

Automatic Classification of Waste Using Artificial Vision and Programmed Electronic

Ospina Arbelaez, Johann

Lopez, Juan

The separation of waste can be understood as a process resulting from the effects of the technological advances and the deterioration of environmental commitment worldwide; although there are strategies to recover at least a percentage of them, sorting processes still represent a limiting factor to carry out such an ideal. These types of problems were evidenced locally in our town when visiting different public places where it was observed, although the area to collect waste had a set of color bins corresponding to the classification code, their content was not classified. Such an effect was equally evident in our institution, even after multiple teaching strategies that promote environmental conservation. In response to the identified problem of classification, this work aims on the design and development of a smart prototype which in addition to helping with the separation task also represents a didactic and exemplary teaching tool of this type of process. The developed prototype used for the fulfillment of the objectives is supported on computer vision techniques, mechanical and programmed electronic processes.