

# Robot Trash Collectors Are Roaming the Streets of Italy (w/ Video)

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DustCart: Robot Trash Collector

(PhysOrg.com) -- In the city of Peccioli in the Tuscany region of Italy a robot called DustCart has been zipping through the streets. This is part of a \$3.9 million research program called DustBot that aims on collecting trash on demand.

DustCart is designed to go from door-to-door collecting waste on

demand. Waste is deposited into the [robot](#) by opening the trash draw using a [touch screen](#) display. The draw is then closed and the type of [trash](#) is selected using the touch screen. DustCart would then take the rubbish to a central collection point.

The objective is to build a team of robots using Wi-Fi internet and 20 cameras located on buildings in a camps environment. This configuration would then be used in cities where the robots would be deployed. The challenge is to have the robots work cooperatively with the senses around them and also with people.

Autonomous navigation is another key factor for the robots. It's important that the robots know where they are going and what may seem easy for us is very complex for the robots.



The robots are equipped with an engine that is powered by a lithium-battery which permits them to run silently. The robots are also equipped

with special sensors that can monitor air pollutants such as nitrogen oxides, ozone, benzene, sulfur oxides, CO<sub>2</sub>, CO and air temperature.

DustCart is still in the prototype stage and does not have the kind of rapid response time that would make them effective on crowded streets. One day however these robots may become tourist guides or even help the elderly.

Via: [GlobalPost](#)

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