A

Mini Project Report on

FACE RECOGNITION USING IMAGE PROCESSING

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In Partial Fulfillment of the Requirements for the Award of Degree of BACHELOR OF TECHNOLOGY

IN

INFORMATION TECHNOLOGY

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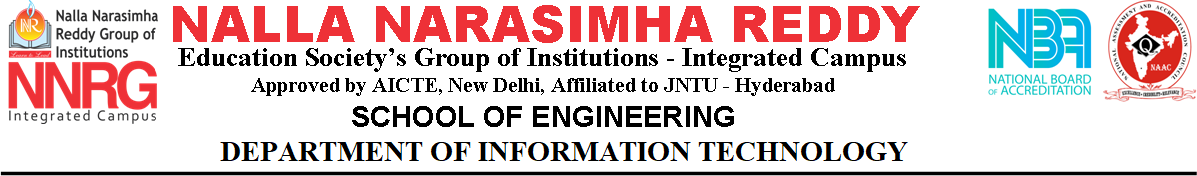
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# CERTIFICATE

This is to certify that the project report titled **“Face Recognition Using Image Processing”** is being submitted by **K.V.Hemanth (207Z1A1225), Sheldon Shaji (207Z1A1241)**, and **V.Nikil (207Z1A1248)** in Partial fulfillment for the award of **Bachelor of Technology in Information Technology** is a record bonafide work carried out by them. The results embodied in this report have not been submitted to any other University for the award of any degree.

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# DECLARATION

We **K.V.Hemanth, Sheldon Shaji and V.Nikil** are students of **Bachelor of Technology in Information Technology, Nalla Narasimha Reddy Education Society’s Group of Institutions**, Hyderabad, Telangana State, hereby declare that the work presented in this project work entitled **Face Recognition Using Image Processing** is the outcome of our own bonafide work and is correct to the best of our knowledge and this work has been undertaken taking care of engineering ethics. It contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning.

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# ABSTRACT

Face recognition from picture or motion picture could be a standard point in bio science analysis. The field of computer vision has experienced remarkable growth in recent years, finding widespread applications in areas as diverse as security, human-computer interaction, and surveillance. An important aspect of face recognition is preprocessing, where images are subsequently cleaned and normalized to improve the accuracy of word recognition. These papers explore various pre-processing techniques such as image resizing, illumination stabilization, and angle filtering. The main objective of this project is to recognize the face. The system subsequently to keep track on the image for further details to identify a face in the image. It serves as an individual identity of everyone and therefore face recognition helps in authenticating any person's identity using his personal characteristics. It consists of static image where it detects the face and details where it apprehends the occasions that manifest the image. The most essential goal of project is to recognize the face and provide the details for an image.

***Keywords: Face Recognition, NumPy, OpenCV, CNN, Image Processing.***

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# LIST OF ABBREVIATIONS

|  |  |  |
| --- | --- | --- |
| **S.NO.** | **ABBREVIATION** | **DEFINITION** |
| 1 | OpenCV | Open-source Computer Vision |
| 2 | UML | Unified Modeling Language |
| 3 | ANN | Artificial Neural Networks |
| 4 | CNN | Convolutional Neural Network |
| 5 | DFD | Data Flow Diagram |

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