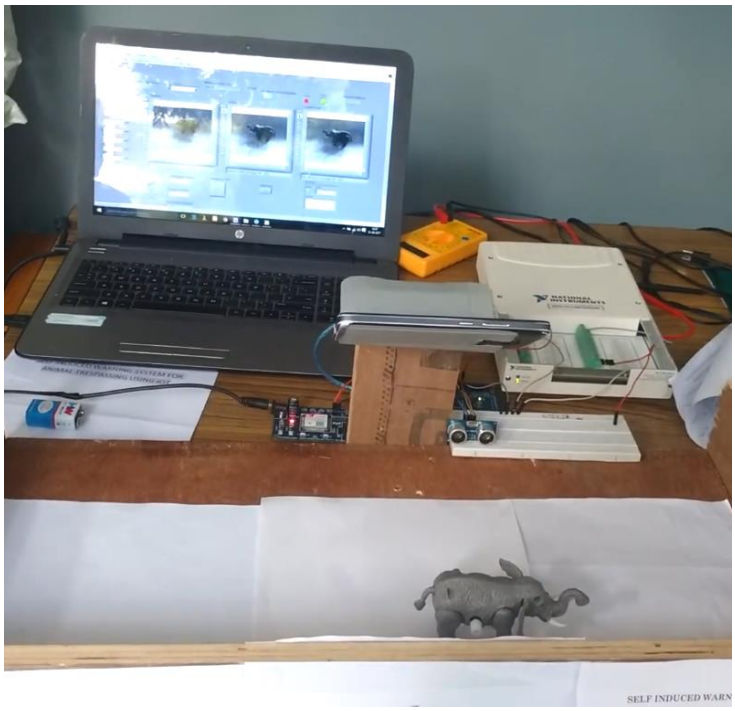
A SELF INDUCED WARNING SYSTEM FOR WILD ANIMAL TRESPASSING USING LabVIEW

The increase in human population in India propelled by agricultural and industrial growth has led to the conversion of the forest lands into human settlements. Due to this, the wild elephant and other animal populations face acute shortage of resources such as water and food, making them move often into the human habitat. Elephants that wait near villages for nightfall to eat crops have been known to kill people. The development of this project prototype can help to track the presence of animals in residential areas and avoid the chance of interference and harm of animal to human life. The object or animal is found by matching the captured image with the template image. The pattern matching is done for identifying specific parts of the elephant such as ivory, trunk, ear etc. The platform used for processing is LabVIEW based image vision algorithm. Cameras are fixed in the places which animals usually use to enter the villages, and is send for processing through wireless system. If the pattern matches, warning signals will be generated. This system provides solution for unsupervised process of individual species identification specifically for elephants. The system is completely automated; the strength of this approach stems from the ability to narrow down the collection of potential matches in the database with the query image. Optimal results for automated identification of individual elephants are obtained with the algorithm developed and is used to rank the most likely matches, followed by final supervised visual identifications through web publication in LabVIEW and also with an early warning sent to the forest officials as well as the villagers about the arrival of elephants towards village, great damages can be avoided. The vision technique of LabVIEW is the brain of the project.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