

Technical Perspective: Prediction of Cyber Threats and Attacks Using Machine Learning Algorithms

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ABSTRACT

In today's era of the Fourth Industrial Revolution, the digital world is rich in data such as network security data, Internet of Things data, business data, mobile data, health data and social media data. Cyber security is developing and Cyber security attacks and threats are rising both in incidence and complexity over the centuries and data are more vulnerable. To perform smart analysis and develop corresponding smart automation applications, artificial intelligence (AI) data, especially machine learning (ML), is required. Numerous types of machine learning procedures such as supervised, semi-supervised reinforcement learning and unsupervised occur in the extent of perceptively analyzing the attacks and threats on a large scale. This article presents a detailed overview of these machine learning procedures to predict cyber attacks and threats. Overall, this paper discusses and highlights different cyber threats and attack prediction using machine learning techniques from a technical perspective.

Keywords: Cyber threats, Un-supervised, Attacks

