IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 10, May 2025
Impact Factor: 7.67

Enemy Tank Detection

Mr. Omprakash Wagh, Ms. Pallavi Shinde, Mr. Swapnil Gawale, Ms. Chetana Khairnar
Student, Department of Electronics and Telecommunication
Asst. Prof., Department of Electronics and Telecommunication
NBN Sinhgad Technical Institute Campus, Pune, India

Abstract: *This paper presents the design and implementation of an Automated Enemy Tank Detection utilizing modern technologies such as image processing, wireless communication, and the Internet of Things (IoT). The system detects and differentiates between friendly and enemy tanks using infrared (IR) identification signals and automatically adjusts a servo motor for accurate targeting. It also features real-time monitoring and data transmission capabilities to provide continuous situational awareness to military personnel, enhancing threat response efficiency. Additionally, the system can intercept radio frequency (RF) signals to expand its surveillance capabilities. The proposed framework reduces human intervention, accelerates response times, and ensures adaptability for future advancements like artificial intelligence (AI) integration for autonomous defence operations.*

Keywords: Enemy tank detection, Border security, Image processing, Raspberry Pi, Servo motor, IR, IoT, ATmega328, Auto- mated defence system

Copyright to IJARSCT
www.ijarsct.co.in