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A Review on Smart Triggering Weapon System for **Military Application**

Sampada Parvatikar¹, Mrs. Nagarathna N², Shreya Muralidhara³, T S Kushma Rao⁴, Yashashwini G V⁵

UG Students, Department of Electronics and Instrumentation Engineering^{1,2,3,4} Assistant Professor, Department of Electronics and Instrumentation Engineering⁵ JSS Academy of Technical Education, Bengaluru, India asampada.parvatikar@gmail.com, bnagarathna@jssateb.ac.in, cshreyamuralidhara03@gmail.com, dkushimithun1403s@gmail.com, eyashashwinigv@gmail.com

Abstract: In India, Border security depends completely on the soldiers. This is a task taken up by the military which is important and also necessary. To reduce the burden on the soldiers we use robots which also helps in increasing the security around the border areas. The current weaponized robotics system which is very useful for border security and surveillance is too expensive, while the demand for their application has been increasing which is why they are taking the help of the existing human teams to solve the dangerous missions. This project aims to solve this problem as we develop a robotic device of low cost that is capable of firing precisely and secured by using a variety of semi-automatic weapons at the targets. This project consists of 3 steps: detection of the human intruder face, wireless communication, and triggering of the weapon. For the purpose of this project, we use a microcontroller-based automatic system. The basic idea of this system is to detect the human intruder by using an ultrasonic sensor. By wireless communication, the information will be sent to the military camp, which will trigger the gun to shoot the enemy. The main objective of our paper is to develop a low-cost robotic device to secure the border area, where surveillance is very difficult for soldiers.

Keywords: Human intruder, wireless communication, ultrasonic sensor, Microcontroller

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