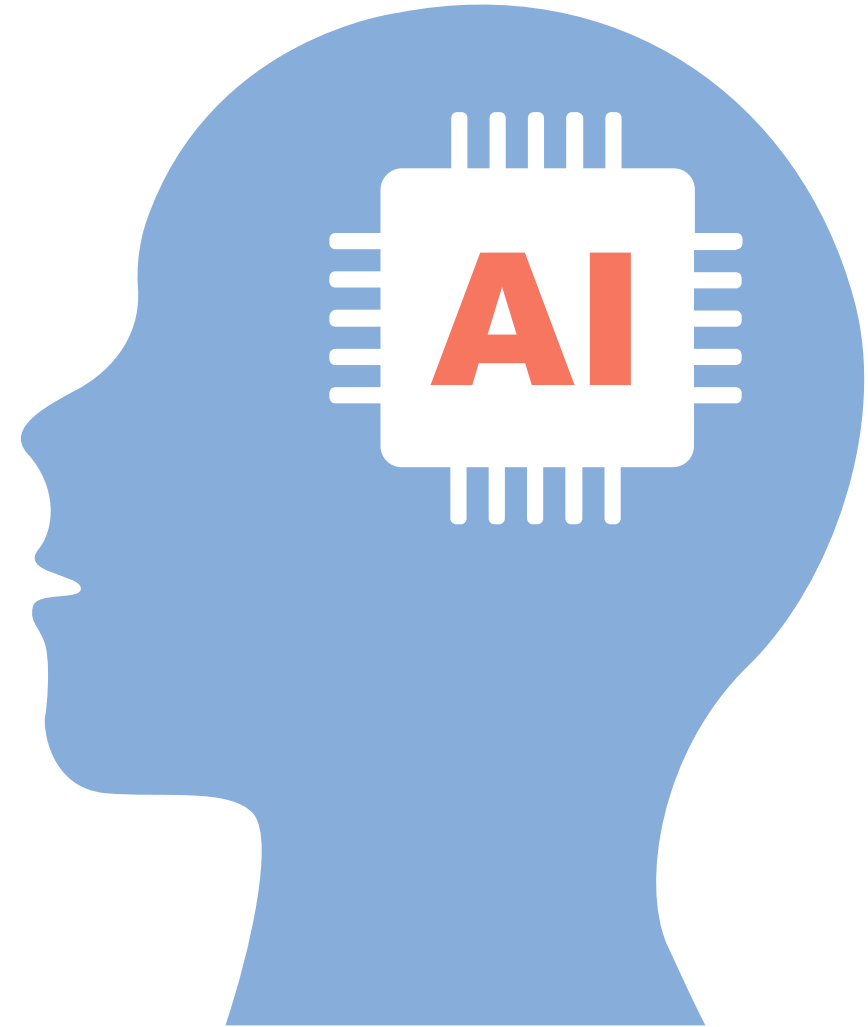
In real time it is highly essential to have an autonomous translator that can process the images and recognize The science very fast at the speed of streaming image . A Image acquisition process is subjected to many Environmental concerns such as the position of the video camera , environmental conditions like lighting sensitivity , Background conditions and camera used . The real time system proposed using the nural network identification And tracking to translate the sign language to a text format .

PROPOSED METHODOLOGY

1) Face Recognition Method work in
Two phase training phase and testing
Phase .

2) It work on preprocessing phase to
Make system more robust on illumination
And noise .

3) Work on phase extraction phase to improve
The accuracy .

4) Image / Video Source , Face Detection
Face Normalization , feature extraction (vector),
DB based feature matching face ID .
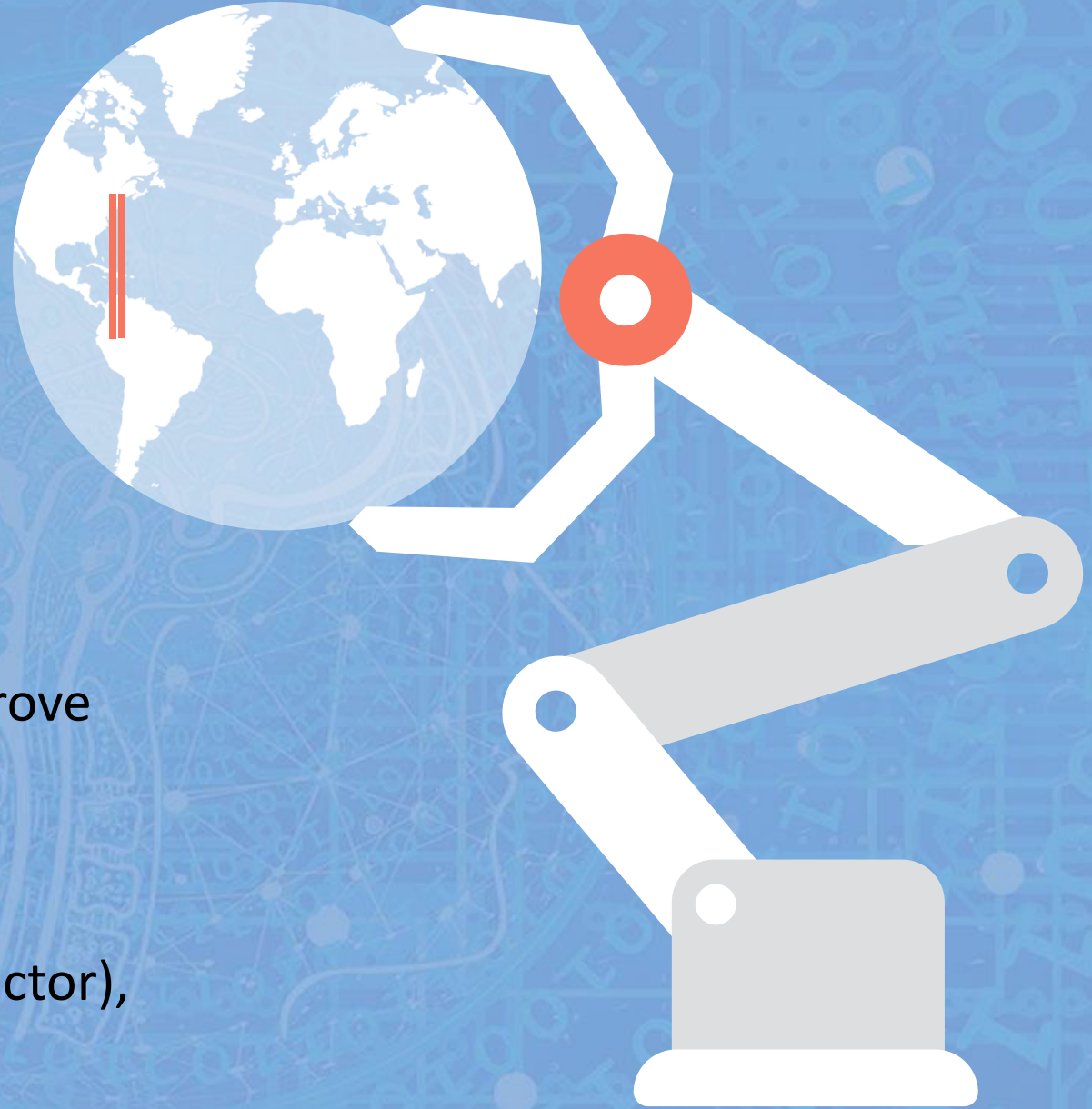
RESULT AND DISCUSSION

APPEARANCE BASED APPROACH

1) Based on The Image as two dimensional patterns.
2) Extract any Characteristics from the image that is a feature .

GEOMETRY BASED APPROACH

Feature are extracted using size and relative position of important Components of image .

The project as performed in many stages we compare facial Recognition rates of a selected sample database once by applying No preprocessing procedure and once by applying preprocessing .

CONCLUSION

Factors Such as environment changes and mild Changes in appearance impact the technology to a Greater degree than many expect For implementations where the Biometric systems must verify and identify users reliably overtime, Facial scan can be very difficult, but not impossible , technology to Implement successfully . Face recognition technologies have been Associated generally with very costly top secure applications.

1) Using proposed Method we improve the face recognition system under illumination variation and non-frontal view .
2) Proposed approach is very simple in term of calculation.
3) Improve speed of recognition .
4) It required only one scanning without any need to a complicated analysis .

GRAPHICAL OUTPUT