

A  
Project Report  
On  
**FACE RECOGNIZATION BASED  
ON PATTERN MATCHING MANAGEMENT SYSTEM**  
*Submitted to*  
Department of  
**Computer Science and Engineering**

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*(Approved by AICTE, New Delhi; Affiliated to JNTU, Hyderabad)*

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*Rajaram*

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



### CERTIFICATE

This is to certify that the project entitled “**FACE RECOGNIZATION BASED ON PATTERN MATCHING MANAGEMENT SYSTEM**” is submitted by CHENU APARNA(206Y1A0517), LANDIGE SREE TEJA(206Y1A0554), BERI LAXMI PRASANNA(206Y1A0510) and ADEPU SUMANA RUSHI(206Y1A0501) to the department of Computer Science and Engineering during academic year 2022-23.

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## ABSTRACT

The main purpose of the project is to build a **Face Recognition based on Pattern-Matching Management System**. Facial recognition is a biometric identification process to identify, verify, and authenticate the person using facial features from any photo or video. Facial recognition system works on comparing facial biometric patterns of the face of interest with the database of known faces to find the match. There are so many places where we use these applications like government sectors, forensic and commercial areas such as facial attendance, retina and iris recognition... Simply to say, mostly we use to identify a person whether present or not (i.e., nothing but a attendance). So with the help of this facial recognition based pattern matching let's build a facial recognition based attendance system. The current old system has a lot of ambiguity that caused inaccurate and inefficient of attendance taking. Many problems arise when the authority is unable to enforce the regulation that exist in the old system. The technology working behind will be the face recognition system. The human face is one of the natural traits that can uniquely identify an individual. Therefore, it is used to trace identity as the possibilities for a face to deviate or being duplicated is low. In this project, we are creating an application, where a people register their name, id and capture images. It is then trained as training image which stores in the training image folder. Then, during the attendance taking session, it asks for subject, then faces will be compared against the database to seek for identity. When an individual is identified, its attendance will be taken down automatically saving necessary information into a excel sheet. (Note: we take attendance for each subject). You can also view the attendance. At the end of the day, the excel sheet containing attendance information regarding all individuals are marked.



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