



BOREWELL CHILD RESCUE SYSTEM

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ABSTRACT

Open bore wells are always a trap. And the accidents can't be avoided till now. Therefore, a practical, safe, and efficient rescue system becomes necessary. But still, the techniques are impractical. This project aims to design a system that can rescue a child easily, safely, and in a short time. There are [8] methods or techniques which can save the child from the borewell. But it may be impractical to do it with a single method. Therefore, this project consists of providing the provision for the inclusion of multiple rescue methods, which provides the possibility of choosing the best method to save. In our project, we plan to combine the various methods of rescuing, some of which do exist today. The design system varies in the diameter of the borehole which varies from eight inches to 12 inches. The system consists of a camera, lamps [16], an oxygen supplier, balloon technology. Sensors and camera are used, taking into account the depth, position, and posture of the kid.

Keywords: *Rescue bag, Rescue techniques, Bore well rescue, Child safety*

1. INTRODUCTION

In water scarcity, borewells must meet the necessary requirements for daily life. when wells were dug, they were not properly sealed. young children unknowingly often fall into pits. [9] rescuing a child with another busy child rescue work compared to all other available means is a major goal of this project. Arm adjustment adjustments are different technologies described in this project.

In the present case, the fall of children or adults on the breast properly increases. The accidents occur mainly because of negligence or playful pursuit of the child. In addition many digging wells have been dug and left open without proper coverage. When a child falls into an open [10] pit, existing rescue operations in such cases become extremely dangerous and safe for members of the relief team. In the current system, a large hollow is drilled in the side of the borewell to the depths where the kid is trapped. It uses a wide range of sources (military, medical in Para, etc.), using machines (Tractors, JCBs, etc.). A small delay is also not acceptable, because it leads to decrease the chances of saving a kid. While drilling the hollow if there were a [15] stones inside the hollow, it also decreases the chances of saving the kid and also it is very dangerous.

Anything happens, [11] the achievement rate depends on a number of aspects, such as the time required to bring the equipment back to normal, staff and especially the feedback time of different government agencies. In our country as maintained by the 2011 NCRB report, five people [12] die every day as a result of licensing sources. Currently there is no definitive result to this problem; in this project a brief description of the lifting mechanism can be used for saving a kid.

Objective of this work:

- The design should be portable.
- Less time of operation and an increased chance of survival.
- It should include multiple rescue techniques and necessary life support system.
- To avoid further fall of the child once the child is held by the system.

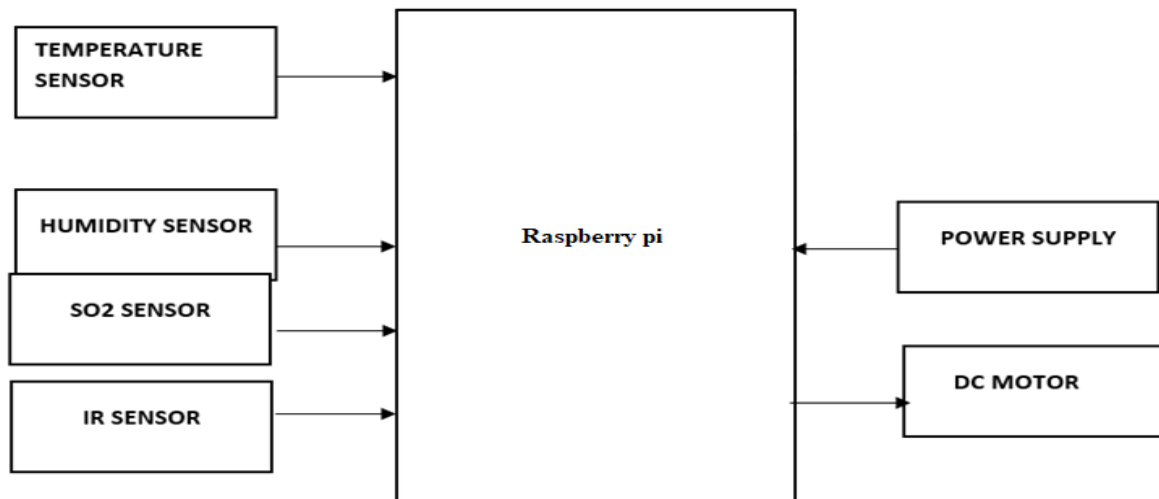
Applications:

- It can used in industries
- It will be helpful in mining industries.
- Plays a vital role in disabled people schools.

2. LITERATURE SURVEY

Preschooler kids accidentally hack down into a 300-meter-wide hollow in the town of Vellore in Tamil Nadu on Sunday. Firefighters and rescue workers worked. Geetha and her preschooler son K Tamilarasan from Sambasivapuram passed her cousin's house in Koorampadi, near Arcot. The child [13] was playing on a local farm with one of his cousin, Kanagashanmugam, when he crashed into the station at 8am on Sunday. When the family found him missing; they started searching him with his photo. After sometime kid's voice came from the preparation area. The family members took help of local residents, who in turn alerted the district and fire [14] authorities and protected administrative staff. The group conquered the city of four miners and began retaining jobs.

3. ARCHITECTURE



4. METHODOLOGY

With the existing method of rescuing a child from a drilling hole it is controlled by an outsider. In the olden days, another hollow is drilled near that well in which the child had been caught up so long. A small delay is also not acceptable, because it leads to decrease the chances of saving a kid. While drilling the hollow if there were a stones inside the hollow, it also decreases the chances of saving the kid and also it is very dangerous. Saving a kid becomes very risky due to the less oxygen and no source of light. So far no special rescue kits have been found inside the trenches. There is no rescue process for the baby. If the proposed system is not working then Military people are called. It includes more time, energy and costly resources those will not be readily available everywhere.

4.1. SYSTEM REQUIREMENTS

Implementation of project is executed in two ways:

- 1) Hardware Requirements
 - Raspberry Pi
 - Humidity sensor
 - Temperature sensor
 - SO2 sensor
 - Power supply.
- 2) Software Requirements
 - Python
 - Open Cv

4.2. ADVANTAGES AND DISADVANTAGES

ADVANTAGES:

- It can be easy to operate.

- It's a Cost effective.
- There are no professional skills required to operate.
- High reliability

DISADVANTAGES:

- It has lack of capabilities to respond in emergencies.
- Suitable only for short borewells.
- Maintenance is thoroughly required.

5. CONCLUSION

The proposed framework is to overcome all of these problems through a customized distance across the framework. This system is used to decrease efforts of human to protect kid from open borewell. Perform protective functions in a shorter period of time compared to traditional techniques. The work involved filling the air to provide oxygen without air. By doing this work we can truly save a child's life by saving them. The proposed system operation works better and can perform different works which will make the arm more secure and easier in operation. Since there is no need for the same hole for rescue purposes and the baby is rescued through an existing hole, the recovery time is greatly reduced. And there is no need to dig another similar extraction hole that costs time. As a development of the system in the future, we can provide additional comfort facilities like cooling. Also, the whole system can be fully automated. And it is better to replace the rope pulley arrangement, with any other suitable safe method.

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