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SYNCHRONIZATION OF PEDESTRIANS WITH REFERENCE TO A JUNCTION

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In many countries traffic congestion becomes an adverse problem due to increasing of private vehicles and slowness of developing of infrastructure especially developing countries like Sri Lanka. Many researchers have been done to find solutions to this problem through synchronization or coordination which is to make two or more junction's color lights to act as one system by various methods. But the pedestrian itself also has the color lights in streets. Because of that it is a huge fact to consider. If more people pushes push buttons on the pedestrian with are nearby, vehicles have to stop at each pedestrian and it will ultimately increase the traffic congestion.

In my research I consider the color lights of the pedestrians as separate intersections and developed a synchronization method which is using a time space graph and produced a green wave. After that I developed a LADDER program to adapt the synchronization to the traffic controlling unit. From that if a vehicle releases from one color light and if it travels at a given speed he can pass all the pedestrians without being stopping. In the other hand it will also reduce the waiting time of the pedestrians to cross the road, which is current functions as a pedestrian should wait a minimum of 60 seconds fixed time whether there are vehicles moving on the road or not.

Keywords: Traffic Synchronization, Time space graph, Programmable Logic Circuit