Deep Learning Latent Representation for IOT Anomaly Detection

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Abstract*: The Internet of Things (IoT) refers to huge network of intelligent device able to gathering, storing, analyzing, and communicating data. Intrusion detection for the IOT is a swiftly advancing. The IoT ecosystem is more challenging to defend than traditional information technology systems due to limited resources and huge amount of smart devices. Unknown IoT-based attacks are significantly more harmful since they have the ability to outperform the bulk of recent security solutions and require time to detect and remediate. In this section, we will demonstrate how representation learning, namely CNN and LSTM-based anomaly detection approaches, may be utilised to accurately identify unknown threats*

Keywords: IOT; Anomaly Detection; Botnet; CNN; LSTM; Autoencoder.