

LITERATURE SURVEY

A Novel Method for Handwritten Digit Recognition System

Author name: Jennifer Smith

Year of Publishing: 2006

Description:

Surveillance is key to the lifesaving capability of lifeguards. Experienced personnel consistently display enhanced hazard detection capabilities compared to less experienced counterparts. However, the mechanisms which underpin this effect and the time it takes to develop these skills are not understood. We hypothesized that, after one season of experience, the number of hazards detected by, and eye movements of, less experienced lifeguards (LEL) would more closely approximate experienced lifeguards (EL). The LEL watched 'beach scene' videos at the beginning and end of their first season. The number of hazards detected and eye-movement data were collected and compared to the EL group. The LEL perceived fewer hazards than EL and did not increase over the season. There was no difference in eye-movements between groups. Findings suggest one season is not enough for lifeguards to develop enhanced hazard detection skills and skill level differences are not underpinned by differences in gaze behavior.

Author name: Victoria Alice Laxton

Year of publishing: 2019

Description:

Lifeguards play a crucial role in drowning prevention. However, current U.K. lifeguard qualifications are limited in training and assessing visual surveillance skills, and little is known about how lifeguards successfully detect drowning swimmers. To improve our understanding of lifeguard visual search skill, and explore the potential for improving this skill through training, this thesis had the following aims: (a) to identify whether visual skills for drowning detection improve with lifeguard experience, (b) to understand why such differences occur, and (c) design and valid a visual training intervention to improve drowning detection on the basis of these results.

Author name: A Kanchana, Kavya G.R, Kavitha C, Soumyashree V, Salila Hegde

Year of publishing: 2017

Description:

Every year, many individuals, including kids under the age of 5 drown in the deeps of the swimming pool, and the lifeguards are not well trained enough to handle these situations. Thus arises the requirement for having a system that will consequently detect the drowning individuals and alarm the life guard at such risk. Swimming pool surveillance systems plays an essential role in safeguarding the premises. In this project differential pressure approach is used for detection of drowning incidents in swimming pools at the earliest possible stage. The children's life is saved during drowning incidents in the swimming pool by lifting the acrylic plate. The proposed approach consists of RF module, Pressure Sensor and Motor Driver. The demo system based on pressure sensor has an advantage of convenience, cost saving and simple algorithm.