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Project Report

Submitted

In partial fulfillment for the award of the

Degree of **Bachelor of Technology**

In

Computer Science & Engineering



Submitted To:-

Mrs. Nirmala Sharma

(Asst. Professor)

Ms. Chanchal Agarwal

(Asst. Professor)

Submitted By:-

Vikram Kumar (16/492)

Rahul Kumar (16/47)

Nasar Jami (17/753)

Yashwant Kholwar(16/493)

Supervisor:-

R.S.Sharma (Professor)

Gaurav Jain(Asst. Professor)

Department of Computer Science & Engineering

Rajasthan Technical University, Kota

Session (2018-19)



CERTIFICATE

This is to certify that **Mrigaya Saini**, **Naveksha Vijay**, **Sumit Kumar And Yash Changlani** of VII Semester, B. Tech (Computer Science & Engineering) "2018-2019", have completed a minor project "**Local Binary Pattern Histogram (LBPH) Face Recognizer**" in partial fulfillment for the award of the degree of Bachelor of Technology under Rajasthan Technical University.

Mrs. Nirmala Sharma (Asst. Prof.)

Ms. Parul Chauhan (Asst. Prof.)

CANDIDATE'S DECLARATION

We hereby declare that the work, which is being presented in the Project, entitled "Local Binary Pattern Histogram (LBPH) Face Recognizer" in partial fulfillment for the award of Degree of "Bachelor of Technology" in Department of Computer Science & Engineering with Specialization in Computer Engineering, and submitted to the Department of Computer Science & Engineering, University Teaching Department, Rajasthan Technical University is a record of our own investigations carried under the Guidance of Mrs. Nirmala Sharma, Assistant Professor and Ms. Parul Chauhan, Assistant Professor Department of Computer Science & Engineering.

We have not submitted the matter presented in this Report from anywhere for the award of any other Degree.

(Sign. of Candidate) (Sign. of Candidate) (Sign. of Candidate)

Mrigaya Saini Naveksha Vijay Sumit Kumar Yash Changlani Roll No.:16/467 Roll No.:16/468 Roll NO.:16/485 Roll NO.:16/493

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ABSTRACT

The face is one of the easiest ways to distinguish the individual identity of each other. Face recognition is a personal identification system that uses the personal characteristics of a person to identify a person's identity. The human face recognition procedure basically consists of two phases, namely face detection, where this process takes place very rapidly in humans, except under conditions where the object is located at a short distance away, the next is the introduction, which recognizes a face as individuals. The stage is then replicated and developed as a model for facial image recognition (face recognition) is one of the much-studied biometrics technology and developed by experts. There are two kinds of methods that are currently popular in developed face recognition pattern namely, Eigenface method and Local Binary Pattern Histogram method. Local Binary Pattern Histogram (LBPH) face recognizer method is based on local binary operator and is one of the best performing texture descriptors. It is widely used in facial recognition due to its computational simplicity and discriminative power. The area of this project face recognition is Image processing. The software requirements for this project are python editor and web camera.

Keywords: Face recognition, Local Binary Pattern Histogram, texture descriptors, Image processing

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