

## ABSTRACT

The flooding problems in Bandung, especially in Dayeuh Kolot is not easy to avoid. One cause of the flooding is the amount of garbage in the river flow. The rubbish in the river caused by the act of a person who consciously throw garbage into the river. To overcome this we need a mechanism to prevent and provide a deterrent effect people who throw garbage into the river.

Therefore, the authors are motivated to design monitoring violations of waste disposal to the river, to deter the person or persons offense waste disposal into the river. The monitoring system is designed authors can work without the help of probation officers river. The workings of this system is that if there are people or unscrupulous actors landfills that want to throw garbage into the river will be detected by using the web camera is HD and methods convexity defect and convex hull which serves as a detector hand to capture images of a man who had been dumping garbage into the river then the system will upload these activities to the telegram.

In this research, the design tool and do the installation of monitoring river system that has been designed on the river PGA Sukabirus. The implementation of the obtained results that the system succed to detect the presence of the person or persons who will throw garbage on the edge of the river. The success of the system of capturing objects waster litter offenders by 70% and managed to upload the captured to the Telegram to be prosessed

**Keywords:** Webcam, minipc, Convex hull, Convexity Defects, Telegram

