

VIRTUAL EYE LIFEGUARD FOR SWIMMING POOL TO DETECT ACTIVE DROWNING SYSTEM

PROBLEM STATEMENT

This project describes the drowning detection system for the prevention of drowning incidents in swimming pools. The problem boundary clearly distinguishes between the positive samples which are inside the boundary to those that are less relevant and outside the boundary. It works like an “extra lifeguard” for under the water of swimming pools. For instance, if it happens to someone to drown inside the swimming pool, it makes them take an excess amount of water content which affects the internal organs and sometimes it may be the cause of death. This detection system tracks the movements of everything inside the water bodies and will help to guard the lives by finding them easily.

Classification of drowning stages:

Stage 1: User needs a way to detect a person from drowning, because now a days lots of kids lose their lives by drowning.

Stage 2: User is a fireman who needs a way to detect a person from drowning because he needs to save people.

Stage 3: User need a way to detect the real time live environment and safeguard system.

Stage 4: Distance: Z-axis coordinates from the depth information acquired by the camera, corrected by adding from the deviation in the y-axis direction (straight line distance from the camera to the nose).

Stage 5: Depth: Z-axis coordinates obtained from the depth information acquired by the camera.