

Implementing Machine Learning Algorithm (anomaly detection one class SVM) to detect malware in cloud environment

Project Overview:

In this project you are asked to implement a python code that performs anomaly detection using one class support vector machine technique. The algorithm should build a normal model for the server's performance and detect the abnormality once a malware is injected on the system. We aim to optimize the training time and the complexity of the algorithm while lowering the average false positive rate of detecting an abnormal behavior when in fact there were no abnormalities on the system. Finally we will need to implement the algorithm on the hypervisor level.

Eligible Departments:

Electronics	-
Communications	-
Networking	X

Software:

- Python
- Vmware Vsphere 6.7
- Linux Redhat
- IBM Watson