**Introduction**

The solar based Electromagnetic breaking system using Object sensor for Automobiles is mainly used in Vehicles either two or four wheelers and can be applied in real time to avoid many accidents

**Block diagramDiagram

Description automatically generated**

**Working**

The object sensor senses the object and gives corresponding signals. These electrical signals are very small mill voltage signal, so it is given to amplifier circuit. The amplifier circuit is constructed with operational amplifier which acts as power amplifier. Then the amplifier signal is given to signal conditioning unit which also constructed with operational amplifier. In this circuit operational amplifier act as comparator and generate the square pulse given to microcontroller. The microcontroller can ATMEL/ARM microcontroller. It will work according to our object already we have programmed. the object sensor value, the microcontroller activates the driver circuit as per mentioned in the program. The driver circuit is constructed with transistor which acts as switch to control the relay. The relay output is directly connected to the electromagnetic core which is attached in the breaking system.