IJARSCT



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

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 12, May 2023

Wild Life Detection using IoT and Android

Prof. Dinesh Ghorpade¹, Ajinkya Ravindra Pawar², Ketan Ramnath Kawade³, Devesh Khemchand Patil⁴, Nikhil Satyanand Kasab⁵, Prasad Ravindra Mali⁶,

Assistant Professor, Department of Information Technology¹
BE Students, Department of Information Technology^{2,3,4,5,6}
Sir Visvesvaraya Institute of Technology Nashik, Maharashtra, India

Abstract: Interference of wildlife into habitat without prior knowledge is known to be destructive for both human beings and animals. Human interactions with wildlife are defining experience of human existence. These interactions can be positive or negative. The main aim of the proposed system is to detect wild animals. This system uses long-range PIR sensors and ESP32CAM Wi-Fi module to detect the movement of the animal and capture image for wild animal detection and send signal to the controller. This signal is transmitted to mobile application, which is an alert to farmers and forest department immediately. This system also uses image detection module so if the animal is entered in the target area the camera will capture image and the image detection module will detect for presence of wild animal. The proposed system endeavors to prevent casualties that occur in areas having high human and wild animals interaction.

Keywords: Mobile application, IoT device, microcontrollers ,motion detection sensor, image detection using tensorflow Machine learning module.

REFERENCES

- [1] Q. Li, R. Gravina, Y. Li, S. H. Alsamhi, F. Sun, and G. Fortino, "Multi-user activity recognition: Challenges and opportunities," Inform. Fusion, vol.63, pp. 121-135, Nov. 2020.
- [2] Z. Qin, Y. Zhang, S. Meng, Z. Qin, and K.-K.Choo, "Imaging and fusing time series for wearable sensor-based human activity recognition," Informa.Fusion, vol. 53, pp. 80-87, Jan. 2020
- [3] Divya, UshaKiran, Praveen M, "IOT- Based Wild Animal Intrusion Detection System", "International Journal on Recent and Innovation Trends in Computing and Communication" ISSN: 2321-8169, Volume: 6, Issue: 7, pp: 06 08, 2018.
- [4] Santhoshi K. Jai, S. Bhavan, "Intruder recognition in a farm through wireless sensor network", "International Journal of Advance Research, Ideas and Innovations in Technology", ISSN: 2454-132X, Volume 4, Issue 3, pp: 667 669, 2018.
- [5] SahanePradnyaSambhaji, Salunke Nikita Sanjiv, ShirsathVitthalSomnath, ShuklaShreyas Sanjay, Prof. A. R. Panhalka, "Early Warning System for Detection of Harmful Animals using IOT", "International Journal of Advance Research and Innovative ideas", ISSN(O)-2395-4396, Vol-5 Issue-3, 2019.
- [6] Sheela.S, Shivaram. K. R, Chaitra. U, Kshama. P, Sneha. K.G, Supriya. K.S, "Low Cost Alert System for Monitoring the Wildlife from Entering the Human Populated Areas Using IOT Devices", "International Journal of Innovative Research in Science, Engineering and Technology", ISSN: 2319-8753, Vol. 5, Special Issue 10, 2016..
- [7] Danesh Tarapore, Jon Timmis, Anders Lyhne Christensen. "Fault Detection in a Swarm of Physical Robots Based on Behavioral Outlier Detection". IEEE, vol. 35, Aug. 2019
- [8]. Pavan C, Dr. B. Sivakumar. "Wi-Fi Robot for Video Monitoring and Surveillance system. International journal of Scientific & Engineering Research. Vol 3. Issue 8. Aug 2018

DOI: 10.48175/IJARSCT-10682

