

Controlling of Smart Road Divider for Clearance of Ambulance Path

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Abstract: *Traffic congestion is a major challenge encountered by urban areas presently despite actions being implemented to alleviate and diminish it. The problem with Static Road Dividers is the fixed number of lanes on each side of the road. Both population growth and the number of cars for each family are on the rise, thereby increasing the count of the cars on roads. The circumstance is worse when an emergency vehicle like an ambulance has to wait for other vehicles to give. This causes a delay in time and may affect the emergency case. All these challenges encountered by faced by ambulances can be averted using the smart movable road divider. It integrates real-time traffic monitoring, data analysis, and intelligent control mechanisms to automatically clear a dedicated lane for ambulance passage. Upon detecting an ambulance approaching, the system triggers the actuation of the smart road dividers located at key points along the road. These dividers can dynamically adjust their positions to make a clear lane for the ambulance, bypassing traffic and reducing response times.*

Keywords: Traffic Congestion, Movable Road Divider, IOT, Ambulance, Object Detection

