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A Complete Monitor to Shishu

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Abstract

It is very important for a parent or guardian to monitor a new born / infant every moment. Monitoring includes the checking if the infant is safe in the placed environment, actions that infants do etc. But it is difficult and also regarded as impossible in the real world, but the requirement of constant monitoring of the infant is never down. Sudden Infant Death Syndrome, also known as SIDS, is the leading cause of mortality in infants from one month to one year of age. Rural as well as urban areas high probably lack the capabilities to help shorten the response time of SIDS cases. In worldwide there are four million babies die in the first month of their birth, one million die on their first day. Now-adays at least 25% of neonatal deaths happen because of preterm birth also.

An incubator is the one which is used in the hospitals to protect the premature babies, who are extra vulnerable and are at increased risk of complications from infection, noise and light. It may even provide humidified air to help very premature babies to maintain skin integrity. The hospitals in rural areas can't have such facilities to protect the preemies. And, the sad part is many tender lives are lost due to lack of this facility.

This project is for video — based baby monitoring system with Internet of Things (IoT). In the event that abnormal movement is detected from the baby an alarm will be generated to notify the parents or guardians. Monitoring the baby health parameters like temperature, pulse rate and moisture and also for storing the measured values in cloud with appropriate security. The major critical parameters are measured in real time. If any variation from the threshold level, it automatically sends an alert message to the caretaker and do the necessary action immediately to safeguard the children. Advantages are increased response time of the guardian in emergencies, monitoring the environment in which the infant is placed, keeping track of the actions infants do, notifying when an abnormal action detected to respond, low cost baby health monitoring system helps to overcome the inhibitive cost of existing baby incubator.

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