# IOT BASED SAFETY GADGET FOR CHILD

# SAFETY MONITORING AND NOTIFICTION.

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**LITERATURE SURVEY**

**BASE PAPER**

A system to monitor pick-up/drop-off of school children to enhance the safety of children during daily transportation from and to school. The system consists of two main units, a bus unit, and a school unit. The bus unit the system is used to detect when a child boards or leaves the bus. This information is communicated to the school unit that identifies which of the children did not board or the bus and issues an alert message accordingly. The system has a developed web-based database-driven application that facilities its management and provides useful information about the children to authorized personnel. A complete prototype leave of the proposed system was implemented and tested to validate the system functionality. The results show that the system is promising for transportation safety. The work is to develop a wearable device for the safety and protection of women and girls. This objective is achieved by the analysis of physiological signals in conjunction with body position. The physiological signals that are analyzed are galvanic skin resistance and body temperature. Body position is determined by acquiring raw accelerometer data from a triple axis accelerometer. Acquisition of raw data is then followed by activity recognition which is a process of employing a specialized machine learning algorithm. Real-time monitoring of data is achieved by wirelessly sending sensor data to an open source Cloud Platform. Analysis of the data is done on MATLAB simultaneously.

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**PROBLEM STATEMENT**

The Increasing need for protection of the child at present times and also when child can be lost in crowded areas. Using Bluetooth and Wi-Fi not possible to track longer distance. Crimes against children are increasing Year on Year. According to a study, roughly 60,000 children to missing in India every Year. Incase of an emergency, or in a situation of panic, the child must be not able to communicate with their parents without the Knowledge of mobile. Assuming the child is not found immediately, Officers and Detectives will begin following up on various leads to see if they can find the child .In many cases, community members will come together to form search parties to look for the child through out the town.