# A Smart Way to Monitor Elephants & Prevent Elephant Attacks Using Artificial Intelligence

**Project Description Report**

# By

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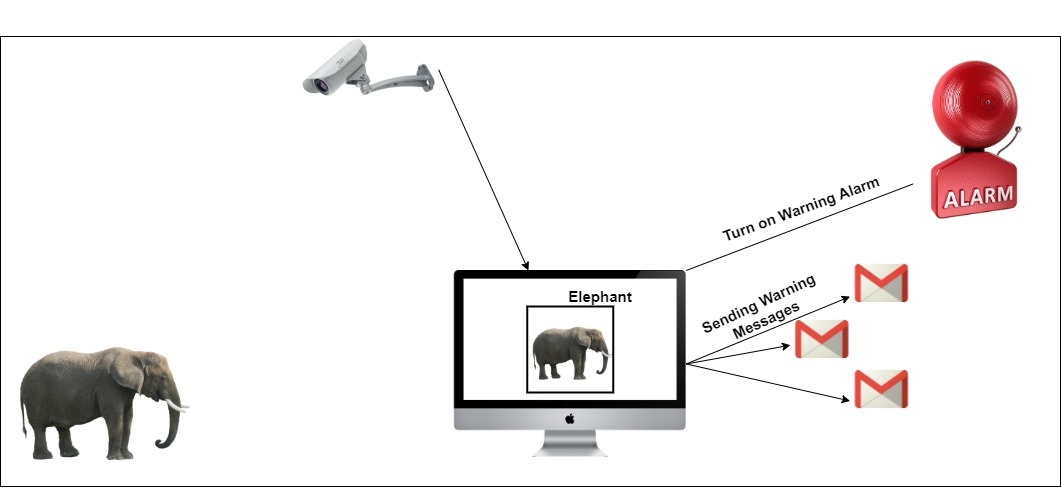
**Introduction**

Sri Lanka is very famous for wild animals and its nature of beauty. Elephant is a key component of Sri Lankan tourism industry. However, elephants are dangerous in some circumstances. Human-wild elephant conflicts are the most frequently reported issue from various parts of our country. There have been many incidents in the past where conflict between humans and elephants has caused serious damage and resulted in the loss of lives as well as property.

Therefore, this research tries to innovate a prototype to prevent elephant attacks using deep learning and machine learning approaches. In this research, computer vision plays the major role. Computer vision is an interdisciplinary scientific field that deals with how computers can gain high-level understanding from digital images or videos.

Basically, this research is trying to build a prototype (An Elephant Detection System) that identifies an elephant in the video frame. For an example, the video source might be coming from CCTV or other cameras, then the video will be analyzed frame by frame to identify elephants in it. A warning message is sent as soon as the position of the elephant overlaps with the area of conflict. Afterwards, the warning alarm will be turned on.

**Diagram**

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