Abstract

WSN in three dimensional space is common in different application areas such as space monitoring, cave monitoring under water eco system and so on. Intrusion is a common type of attack in such types of networks. In this paper, we analyze the intrusion detection probability which helps in deploying the sensors in efficient manner. Even though the sensors are throw away in nature, still the cost matters. And the intelligent deployment helps in reducing the redundancy in communication. Therefore this model can be beneficial in case of three dimensional WSN. Here we deal with heterogeneous WSN as such types of WSN are common in different applications. For the case of simplicity, in our analysis, we consider only two types of sensors named as Type 1 and Type 2. This model can be extended to any number of types. This paper is an extension of our previous work where intrusion detection on homogeneous networks was discussed.
Reference

- Tran Hoang Hai, Eui-Nam Huh,” Optimal Selection and Activation of Intrusion Detection Agents for WSN”.

Index Terms
Computer Science Network Security
Key words

Intrusion detection
node density
sensing range

Wireless Sensor Network (WSN)