Abstract

Recently, the Internet of Things (IoT) has developed into a technology to build a Smart Environment. Security and privacy are important in building an IoT-based Smart Environment. A low level of security on IoT-based systems can lead to attacks or threats that have an impact on Smart Environment applications. Therefore, an Intrusion Detection System (IDS) is urgently needed to improve security on IoT-based systems from attacks. In this journal, the author proposes an Intrusion Detection System using the SupportVector Machine (SVM) as a classifier to classify data that is affected by attacks and normal ones. The authortakes the case by using a dataset containing data retrieved from IoT devices. The system to be built consistsof several processes, namely Preprocessing, Data Split, Classification with SVM, and system performance analysis. In the last process, the accuracy value of the system created will be obtained. The experimental results show that the SVM is able to achieve over 89% of accuracy.