Design and Implementation of Wearable Protective Device for Women Usingraspberry PI

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Abstract: When women were subjected to harassment and molestation at that time the women compact device inbuilt raspberry pi and Universal Serial Bus (USB)camera will capture and sent the opponent faces to parent mail. This video is captured only when the women is succumbed to higher heart rate and subsequently if she presses a button, short message services carrying her Global Positioning System (GPS) location is sent to the user straight away. Using this system, it becomes handy to save women when they are in danger and risks. When women gets higher heart beat due to some panic situation and when acknowledged by subsequent pressing of button will make the camera thus connected to take a shorter video of duration around 3 seconds of the environment pertaining to the incident. Meanwhile, it also sends longitude and latitude data using GPS and Global System for Mobile communication module (GSM) to the preloaded contacts as an alert to the preloaded contacts in form of a Short Message Services (SMS). In this work, not only the location data is sent but also the video will be very much useful. Raspberry pi is the central unit, which contains and makes all important decisions, Pulse sensor continuously senses the heartbeat and feeds to the raspberry and subsequently gets displayed in the monitor. Subsequently using Simple Mail Transfer Protocol (SMTP) and ETHERNET the mail is sent to the loaded recipient, that mail contains the video content of 3 seconds. Secure Digital (SD) card contains the program and software required for the functioning of Raspberry pi.
Keyword: Global System for Mobile communication module (GSM), Global Positioning System (GPS), Simple Mail Transfer Protocol (SMTP),Raspberry pi.

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