## **ABSTRACT**

Of the many people who choose to keep cats, a common complaint is not having enough time to clean up cat litter. One of the problems that often occurs in people who are sometimes too busy in taking care of their work or business affairs is that they sometimes forget to clean the feces from cats in the litter box. From these problems comes the idea of researchers on how to design and build a monitoring system for cat litter disposal to iot-based trash cans (internet of things). The manufacture of this tool uses 1 infared sensor to detect the presence of cats in the litter box, 2 loadcell sensors to monitor the capacity of feces in the trash and a 4-channel relay to rotate the litter box. From the results of this infrared test measurement using a ruler with a length of 1 to 9 centimeters, the average measurement accuracy is 90%, which covers the measurement range from 1 to 10 centimeters consistently detected with 100% accuracy. Tests on loadcell sensors 1 and 2 use scales to measure the capacity of the trash can. The average error value of loadcell sensor 1 is 1.0364 and 98.98% accuracy, the average error value of loadcell sensor 2 is 2.1057 and 97.95% accuracy. From the error value obtained, it shows that the sensor reading works very well, the monitoring system runs well and the loadcell sensor can measure the capacity.

Keywords: Internet of Things (IOT), Cats litter box,infrared sensor, loadcell sensor