



TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS

**“Object Recognition and Image Enhancement for Night Vision
Surveillance”**

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Regards,

Project Members

ABSTRACT

Object recognition is critical part of any surveillance system. It is the matter of utmost concern to identify intruders and foreign objects in the area where surveillance is done. The performance of surveillance system using traditional camera in daylight is vastly superior as compared to night. The main problem for surveillance during night is the objects captured by traditional cameras have low contrast against the background. Therefore, the image taken in the low light condition is first enhanced to obtain the image with higher contrast using different enhancing algorithms. The enhanced image is then sent for classification using the neural network architecture and the object is recognized in the image.

KEYWORDS

Infra-red image processing, night vision image enhancement, low light image enhancement, night vision object recognition, night vision surveillance.

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