**ABSTRACT**

This project focuses on developing a car speed detector and dynamic speed breaker system using Arduino and ultrasonic sensors. The system aims to enhance road safety by detecting vehicle speeds and automatically adjusting the speed breaker height accordingly. The setup involves ultrasonic sensors placed strategically on the road to detect approaching vehicles. An Arduino microcontroller processes sensor data to determine vehicle speed. Based on the speed readings, the system adjusts the height of the speed breaker in real-time to ensure that vehicles traveling above a safe speed threshold experience a noticeable reduction in speed. By combining sensor technology with dynamic control mechanisms, this project offers a proactive approach to managing vehicle speeds, potentially reducing accidents and improving overall road safety.