

1167-00-155

Joanna Trinidad Chavez*, joachavez2513@gmail.com. *The Machine Learning Toolkit in Cybersecurity.*

The monetary impact of cyber crimes and data breaches has cost organizations and governments, worldwide, an estimated 1% of the total global GDP. More than ever, organizations are looking to data, sophisticated machine learning algorithms, and robotic process automation to quickly identify and remediate threats to their assets and, in some cases, predict when those threats will occur. This presentation will focus on comparing and contrasting Supervised, Unsupervised, and Reinforcement Learning and how these methods are being used today to secure assets. Although these algorithms get the job done, they do not function in a vacuum and require the support of organizational resources and infrastructure to properly provide security. (Received March 04, 2021)