

Classification of IoT Traffic Security Attacks Using Deep Learning

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Abstract : The future smart cities trend will be towards Internet of Things (IoT); IoT creates dynamic connections in a ubiquitous manner. Smart cities offer ease and flexibility for daily life matters. By using small devices that are connected to cloud servers based on IoT, network traffic between these devices is growing exponentially, whose security is a concerned issue, since ratio of cyber attack may make the network traffic vulnerable. This paper discusses the latest machine learning approaches in related work further to tackle the increasing rate of cyber attacks, machine learning algorithm is applied to IoT-based network traffic data. The proposed algorithm train itself on data and identify different sections of devices interaction by using supervised learning which is considered as a classifier related to a specific IoT device class. The simulation results clearly identify the attacks and produce fewer false detections.

Keywords : IoT, traffic security, deep learning, classification

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