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Detection and Tracing of Wild Animals using Machine Learning

Miss. Snehal Mangale, Raj Patil, Apoorva Kakade, Prasad Mharnur, Samarth Mokashi
Dr. D. Y. Patil College of Engineering and Innovation, Varale, Talegaon, Pune

Abstract: *Monitoring wild animals is essential. It is key to discovering Their population and Studying behavior as well as habits. At the inception of wild animal monitoring reliance on human effort was high. It was the main method. Despite being time-consuming It Was also dangerous. Safety risks made this method less than optimal. Development Of pattern recognition technology has been continuous. These techniques are crucial. They have enabled automated wildlife detection. This method uses algorithms driven by image Content analysis. Such algorithms have progressed. They have been Advanced due to these developments. However implementation Of current methods often falls short Recognition accuracy remains a challenge Robustness too often fails to meet practical application requirements Based on these considerations we advocate using RCNN. The method is field animal detection It has been spotlighted in our study We aim to localize and recognize wild animals. We analyzed the effects of different scenes on recognition accuracy This was especially true for Scenes containing multiple targets. We also focused on scenes with small or occluded targets. Our experiments Were vast. We used a Plethora of them. They were used to confirm the feasibility of this method. This method is entirely reliable. Its ability to deliver accurate results have Been proven*

Keywords: animal detection, deep learning, RCNN

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