ABSTRACT

Trash is the result of waste or output from all human activities. The increase in population, type of activity, and level of consumption can affect the amount of waste produced. Throwing garbage into rivers into rivers has become a habit of the community. With various appeals or warnings, it seems that people who have this habit are no longer heeded. A number of sights and unpleasant odors in the form of scattered garbage piled up on the edge or in the river flow. The garbage collection tool in the river aims to reduce waste in the river. The garbage collection tools used are generally still classified as simple equipment that still uses the services of human labor which is done manually. Based on these conditions, this final project will design a prototype of a robot called Trash Boat, on the Trash Boat a system for detecting the weight and height of garbage is needed, this system is designed with a microcontroller device system, with Arduino as a microcontroller tool for data communication using Load Cell sensors. as a means of detecting and measuring the weight of the waste and using the PING Ultrasonic sensor as a means of detecting and measuring the height of the waste. Trash Boat users will be able to find out the value of the height and weight of the garbage that will be displayed on the oled on the transmitter.

Keywords: Trash, Trash Boat, Load Cell, PING Ultrasonic.