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Patent Search

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Abstract:

The proposed invention is an image processing system based on the Internet of Things (IoT) for obstacle detection on roads. It aims to enhance road safety by utilizing image processing algorithms and interconnected sensors to detect and identify potential obstacles or hazards on the road in real-time. The system combines the pov computer vision with IoT infrastructure to provide comprehensive coverage, accurate detection capabilities, and timely responses to potential obstacles. By leveragin; infrastructure, the system can exchange data with other transportation management systems, traffic monitoring systems, and infrastructure components, enabling c responses and improved traffic flow. The proposed invention offers scalability, adaptability, and integration potential, making it a valuable solution for both urban and networks. It has the potential to revolutionize obstacle detection systems, ensuring safer road environments for all users. Accompanied Drawing [FIGS. 1-2]

Complete Specification

Description:[001] The field of invention relates to an innovative image processing system based on the Internet of Things (IoT) technology for real-time obstacle det on roads. The system utilizes a combination of image processing algorithms, connected sensors, and IoT infrastructure to enhance road safety and prevent accident caused by obstacles or hazards on the road.

[002] The proposed invention aims to address the increasing concerns and risks associated with road accidents due to unexpected obstacles, such as fallen trees, d vehicles in distress. By leveraging IoT capabilities, the system establishes a network of interconnected devices and sensors placed strategically along roadways to ca real-time visual data.

BACKGROUND OF THE INVENTION

[003] Road accidents caused by unexpected obstacles pose a significant risk to drivers, passengers, and pedestrians. Hazards such as fallen trees, debris, or stranded vehicles can lead to severe accidents and traffic disruptions. Timely detection and alert systems are crucial to prevent such incidents and enhance road safety. Tradi methods for obstacle detection often rely on manual observation or limited sensor-based systems, which can be prone to human error or lack comprehensive cove Therefore, there is a need for an innovative and efficient system that utilizes advanced technologies to detect and identify obstacles on roads accurately.

[004] The proposed invention addresses this need by combining image processing techniques with Internet of Things (IoT) technology to develop a robust obstacle detection system. By leveraging the power of computer vision algorithms and a network of interconnected devices, the invention aims to enhance road safety and p accidents caused by unforeseen obstacles.

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