**PURBANCHAL UNIVERSITY**

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**DEPARTMENT OF COMPUTER ENGINEERING**

**KHWOPA ENGINEERING COLLEGE  
LIBALI-8, BHAKTAPUR**

**A MID-TERM REPORT**

**ON**

**"Face Recognition System"**

A project submitted for the partial fulfillment of requirements for the degree of Bachelor of Engineering in Computer Engineering (Seventh Semester)

**SUBMITTED BY:**

Amar Nagaju (730305)

Anirudh Basukala (730307)

Manish Kharbuja (730319)

Manish Nhuchhe (730320)

Sunder Tamakhu (730345)

**UNDER THE GUIDANCE OF:**

Er. Shiva K**.** Shrestha

**SUBMITTED TO:**

DEPARTMENT OF COMPUTER ENGINEERING

KHWOPA ENGINEERING COLLEGE

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# ABSTRACT

This system that we have build briefly describes about the seventh semester project on "Facial Recognition System”. Normally, facial system is collected and managed manually through the use of deep learning. This project attempts to solve the task of low reliability of other provided biometric artificial intelligence and use facial recognition system by analyzing patterns with the features of textures, shape of the persons face. This system can detect and successfully recognize five people as per the dataset used to train the model. The use of popular neural network makes the system to train and learn at high rate and aid in successful facial recognition. It has great learning ability which uses various features for creating a model which can be used to determine the required output. Providing that there are many algorithms to recognize the face we used VGG-16 approach which helped to achieve a better result in recognizing the face. With the dataset we created of total 6250 images the system provides an accuracy measure of 99%.

Keywords: *Biometric AI, Facial Recognition, Convolution Neural Network, VGG-16*