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BELGAUM, KARNATAKA
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ಬೆಳಗಾವಿ, ಕರ್ನಾಟಕ

A PROJECT REPORT

ON

"Webcam Based Human To Machine Interaction (WEBCAM-MOUSE)"

Sponsored by K.S.C.S.T

Submitted to Visvesvaraya Technological University in partial fulfillment of the requirement for the award of Bachelor of Engineering degree in Computer Science and Engineering.

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ABSTRACT

The need for advanced human to computer interaction is to provide the user with the advantage of taking up no desk space as well as being able to disappear when not in use. By means of designing a virtual mouse an object movement in front of webcam can be correlated to the movement of screen cursor.

Webcam-mouse is a webcam based system that emulates common functionalities of a computer mouse device, like mouse move and mouse press. A novel image processing techniques, such as grey scale conversion, thresholding, edge detection, circle detection are used.

In this project titled **"webcam based human to machine interaction" (webcam-mouse).** We have made an attempt to develop a virtual mouse using webcam and torch battery. The color of the light emitted by LED is used for performing functionalities of computer mouse.

The aim is to provide an alternative method of interaction with personal computer.