

# Bus Overload Detection

Indian buses can accommodate a maximum of only 80 people. But in our country, buses carry a huge amount of passengers. Due to this, some passengers face problems and some take undue advantage of it. Overloading in the buses may sometime leads to the accidents and fatal deaths due to the foot boarding. We have proposed an idea to overcome this problem occurring in our country. There are no existing methods in our country to overcome this problem. The objective of this work is to simply count the passengers while they are boarding the buses. If overloading of the passengers occurs, then immediately the bus number along with the bus details will be sent to the nearby police station number or traffic policeman's mobile. This will help them to monitor over the loading in the buses and to take necessary action against the one who violates the rules. In this work we used IR Sensors to count number of person. Once person is detected then passenger count will be incremented. When the passenger count exceeds the value that is already stored in the Arduino processor, then message will be sent to the policeman through GSM module. To make this project more interesting we have made facility of checking the seat availability before boarding of into the bus. A passenger can call on the given number and will get a message of number of seats available. Moreover announcement of station reached and next station is added using voice kit.

