

## Activity Analysis dengan Menggunakan Jaringan Sensor PIR

Ndaru Akbar Prakoso<sup>1</sup>, Dr. Maman Abdurohman, S.T., M.T.<sup>2</sup>, Aji Gautama Putra Satwiko, S.T., M.T.<sup>3</sup>

<sup>1,2,3</sup>Fakultas Informatika, Universitas Telkom, Bandung

<sup>1</sup>ndaruaprakoso@gmail.com, <sup>2</sup>abdurohman@telkomuniversity.ac.id, <sup>3</sup>ajigps@telkomuniversity.ac.id

---

### Abstract

Activity analysis, has been known as activity recognition, is one of major topic that has been researched many times. Considering its benefits that can be found on many aspects, such as smart home and smart lighting. In activity analysis, one of its important parameter is sensor data acquisition. Sensor that commonly used is PIR motion sensor because it is easy to find, one of non-obtrusive sensor, and it has affordable price. The performance of each PIR motion sensor zone has Precision of 90,90% and Recall of 100% for zone 1, Precision of 100% and Recall of 88,23% for zone 2, Precision of 95% of Recall of 100% for zone 3, also Precision of 100% and Recall of 93,75% for zone 4. By using PIR motion sensors network, the system in this final task is able to recognize some activities with accuracy of 92,30%.

**Keywords:** *activity analysis, activity recognition, PIR motion sensors network*

---