ABSTRACT

Telkom University is an university located in Bandung, specifically in Bojongsoang. Telkom University consisted of many building, one of them is E Building. In the morning, around 50 people enter this building in one hour. This value increase to around 80 people in the afternoon, after lunch break until 14:00. But, monitoring system in this building is not enough to cover that much people that enter this building, so that a system that can monitor and track people in this building will become an important addition to this building. One method that often used for monitoring is closed-circuit television (CCTV). But CCTV sometimes cant afford to look around because of its limited sight. So, a people tracking system using bluetooth is proposed and will be use to strengthen CCTV function for monitoring people in E building. People tracking system is a system that track a group of people use a specific parameter, and this system will use MAC address as its parameter. This system consisted of three big component: bluetooth scanner, database and people tracking program. In conclusion, this system can track people well based on their location, South or North in E building and had 98,2% accuracy, if user turn on their bluetooth before entering this building and stay around the bluetooth scanner for around 25 seconds.

Keyword: Bluetooth, people tracking, E building, monitoring