

Design of an Intelligent and Secure System for Women's Safety

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Abstract. Women are frequently the targets of harassment, abuse, and other types of violence nowadays. This article describes an innovative method for women's self-defense that involves the use of a handbag purse outfitted with a protective circuit that can be activated by pressing an emergency button on the bag. This circuit has the features of sending SMS and user location, making a loud noise, generating an electric shock, and spraying pepper spray. This device can also capture a photograph of the abuser and save it in memory. This system completely functions by simulating the Python code running through the Raspberry Pi 4 software.

INTRODUCTION

Women harassment cases are becoming more common around the world and the count of these cases is rising every year, the data of women harassment cases in India from 2005-2021 is represented in Figure 1.

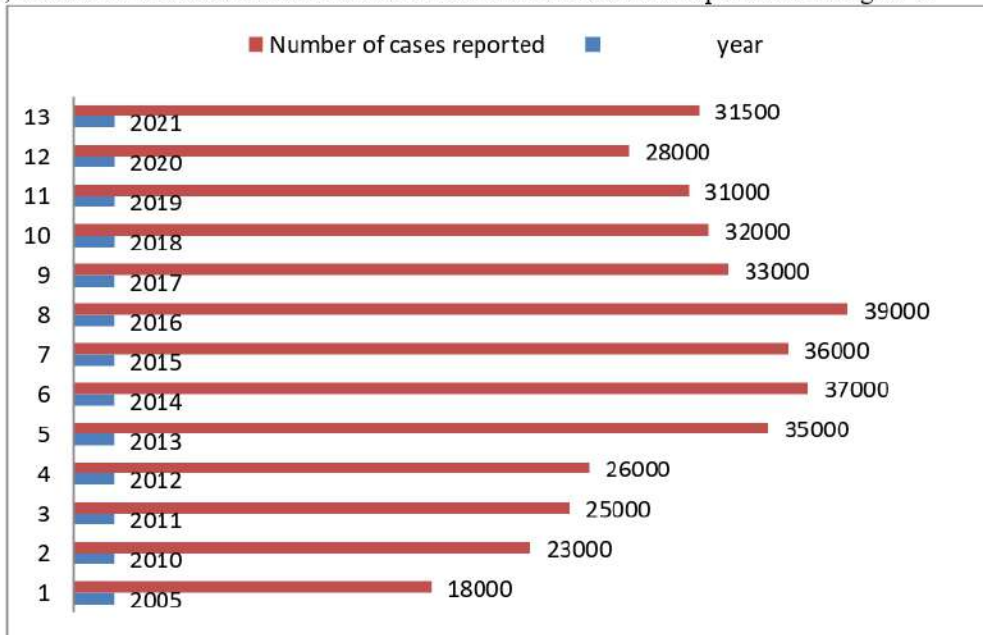


FIGURE 1. Women Harassment cases from 2005-2015

Various articles have been published in this research field of women protection. In [1] the system consists of various modules such as GSM shield (SIM 900A), Arduino ATmega328 board, GPS (GY-GPS6MV2), screaming alarm (APR 9600), a set of pressure sensors for activation and power supply unit made for women safety device. In