

ARSCT International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 8, June 2022

Impact Factor: 6.252

## Surveillance and Defense Bot

Prof. D. A. Mahajan<sup>1</sup>, Mr. Akash Bhaliya<sup>2</sup>, Mr. Mihir Thakur<sup>3</sup>, Mr. Kedar Ghodke<sup>4</sup>, Mr. Lakhan Londhe<sup>5</sup>

Assistant Professor, Mechanical Engineering, NBNSSOE, Pune, India UG Student, Mechanical Engineering, NBNSSOE, Pune, India 2,3,4,5

Abstract: This robotic vehicle has the ability to substitute the soldier at the border area to provide surveillance. The robotic vehicle works as manually controlled vehicle using internet communication medium. This robot used to detect presence of enemy capture it in camera and give the live streaming to the authorized person Surveillance is major role while we working on border area for this there is robot for surveillance purpose. This paper presents a smart surveillance robot for military application by using an Atmega328 microcontroller for security purposes. On field Atmega 328p microcontroller sends a wireless command which is received by Authorized person on web Page and accordingly robot moves. We have seen increased levels of investment in autonomous vehicles for surveillance and security used. On the domestic side, the robots are only used to detect human movement in the region and store it in the database to record, but on the side of the defense, the robots are used to detect the movement and directly send to the control room and capturing the person on the field. We propose a cost effective four wheels surveillance robot of an Arduino microcontroller. This system is very useful for monitoring in areas where there is no Internet connection and also the collapse of the communication system during a disaster.

**Keywords:** Atmega 328p, Smart Surveillance Robot for Military, Internet, etc.

## REFERENCES

- [1] Mansi S. Chabukswar1, Ravikant K. Nanwatkar2, in International Journal of Research in Engineering, Science and Management volume 2, issue 12 published 2019/12.
- [2] An Arduino UNO application: GPS guided unmanned ground vehicle Hasan Fatih Aci, Muhammed Senyurt, Tugay Bozik and Guray Gurkan.
- [3] War Field Spying and Rifle Firing system with UGV's Approach Asst. Prof. Ashitha V Naik, Balram Rayappa Kage, Vikrant Krishna, Tarun Pal, Tanmay Raj.
- [4] Sarijari, M.A.B., Rashid, R.A., Rahim, M.R.A., Mahalin, N.H., Wireless Home Security and Automation System Utilizing ZigBee based Multi-hop Communication National Conference on Telecommunication Technologies, pp. 242-245, 2008.
- [5] Saliyah Kahar, Riza Sulaiman, Anton Satria Prabuwono, Mohd Fahmi Data Transferring Technique for Mobile Robot Controller via Mobile Technology International conference. pp 103-108, 28-29 June 2011.
- [6] Basic Concept of Android System and the web reference is, http://developer.android.com/index.html
- [7] Ritik apahuja, Narendra kumar, Android phone controlled bluetooth robot using 8051 microcontroller, IJSER,Vol. 2,Issue-7,pp 14-17, July 2014 2.
- [8] Arpit Sharma, Reetesh verma, Saurabh Gupta, Sukhdeep kaur bhatia, Android phone-controlled robot using Bluetooth, IJEEE, Vol.7, pp-443-448, Nov- 2014.
- [9] M. Selvam, Smart phone based robotic control for surveillance application, IJRET, Vol.3, Issue-3, pp-229-232, Mar- 2014.
- [10] Sebastian van Delden and Andrew Whigham, A Bluetooth-based Architecture for Android Communication with an Articulated Robot, IEEE, Sharma, Rupam Kumar, et al. Android interface-based GSM home security system." Issues and Challenges in Intelligent Computing Techniques (ICICT), 2014NInternational Conference on. IEEE,2014.

Copyright to IJARSCT DOI: 10.48175/IJARSCT-5532 818



## IJARSCT International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

**IJARSCT** 

Volume 2, Issue 8, June 2022

Impact Factor: 6.252

[11] De Luca, Gabriele, et al. The use of NFC and Android technologies to enable a KNX-based smart home." Software, Telecommunications and Computer Networks (SoftCOM), 2013 21st International Conference on. IEEE, 2013.

DOI: 10.48175/IJARSCT-5532