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Development of Collision Mitigation Braking System

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Abstract: The main focus of the study is to address the problem of slow braking reaction of the driver tends to frontal collision and also to develop the active safety system that will have the potential to braking itself automatically. The system consists of an autonomous vehicle and active collision avoidance system fixed at the frontal section of the vehicle. The collision mitigation braking system consists of an ultrasonic sensor and Node MCU microcontroller which is programmed by Arduino based software. The system was tested on small model which brakes the vehicle when an obstacle detected within the range of 12cm.

Keywords: Frontal Collisions, Active Safety, Collision Avoidance

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