

ABSTRACT

See conditions in the field today sometimes still a lot of garbage transport vehicles are seen carrying loads that exceed the limits of transports. But sometimes there are vehicles that carry garbage less than that's capacity. Because the daily production of trash of any individual or group in a locations is varied/ not fixed and waste transportation system that is from the time is not based on capacity. And so we need a solution to handle these problems.

this final project will be designed and realized an automated garbage system that is integrated with the line follower robot. On this there is a conveyor robot is used to take out the trash automatically. Then to determine the position of the final disposal as well as the initial location with Radio Frequency Identification (RFID). To use the capacity detector LED emitted into Light Dependent Resistor (LDR) at some point in the trash. So that when the trash is full conveyor will move to throw garbage at the landfill.

Output from this final project line follower robot can transport the garbage to the landfill garbage with a detector capacity sensor trash and maximum load capacity 7 kg. And then to detect the location of the landfill using the RFID tag and reading error percentage is 10%.

Keyword: *line follower robot, Trash, conveyors, RFID, LDR*