

## **Abstract**

*The level of garbage in the city of Bandung is very high and causes flooding due to the blockage of the waste itself in the ditch, the general worker department does not know where the flood is and sometimes hampered by time due to the efficiency of the officers to the location of the sewer or information from local residents who are very slow to respond to the ditch that.*

*Therefore, with the increasingly sophisticated technological development in this day and age, it can be helped more by using IoT (Internet of Things) technology which is applied to measuring instruments consisting of sensors, dc motors, and microcontrollers. Data taken from the ultrasonic sensor is processed with the Arduino Uno microcontroller, then sent to the database server using the GPRS network, then the data that has been entered into the database will be processed into a JSON (JavaScript Object Notation) which is then taken by the Android-based mobile application.*

*With this tool combined with an android application installed on a smartphone, it is expected to help facilitate officers in preventing floods more efficiently. Can save time and is easy to use.*

Kata kunci: ditch, sensor ultrasonic, motor DC, Arduino Uno, mobile app, android