**WEAPON DETECTION**

**ABSTRACT:**

Security is always a main concern in every domain, due to a rise in crime rate in a crowded event or suspicious lonely areas. Abnormal detection and monitoring have major applications of computer vision to tackle various problems. Due to growing demand in the protection of safety, security and personal properties, needs and deployment of video surveillance systems can recognize and interpret the scene and anomaly events play a vital role in intelligence monitoring. This paper implements automatic gun (or) weapon detection using a Faster RCNN algorithms. Proposed implementation uses two types of datasets. One dataset, which had pre-labelled images and the other one is a set of images, which were labelled manually. Results are tabulated, both algorithms achieve good accuracy, but their application in real situations can be based on the trade-off between speed and accuracy.

**EXISTING SYSTEM:**

Abnormal detection and monitoring have major applications of computer vision to tackle various problems. Due to growing demand in the protection of safety, security and personal properties, needs and deployment of video surveillance systems can recognize and interpret the scene and anomaly events play a vital role in intelligence monitoring. This paper implements automatic gun (or) weapon detection using a convolution neural network (CNN)

**DISADVANTAGES:**

* Fast is lesser than FRCNN.
* It takes more time to clear.

**PROPOSED SYSTEM:**

g. This paper implements automatic gun (or) weapon detection using based SS D and Faster RCNN algorithms. Proposed implementation uses two types of datasets. One dataset, which had pre-labelled images and the other one is a set of images, which were labelled manually. Results are tabulated, both algorithms achieve good accuracy, but their application in real situations can be based on the trade-off between speed and accuracy

**ADVANTAGES:**

* More Accuracy.
* FRCNN is faster than CNN

**SYSTEM REQUIREMENTS**

**HARDWARE REQUIREMENTS**:

Processor - Intel I3 or Above

Speed - 1.1 GHz

RAM - 4 GB (min)

Hard Disk - 500 GB (min)

**SOFTWARE REQUIREMENTS:**

Operating System - Windows 10 or above

Programming Language - Python (3.7.0)