

AUTOMATED DEFENCE SYSTEM

A PROJECT REPORT

Submitted to

Visvesvaraya Technological University

BELGAUM - 590 018

By

Dhanalakshmi A B

USN: 4VP10EC016

Shriroopa B

USN: 4VP10EC042

Shruthi K

USN: 4VP10EC045

Under the guidance of

Prof.Srikrishna Shastri C

HOD, Dept. of Electronics & Communication

Vivekananda College of Engineering and Technology, PUTTUR (DK)

In partial fulfillment of the requirements for the award of the degree of

Bachelor of Engineering



Sponsored by

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY (KSCST)

Indian Institute of Science, Bengaluru – 560 012

Department of Electronics and Communication

VIVEKANANDA COLLEGE OF ENGINEERING AND TECHNOLOGY

Nehru Nagar, PUTTUR (DK) - 574 203

JUNE 2014

ABSTRACT

For every citizen of any country it is his duty to save his country from the external invasion and from the internal disturbances. To serve this purpose the country is producing well capable soldier teams every year which increases the need for efficient soldiers.

This project seeks to investigate the extents to which technology can be applied to weaponry, in order to minimize the number of military casualties. The target audience for this kind of projects is military establishments, who seek to minimize the number of human operators in the field. The proposed system makes use of micro controller to continuously monitor the target area and alert the security system in case of infiltration. The movement of the gun such as pan, tilt and trigger is controlled using servo motors. The camera will record the image and send it to the image processing software. The algorithm used for motion detection is background subtraction algorithm. In these algorithms, a foreground object is detected by comparing the current image with the static background of the scene.

As the use of electronics in warfare is becoming intense, there arises a need to develop a modern warfare technology as described above. The use of electronics in warfare will not only be very effective but will also reduce the military casualties emerging due to war.