**Abstract**

Indiscriminate disposal of solid waste is a major issue in urban cen-

ters of most developing countries and it poses a serious threat to healthy living

of the citizens. Access to reliable data on the state of solid waste at different lo-

cations within the city will help both the local authorities and the citizens to ef-

fectively manage the menace. In this paper, an intelligent solid waste monitor-

ing system is developed using Internet of Things (IoT) and cloud computing

technologies. The fill level of solid waste in each of the containers, which are

strategically situated across the communities, is detected using ultrasonic sen-

sors. A Wireless Fidelity (Wi-Fi) communication link is used to transmit the

sensor data to an IoT cloud platform known as ThingSpeak. Depending on the

fill level, the system sends appropriate notification message (in form of tweet)

to alert relevant authorities and concerned citizen(s) for necessary action. Also,

the fill level is monitored on ThingSpeak in real-time. The system performance

shows that the proposed solution may be found useful for efficient waste man-

agement in smart and connected communities.