Obstacle Avoider Robot

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Abstract: *This paper presents an Obstacle Avoider Robot, an intelligent autonomous system developed using Arduino and ultrasonic sensors. The robot is designed to detect and avoid obstacles in real-time, enabling smooth and collision- free navigation. By continuously scanning the surroundings using multiple sensors, the robot dynamically adjusts its path to ensure uninterrupted movement. The system automates decision-making and path selection without human intervention, enhancing the robot's adaptability and efficiency. The project demonstrates the integration of sensor technology, embedded systems, and motor control to provide a reliable obstacle avoidance solution.*

Keywords: Obstacle Avoider Robot, Arduino, ultrasonic sensor, real-time navigation, automation, embedded systems, motor control

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