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Analysis of Histogram Asymmetry for Waste Recognition

Authors: Janusz Bobulski, Kamila Pasternak

Abstract : Despite many years of effort and research, the problem of waste management is still current. So far, no fully effective waste management system has been developed. Many programs and projects improve statistics on the percentage of waste recycled every year. In these efforts, it is worth using modern Computer Vision techniques supported by artificial intelligence. In the article, we present a method of identifying plastic waste based on the asymmetry analysis of the histogram of the image containing the waste. The method is simple but effective (94%), which allows it to be implemented on devices with low computing power, in particular on microcomputers. Such de-vices will be used both at home and in waste sorting plants.

Keywords: waste management, environmental protection, image processing, computer vision

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