

**COMPUTER CONTROLLED INTRUSION DETECTION AND
AUTOMATIC FIRING UNIT FOR BORDER SECURITY**

**A Project report submitted in partial fulfilment of the requirements for the award of
degree of**

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

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CERTIFICATE

This is to certify that the project entitled “**COMPUTER CONTROLLED INTRUSION DETECTION AND AUTOMATIC FIRING UNIT FOR BORDER SECURITY**” in partial fulfilment for the of degree of Bachelor of Technology in **ELECTRONICS AND COMMUNICATION ENGINEERING**, at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bonafied work carried out by G.JYOTHI (14811A0417),A.SAI SOWJANYA(14811A0403), B.ARUNA (14811A0406), CH.PERRAJ ABHISHEK (14811A0449) under the guidance and supervision during 2017-2018.


PROJECT GUIDE

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EXTERNAL EXAMINER

ABSTRACT

This project describes a computer-controlled intrusion-detector and automatic firing unit, which may be used for the surveillance of borders, either of a country especially in regions of extreme climatic conditions, where it is difficult to deploy personnel.

Reckoning the increasing security threats, it becomes very necessary to cautiously defend the borders of a country, or of any other areas demanding extreme security. However, owing to the vastness and the extreme climatic conditions which may be prevalent in these regions, it becomes practically impossible to deploy personnel throughout the borders. It is also provided with automatic firing mechanisms which can be used to automatically locate and fire at the target.

Here, in this project we are using a PIR sensor to detect the motion of the person or intruder. This information will be transmitted wirelessly through HC12 Module. Whenever the microcontroller gives the information regarding intruder, then automatically the HC12 Module at the receiver will receive the information and displays on PC.

Video will be used to adjust the laser for automatic firing. Thus, several kilometers of the borders, which would have otherwise required several hundred personnel, can be effortlessly monitored with this system, with only a few personnel. Since, the actual firing occurs only after authoritative personnel have doubly confirmed the presence of an intruder, chances of firing at innocent people are completely ruled out. Our project is implemented by using AVR studio software.