Smart Waste Management System For Metropolitan Cities

Literature Survey

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Paper title	Problem definition	Methodology / Algorithm	Advantages	Disadvantages
1.IOT-Based Smart Solid Waste Management System A Systematic. Nor Azman Ismai Nurul Aiman Ab Majid Shukur Abu Hassan	ot based smart waste management system useful in many ways such as monitoring garbage level in real-time, tracking the location of garbage bins, optimizing waste collection route using an IOT.	Optimization Technique	People to take necessary amounts of food so that the wastage of food can be reduced	No prior information
2. A smart waste management and segregation system that uses internet of things, machine learning and android application(2021). Varudandi, Shaunak, Raj Mehta, Jahnavi Mahetalia, Harshwardhan Parmar, and Krishna Samdani.	Main constituent of this system is a waste bin which will automatically segregate the waste by employing technologies such as Internet of Things and Machine Learning.	Image classification algorithm	First version achieved an accuracy of 75% in classifying the waste as wet or dry whereas the second version achieved an accuracy of 90% when segregating the waste into six distinct categories**.**	First version achieved an accuracy of 75% in classifying the waste as wet or dry whereas the second version achieved an accuracy of 90% when segregating the waste into six distinct categories.
3. From smart city to smart citizen: rewarding waste recycling by designing a data centric iot based garbage collection service(2020). Pelonero, Leonardo, Andrea Fornaia, and Emiliano Tramontana.	The smart bin model by proposing an incentive system that focuses on door-to door waste collection. Such a solution assists door-to-door garbage collection by using practical and affordable QR-codes and IoT sensors to accumulate	DTD method, QR code methodology.	Allows gathering a great deal of data, as well as timely giving users a monitoring ability and incentives according to their activities.	QR code detection some time makes mistakes.
4 .A LoRaWAN IoT-Enabled Trash Bin Level Monitoring System (2021) .Ramson, SR Jino, S. Vishnu, A. Alfred Kirubaraj, Theodoros Anagnostopoulos, and Adnan M. Abu-Mahfouz.	Development and validation of a selfpowered, LoRaWAN IoT enabled Trash Bin Level Monitoring System (IoT-TBLMS).	LoRaWAN ,TBLMU, Dijkstra algorithm	System was validated by evaluating the accuracy of the sensor employed, maximum transmission distance between a TBLMU and a gateway, life expectancy of a TBLMU, battery charging time and cost. Based on the results obtained, the proposed IoT system is suitable for Municipality or Municipal Solid Waste Management Companies to manage municipal solid waste efficiently	System requirement of accuracy in LoRaWAN is less.