**VIRTUAL EYE – LIFE GUARD FOR SWIMMING POOLS TO DETECT ACTIVE DROWNING**

**PROPOSED SOLUTION**

The use of video surveillance as a monitoring and security tool is possible. Observing both public and private locations has grown to be a highly delicate subject. To make people's lives safer, the visual monitoring capabilities may be used in a variety of settings. There are built and deployed video-based security systems in areas like airports, train stations, and even dangerous surroundings. Real-time intelligent monitoring of the objects or events of interest may be accomplished effectively through the use of image processing, pattern recognition, and machine-vision based approaches. Proposed a method for automatic real-time detection of a person drowning in the swimming pools, this raises the need for having a system that will automatically detect the drowning person and alarm the lifeguards of such danger. Real-time detection of a drowning person in swimming pools is a challenging task that requires an accurate system. The challenge is due to the presence of water ripples, shadows and splashes and therefore detection needs to have high accuracy.

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| **S. No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Hard for lifeguards to monitor all the surroundings for a long time |
|  | Idea / Solution description | Providing technical support for reducing drowning accidents |
|  | Novelty / Uniqueness | Alerting life savers quickly to recovering the swimmers. |
|  | Social Impact / Customer Satisfaction | Accurate findings increase people's satisfaction and health. |
|  | Business Model (Revenue Model) | - |
|  | Scalability of the Solution | Capable of detecting and providing exact results. |