A SURVEY PAPER ON AUTOMATIC VEHICLE HORN INTENSITY CONTROL SYSTEM

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ABSTRACT

In this system we use intelligent instruments in every part of our lives. It won't take much time that we realize that most of our tasks are being done by electronics. Very soon, as we shall see, they will perform one of the most complicated tasks that a person does in a day, that of driving a vehicle. This is for the better. As the days of manned driving are getting extremely numbered, so are those of traffic jams, bad, dangerous and rough drivers and more importantly, accidents. A person dies in a car crash every second. Automation of the driving control of car is one of the most vital need of the hour. This technology can very well implement what was absent before, by the help of obstacle sensor it detects the closer vehicle in any direction immediately it sends control signal to control and activate the horn system by the help Arduino. But In the traffic area the car will be in manual mode to control horn manually.

Keyword: - *Horn, Horn control, Horn intensity, Vehicle, Safety.*

1. INTRODUCTION

Due to increase in vehicle the amount of pollution, that is generated by these vehicles have increased significantly. This has in turn caused disturbances and therefore, in some areas such as in central cities, near hospital, near school, zoos etc. honking (operating a horn to generate to generate sound) is prohibited by law or regulation. On the contrary the driver, in some areas uses the horn to draw attention of people or the animals towards his vehicle. In general, there are many traffic signs in various areas to notice the drivers not to operate horns. Additionally, or alternatively, local governments issue permanent or temporary regulations the horn operations. However, some drivers ignore such traffic signs or forget or do not know of such regulations, especially in those areas that they are not familiar with, and thus operate horns in a wrong way against the regulations. The only way by which the driver can honk is that if the driver gets close to the other cars range only then the driver will have full access to honk, if the other car is not nearer to the car of the driver, he will not be able to honk. Thus, it needs to provide a technical solution for automatically deciding the closeness of the car and preventing unnecessary honking.

1.1 Objective and Aim of Work

The primary goal of the project is to stop noise pollution happening due to the over honking of vehicle. Unnecessary honking produces a major problem to the healthy society and animals and birds. This cannot be stop completely but can be reduces to a great extent.

2. LITERATURE SURVEY

The main aim of this paper is to demonstrate the technology used in driverless metro trains which are functioning The present invention in a first aspect provides an automatic vehicle horn control system comprising: a control unit in which operation programs and configurable parameters are stored; a horn connected to the control unit and configured to receive command from the control unit; and horn-operating-regulation acquisition means coupled with the control unit and configured to acquire information about horn operating regulation related with

current or concerned location and driving direction of the vehicle; wherein, in accordance with the information acquired by the horn-operating-regulation acquisition means, a) if at current or concerned location and in current or concerned driving direction it is not allowed to operate the horn to produce sound or the sound level is not allowed to be higher than a certain level, then the control unit initiates a honking forbidden or restriction mode in which the horn is deactivated or the sound of the horn is controlled to be lower than a certain level, and/or an alarm indicating the honking forbidden or restriction requirement is generated, and/or b) if at current or concerned location and in current or concerned driving direction it is required to operate the horn to produce sound, then the control unit initiates a honking must mode in which the horn is operated automatically to produce sound, and/or an alarm indicating the honking must be performed is generated; and c) if at current or concerned location and in current or concerned driving direction there is not any requirement to horn operation, then the control unit maintains a free mode in which the driver may decide whether to operate the horns or not according to real traffic condition.

3. AUTOMATIC VEHICLE HORN CONTROL SYSTEM USING PROXIMITY SENSORS

In this paper, the honking of horn is detected or work only when the other vehicle is in the given range of at given specific distance. Here the proposed system is that the horn won't work unless a vehicle is close enough or else simply the horn won't work. By this way it can avoid all the noise pollution and give a noise free environment, this project ensures that there will be less noise generated by horn and we can avoid the unnecessary honking where it is not at all required.

4. BLE-HORN: A SMARTPHONE-BASED BLUETOOTH LOW ENERGY VEHICLETO-PEDESTRIAN SAFETY SYSTEM.

In this paper, the proposed system is an Android application called BLE-Horn, using Bluetooth Low Energy (BLE) to realize the bidirectional many-to-many communications. Whats more, BLE also has advantages like lower battery consumption, low latency, low cost and it is also widely supported by smartphones. They redene a Compressed GPS Information Packet (CGIP) in Bluetooth advertising packets and use a collision warning algorithm to detect the potential collision.

5. CONCLUSION

There are practical and safety benefits with an automated train system. Although our model cannot be made to materialize into reality as it required a control center and more sensitive sensors. The safety of our future trains can be increased with the use todays advanced technologies. Passengers can be protected by automated doors at train platforms. The trains can be programmed to operate in conjunctions with boom barriers and most importantly with human operators. By using this auto metro train the timings of the train will be exact and it avoids a lot of inconvenience to the passengers. The passenger counting technology provides more service, to track changes in passenger demand, and to track on time performance issues. This project will greatly reduce the human intervention in the control of trains and hence saves a lot of time and money. Closer, more accurate relation of passenger boarding's and alighting's with respective locations Trains must operate without any staff onboard. Lower staffing costs.

REFERENCES

[1]. A. Cherubini, F. Spindler, and F. Chaumette. Autonomous visual navigation and laserbased moving obstacle avoidance. IEEE Transactions on Intelligent Transportation Systems, 15(5):21012110, Oct 2014.

[2]. World Health Organization. Violence, Injury Prevention, and World Health Organization. Global status report on road safety 2013: supporting a decade of action. World Health Organization, 2013.

[3]. Chris Naughton Sara Pines Robyn Eagles, Steve Kinkade. Honda demonstrates advanced vehicle-to-pedestrian and vehicle-tomotorcycle safety technologies. Accessed August 28, 2013.

[4]. Theodore J., Audio Level Safety Limits and Their Impact on Personal Music Player, Year: 2010. DOI: 10.1109/PSES.

[5]. L. P. Kostyniuk, F. M. Streff, J. Zakarajsek, "Identifying unsafe driver actions that lead to fatal car-truck crashes", AAA Found. Traffic Safety, 2002