Abstract

Making a network foolproof is a very important task that every Intrusion Detection System should provide to the network. Areas of deployment of an IDS is also an important task that helps in efficient functioning of the system. Deploying the IDS in all the systems is a very inefficient strategy that reduces the performance of the entire network, while deploying the IDS in inappropriate or inefficient nodes leads to the system becoming vulnerable to attacks. The current proposal deals with improving the effectiveness of an Intrusion Detection System by selecting the appropriate candidates in the network. The candidacy selection is performed by initially clustering the nodes using Ant Colony Clustering algorithm and using Game Theoretical approaches for selection of heads and monitoring the environment for changes.

References

A Co-operative Game Theoretic Approach to Improve the Intrusion Detection System in a Network using Ant Colony Clustering


Index Terms
Keywords
Intrusion Detection; Ant Colony Clustering; Game Theory; Clustering