Improvement of Computer Vision-Based Elephant Intrusion Detection System (EIDS) with Deep Learning Models

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Summary

The expanding need of wild life behavior and partition of human-wild life strife has guided the researchers to the execution of counteraction and alleviation draws near. The division of boondocks grounds and separation of elephant populaces moves toward the essential driver of Human Elephant Collision (HEC). Human-elephant strife is a troublesome issue since which prompts to territory misfortune, destruction of agribusiness zones, environment misfortune. This demands an intelligent system which predicts and rest the conflict. In this work, Artificial Intelligent based device is developed to detect the presence of elephant into residential areas and provides a warning to the forest rangers. In this counterfeit intelligent gadget, the identification part comprises of the PIR sensor and seismic sensor. Both of the sensor yields trigger the camera module associated with the model created. The camera module catches a video for a specific span which may contain the nearness of the animal. At that point, the recordings are been coordinated to the trained AI algorithm. The AI algorithm forms the video in the succession of the casing and once if the presence of an elephant is available in the video, it triggers the cautioning system. An SSD, YOLO, and Faster RCNN algorithm has been accomplished to locate the ideal one. The model builds up a broad item to distinguish an economical arrangement.

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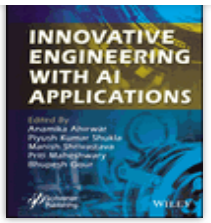

Applications

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