ABSTRACT

Garbage is divided into two types, namely Organic and Inorganic. Decomposed organic waste such as kitchen scraps and food can be recycled into compost, while inorganic waste is generated from the process of technology such as metals, plastic, cans, and can be recycled into items that can be useful again. However, public awareness that removes garbage to the trash based on organic and inorganic categories is still minimal, so that it becomes a mixture of garbage and result in the disposal of garbage will end in place so it cannot be reprocessed. The automated trash bin design planning uses Machine Learning by leveraging the concept of the Internet of Things (IoT) as a means of sorting out auto-garbage based on organic and inorganic categories and a Raspberry Pi B + model as its main component. This method uses Image Processing was to take the incoming trash pictures. This trash bin has an ultrasonic sensor to measure the height of the garbage and a weight sensor where heavy waste is used to determine the selling price of the waste to be deposited to the nearest waste bank. This will help the waste bank in the trash bin although it is out of the trash area because there is an android application that will monitor the incoming trash.

Keywords: Internet of Things, Raspberry Pi 3, Waste Bank, Trash,