The Idiosyncratic Monitor: A Child Safety Device

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Children start to crawl at the age of 6 months and eventually start to walk at the age of 1. As they start to move around it starts to get difficult and stressful for parents or guardians to keep an eye on them continuously as they tend to hit, touch, or go near hard and dangerous surfaces like furniture, doors, switches, walls and stairs. The project proposes a solution to this problem which is a proximity sensor which notifies parents/guardians when the child nears any of the hard and dangerous surfaces. Infrared sensors are used, the emitter on a shoulder pad to be placed on the child, and the receiver on the hard surface and/or the area where the child is not supposed to go. The shoulder pads are made up of cotton as it is the least allergic material and generates minimum amounts of static electricity (large amounts can damage the sensors as they are electronic). An infrared emitter (gives out infrared waves) is placed in the shoulder pad. On the hard surface or danger zone, an infrared receiver is placed, which, after receiving a signal from the emitter sends a signal to alert the buzzer and LED, which then rings and lights up respectively. This device is programmed by using an Arduino and is capable of being adjusted anywhere according to the needs of the parent. This enables the parent/guardian to lead a less stressful life and increases the child's safety.