## **ABSTRACT**

The development of the industrial world is increasingly rapid and advanced so that it requires additional employees to be more significant. With the increasing number of employees in an industry, it is necessary to control employees more efficiently and effectively in terms of attendance and control. To meet these demands, a system is needed to make it easier to manage employee data to be more effective. The sensor system is a device that will be developed by researchers in this study using a QR code and face detection system.

One of the techniques used to make it easier to get attendance data for these employees is to use a wireless sensor network to detect the faces of employees so that data can be obtained to fill in the attendance of these employees digitally and automatically. There are several algorithms used for face detection systems, including the haar cascade classifier algorithm. This method was chosen because the algorithm is able to detect objects quickly and in real time, including human faces. The haar cascade classifier algorithm is used in processing face detection data considering that this algorithm has fast and best computing in face detection.

**Keywords:** employee attendance, employee monitoring, haarcascade,barcode