

# RoboWash: A Review on Automated Laundry Collection System

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**Abstract:** *The system uses modern robots and sensor technology to increase the efficiency and automation of the laundry process. The system's central robot is equipped with infrared sensors to identify obstacles, load cells to measure weight precisely, and traction motors to enable mobility. The robot, which is powered by an Arduino Uno, efficiently collects laundry supplies, recognises them by scanning Data Matrix Codes (DMC) that are attached, and weighs them to calculate the approximate cost and washing time. The robot moves the laundry to the ironing station after navigating to the washing machine and updates the user interface with its present status. After the laundry is ironed, it is wrapped and designated as finished, and the system modifies the status once more. Load cells give accurate weight information, servo motors allow precise laundry item movement, and infrared sensors ensure safe navigation. The goal of this all-inclusive system is to increase the effectiveness of laundry management by automating procedures and giving real-time status updates.*

**Keywords:** Sensor Technology, Load Cell, Infrared Sensors