

A REVIEW PAPER ON AUTOMATIC TRAFFIC CONTROL SYSTEM TO REDUCE ACCIDENTS IN PEDESTRIAN CROSSING

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ABSTRACT- In the last few decades, a lot of investigation endeavour have been manage the pedestrian crossing because they are nearly hazardous place at the transportation field. Pedestrian crossing, it is an important section of transportation fundament serves to secure pedestrians, lives, and owned and keep vehicular flow of traffic in order. In this system, it plays a vital role to examine its state of affairs pedestrian crossing recognizing the vehicles based sensing system to take foreshorten the unfortunate incidents on the pedestrian crossing are analysed in this paper. This system works for pedestrian crossing perception under dissimilar cases and light conditions. It is appreciate the upcoming vehicles to convey the instruction to stop or moving away from the pedestrian and also the vehicle gesture the action to concerned to processed to moving or stop from the road. The presence of pedestrian traffic control system such as bus stops, schools, shopping centres, hospitals, highway service road points. Within 0.25-mile radius. Consequently, The paper propose the solution to handle the traffic control system for reducing the street scene accidents to give the safe and secure lives to pedestrian users.

1. INTRODUCTION

India is populated with 1.38 billion people. The population is equivalent to 17.7% of total world population living in 3.287 million km some parts of country is below the poverty line for them walking is the only available option for making movement one place to another place pedestrian crossing are become important for them pedestrian are the usable path for the road usable in India. Pedestrian crossing, as an important part of a transportation infrastructure serves to secure lives and possessions and keep traffic flow in order. Therefore an approach to automatically detect pedestrian crossing area with the help of infrared sensors for recognizing the vehicle so as to reduce the traffic safety hazardous and safe guards lives and properties. Vehicle based sensing system provided due to its low cost of application of speedily working and great continence in repeatedly collecting high temporal data and special resolution which makes the clear and efficient supervision over pedestrian crossing and automatic opening and closing the gate at rest to the pedestrian crossing over the roadside.

In terms of pedestrian crossing detection. Current approaches have been focused on that of a single crossing area from detection and recognizing at vehicular angle.

This paper develops an approaches to automatically detect pedestrian in using, so they signalize to the vehicular person to stop at the pedestrian crossing, which will make ensure a supervision over the discovering flaking point. The defiling and impairing of pedestrian crossing to reduce potential traffic safety from making of harmful incidents. This paper recognizing the traffic control system to positively supportive and design the finest perfect pedestrian crossing consequently. And also proposes to handle the traffic system to give the instruction to the pedestrian crossing user.

2. LITERATURE REVIEW

The importance of safety, security, width of the pedestrian sidewalk, streets and comfort with the help of traffic control sensing system. It is explained by **Jacob(1961)**. In year 1964 few elements like pedestrian-scale design, convenience and comfort are essential for a pedestrian-friendly environments are developed by **Ritter**. In Planning for Pedestrians, The general aim of providing a pedestrian system is to express a uniform design identity in terms of function and visual quality and to aid the pedestrian to orient by **Antoniou(1971)**. **Brambilla and Longo (1977)** identify convenience,

security, comfort and safety, as the parameters that are essential for a pedestrian friendly environment. In the previous Geography, Nowhere, **Kunstler(1994)**. provides a scathing critique of vehicle friendly streets. According to him, the important elements of a pedestrian-oriented street are comfort, safety and secure. **Shioyama,(2004)** and **Uddin (2004,2005)** either a pedestrian perspective adopted or the length of the pedestrian is collected in the data by assisting it over a road. And all the studies aim to extract pedestrian crossing contours. The position of pedestrian crossing is located, with data from traffic surveillance converged, by constantly monitoring pedestrians moving vehicles

detection which results in approach are immune to occlusion or barriers but are subject to surveillance coverage and sensing recognizes the angles unable to estimate to manage traffic control system by **Boudet(2009)**.

3. CONCLUSION

In this paper, crossing behaviors of 775 pedestrians were analyzed at signalized intersections in Mumbai, India. Based on the conducted statistical tests, the significant factors affecting the pedestrian crossing speed variations, compliance behavior, and pedestrian vehicular interactions were identified and tabulated. The major findings of this paper are pedestrian crossing speed of a male is faster than that of a female. Pedestrian age and departure signal phase have more significant impact on crossing speed variations. Some of the pedestrian speed as well as crossing path were unobserved from video due obstruction of vehicular movement. The pedestrian trip purpose was also an unknown factor in this study which might have influence on pedestrian behaviour.

These results may also be helpful in reducing pedestrian and vehicular conflicts by control measurements at unprotected mid-block locations.

The paper also provided extensive simulative assessments, performed through Vissim, regarding the distribution of vehicles and pedestrians' flow, the queues at the traffic lights, the number of stops, and several parameters for the evaluation of pedestrian safety.

Due to this:-

- Improved safety for pedestrians and vehicles.
- Possible traffic volume decreases.
- Small improvement to pedestrian safety, as it will cut down the risk of a pedestrian walking.
- To accommodate the flow of traffic.
- Minimize the traffic signal time for traffic.

4. REFERENCES

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