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Radar System for Detecting Object

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Abstract: *This research paper presents the design and implementation of a low-cost radar system using Arduino. The system utilizes a Doppler radar sensor to detect and track moving objects, and an Arduino microcontroller to process and display the radar data. The system consists of a radar sensor, an Arduino board, and a display unit. The radar sensor emits a high-frequency signal and detects the reflected signal, which is then processed by the Arduino board to determine the velocity and distance of the moving object. The system is capable of detecting objects within a range of 10 meters and tracking their movement. The project demonstrates the feasibility of using Arduino to develop a low-cost radar system for various applications, including robotics, surveillance, and automation.*

Keywords: Radar system, Arduino, Doppler radar sensor, low-cost radar, object detection, tracking

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