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Smart Road Safety and Accident Prevention System

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Abstract: Population growth has resulted in technological advancement. People use cars in large numbers, and the number of accidents that occur on a daily basis is increasing. Road accidents are without a doubt the most common occurrences and, overall, the cause of the most damage. In the world, there are many dangerous roads, such as mountain roads, narrow curve roads, and T roads. Some mountain roads are extremely narrow and have numerous curves. The issue with these curve roads is that drivers are unable to see vehicles or obstacles approaching from the opposite end of the curve. When the vehicle is moving at high speeds, it is difficult to control and there is a risk of falling off a cliff. Accident detection can be done under various domains. Most papers surveyed use the application of sensors technology, machine learning and computer surveillance systems.

Keywords: Smart Road safety, Accident Prevention, ultrasonic sensor, mountain roads, Microcontroller

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