

## ABSTRACT

In determining a location, GPS (Global Positioning System) technology is needed. Basically, GPS technology is used to find locations outdoors. Many people feel confused when looking for a room when they are in a newly visited building. Therefore, a technology is needed to help humans find the location and position of an object in a room.

The Indoor positioning system is a solution that can overcome this. The implementation of indoor positioning can be used in the library to find the position of the bookshelf. One of the technologies used in indoor positioning systems is Bluetooth beacons. Bluetooth Beacon is one type of Bluetooth Low Energy (BLE) that can transmit signals to electronic devices such as smartphones whose implementation is adjusted to the basic theory of RSSI dan *Trilateration*.

Beacon Bluetooth supports the application of Android. So, to display the final results, Android is used which is expected to be able to direct users to find a position of bookshelves.

Keywords : Indoor positioning system, beacon Bluetooth, BLE, RSSI, *Trilateration*