**ABSTRACT** 

TITLE: AUTO DRIVING TEMPERATURE AND HUMIDITY SENSING

**ROBOT USING ARDUINO** 

This mini-project delves into the development of an auto-driving temperature and humidity sensing robot using Arduino technology, incorporating DHT11 and IR sensors. Motivated by the demand for

autonomous environmental monitoring, the project employs embedded C programming to integrate

these sensors with the Arduino micro-controller. The DHT11 sensor facilitates real-time data

collection of temperature and humidity, while IR sensors contribute to obstacle detection for

navigation. The embedded C programming ensures efficient communication between the sensors and

the Arduino, enabling the robot to autonomously maneuver while gathering environmental data. Key

results showcase successful sensor integration, obstacle avoidance, and reliable data acquisition. In

conclusion, this project not only demonstrates the practical implementation of embedded C

programming for sensor interfacing but also underscores the versatility of Arduino-based robots for

effective environmental monitoring and navigation tasks.

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